

INFLUENCE OF CONTEXTUAL FACTORS ON THE USE OF COERCION IN MENTAL HEALTH SERVICES

DEBORAH OYINE ALUH

**A thesis submitted in fulfilment of the requirements for the Doctoral Degree
in Global Public Health**

(an association between the National School of Public Health, the Institute of Hygiene and Tropical Health and Nova Medical School, of NOVA University, and the Institute of Public Health of University of Porto)

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6. **Aluh DO**, Onu JU, de Almeida JMC. A new era for mental health care in Nigeria. *Lancet Psychiatry*. 2023 May;10(5):310-311. doi: 10.1016/S2215-0366(23)00071-8.
7. **Aluh DO**, Santos-Dias M, Silva M, Pedrosa B, Grigaitė U, Silva RC, de Almeida Mousinho MF, Antunes JP, Remelhe M, Cardoso G, Caldas-de-Almeida JM. Contextual factors influencing the use of coercive measures in Portuguese mental health care. *Int J Law Psychiatry*. 2023 Aug 2; 90:101918. doi: 10.1016/j.ijlp.2023.101918.
8. **Aluh DO**, Diaz-Milanes Diego, Silva Manuela, Pedrosa Barbara, Grigaitė U, Almeida CR, Almeida Mousinho MF, Vieira M, Cardoso G, Caldas-de-Almeida JM. A Portuguese study of Staff Attitudes towards Coercion in Mental health care. *Journal of Psychiatric and Mental Health Nursing (Manuscript under review)*

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Abstract

Background: The use of coercion in mental health care, while intended to benefit patients and improve their mental health, raises significant ethical and clinical concerns. It is a controversial practice that violates the rights of Persons with Mental Health Conditions (PMHCs) and goes against the recommendations of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD). Despite the ongoing debates and arguments, there is no consensus on eliminating coercive measures in mental health care. However, there is growing pressure from all stakeholders to minimize their use. This Ph.D. research was conducted in Nigeria and Portugal, representing low-and-middle-income and high-income contexts, respectively. It encompasses diverse contexts that highlight both shared challenges and unique circumstances.

Objectives: The objective of the PhD research was to systematically explore how contextual factors influence the use of coercion in mental health care. The research aimed to achieve the following: 1) Review the available empirical evidence on contextual factors contributing to coercion; 2) Evaluate the perspectives of service users and mental health professionals about coercion in Nigeria and Portugal; 3) Identify contextual factors influencing coercion in Nigeria and Portugal; 4) Propose recommendations to reduce coercion.

Methods: The research project consisted of three phases. First, a narrative review was conducted to examine the contextual factors that influence involuntary admissions. In the second phase, an analysis was conducted to assess the compliance of Nigeria's proposed mental health and substance abuse bill 2019 and the National Mental Health Act 2021 with the recommendations of the UNCRPD, focusing on the regulation of coercive measures. Additionally, the experiences and perspectives of 30 service users and 30 mental health professionals in two Nigerian psychiatric hospitals were explored through focus group discussions and semi-structured interviews, respectively. In this phase, a qualitative integrative analysis was also conducted to gather suggestions from both service users and mental health professionals on ways to reduce coercion. The third phase focused on studying the contextual factors influencing coercion in Portugal, involving five focus group discussions with 40 mental health professionals from five psychiatric departments. This phase also included evaluating the attitudes of 119 mental health professionals in Portugal using the Portuguese version of the Staff Attitude towards Coercion Scale (SACS). Furthermore, the psychometric properties of the Portuguese version of the

Admission Experience Survey (P-AES) were assessed, and the subjective experience of coercion among 208 patients receiving care in five Portuguese psychiatric departments was evaluated using this instrument. Lastly, the study also examined the predictors of changes in the subjective experience of coercion during admission.

Results: The PhD research yielded ten scientific papers, consisting of nine original articles and one commentary. The initial phase of the study revealed that various factors beyond patient characteristics, such as mental health legislation, demand and supply of mental health resources, impactful events like economic recessions and COVID-19, and staff-related factors like attitudes, traits, and qualifications, along with public attitudes and stigma, contribute to the use of coercive measures in mental health care. These factors interact with each other, rather than independently, to reinforce their impact on the reliance on coercive measures for the care of PMHCs. The second phase of the research demonstrated that while Nigeria's mental health laws are not fully compliant with UNCRPD recommendations, significant improvements have been made to the existing laws, considering the socio-cultural context of the country. Alongside the outdated mental health law, limited accessibility to mental health care and social services, deeply rooted stigma and misconceptions surrounding mental health conditions, and public attitudes play a role in the use of coercive measures in Nigerian mental health care. Service users and providers' suggestions to reduce coercion in Nigeria focused on improved communication, increased resources for mental health, and the implementation of policies and regulations to regulate coercive measures, aligning with existing interventions to decrease coercion in mental health care. In the third phase, mental health professionals in Portugal identified socio-legal factors, staff-related factors, inefficient services, and insufficient resources as contextual factors influencing the use of coercion in Portuguese mental health care. The validated SACS showed acceptable psychometric properties and indicated that Portuguese mental health professionals exhibit pragmatic attitudes towards coercion, with observed differences in attitudes based on age and years of work experience. The P-AES also exhibited satisfactory psychometric properties, with the bifactor model displaying better fit properties compared to previously proposed models. The subjective experience of coercion among service users in Portugal increased during the second assessment. Changes in the subjective experience of coercion were predicted by the perceived admission status rather than the legal admission status, and the initial procedural justice at admission.

Conclusions: The findings of the PhD research advance current understanding of how contextual factors contribute to the reliance on coercive measures for care of PMHCs. The thesis underscores the significance of resolving fundamental problems within the mental health care system to

effectively deliver high-quality mental health care that preclude the need for coercive measures. By involving all stakeholders, and fostering collaboration, all countries, regardless of income level, can strive for reform and establish mental health systems that prioritize rights, dignity, and recovery.

Keywords: Coercion, Coercive measures, Mental health legislation, Context, Nigeria, Portugal

Resumo

Antecedentes: O recurso à coerção nos cuidados de saúde mental, embora tenha por objetivo beneficiar os doentes e melhorar a sua saúde mental, suscita preocupações éticas e clínicas significativas. É uma prática controversa que viola os direitos das pessoas com problemas de saúde mental (PMHCs) e vai contra a Convenção das Nações Unidas sobre os Direitos das Pessoas com Deficiência (UNCRPD). Apesar do argumento da sua justificação em situações de risco de vida, não existe consenso sobre a eliminação das medidas coercivas nos cuidados de saúde mental. No entanto, há uma pressão crescente de todas as partes interessadas para minimizar o seu uso. Esta investigação de doutoramento foi realizada na Nigéria e em Portugal, representando contextos de rendimento baixo e médio e de rendimento elevado, respetivamente. Abrange contextos diversos que evidenciam tanto desafios comuns como circunstâncias únicas.

Objectivos: O objetivo da investigação de doutoramento foi explorar sistematicamente a forma como os factores contextuais influenciam o uso da coerção nos cuidados de saúde mental. A Nigéria e Portugal foram escolhidos como estudos de caso para países de baixo e alto rendimento, respetivamente. O objetivo da investigação era alcançar o seguinte: 1) Rever as evidências empíricas disponíveis sobre os factores contextuais que contribuem para a coerção; 2) Avaliar as perspectivas dos utilizadores dos serviços e dos profissionais de saúde mental sobre a coerção na Nigéria e em Portugal; 3) Identificar os factores contextuais que influenciam a coerção na Nigéria e em Portugal; 4) Propor recomendações para reduzir a coerção.

Métodos: O projeto de investigação consistiu em três fases. Em primeiro lugar, foi realizada uma revisão narrativa para examinar os factores contextuais que influenciam as admissões involuntárias. Na segunda fase, foi efectuada uma análise para avaliar a conformidade da proposta de lei de saúde mental e abuso de substâncias de 2019 da Nigéria e da Lei Nacional de Saúde Mental de 2021 com as recomendações da UNCRPD, centrando-se na regulamentação das medidas coercivas. Além disso, as experiências e perspectivas de 30 utilizadores de serviços e 30 profissionais de saúde mental em dois hospitais psiquiátricos nigerianos foram exploradas através de discussões em grupos de foco e entrevistas semi-estruturadas, respetivamente. Nesta fase, foi também realizada uma análise qualitativa integradora para recolher sugestões dos utilizadores dos serviços e dos profissionais de saúde mental sobre formas de reduzir a coerção. A terceira fase centrou-se no estudo dos factores contextuais que influenciam a coerção em Portugal, envolvendo cinco discussões de grupos focais com 40 profissionais de saúde mental de cinco departamentos psiquiátricos. Esta fase também incluiu a avaliação das atitudes de 119 profissionais de saúde mental em Portugal, utilizando a versão

portuguesa da Escala de Atitudes do Pessoal face à Coação (SACS). Além disso, foram avaliadas as propriedades psicométricas da versão portuguesa do Admission Experience Survey (P-AES) e avaliada a experiência subjectiva de coerção de 208 doentes atendidos em cinco serviços de psiquiatria portugueses através deste instrumento. Por fim, o estudo também analisou os factores preditores de alterações na experiência subjectiva de coerção durante o internamento.

Resultados: A investigação de doutoramento deu origem a dez trabalhos científicos, constituídos por nove artigos originais e um comentário. A fase inicial do estudo revelou que vários factores, para além das características dos doentes, tais como a legislação em matéria de saúde mental, a procura e a oferta de recursos de saúde mental, acontecimentos impactantes como as recessões económicas e a COVID-19, e factores relacionados com o pessoal, como atitudes, características e qualificações, juntamente com atitudes públicas e estigma, contribuem para a utilização de medidas coercivas nos cuidados de saúde mental. Estes factores interagem entre si, e não de forma independente, para reforçar o seu impacto na dependência de medidas coercivas para os cuidados dos PMHCs. A segunda fase da investigação demonstrou que, embora as leis de saúde mental da Nigéria não estejam totalmente em conformidade com as recomendações da UNCRPD, foram introduzidas melhorias significativas nas leis existentes, tendo em conta o contexto sociocultural do país. Para além da lei de saúde mental desactualizada, a acessibilidade limitada aos cuidados de saúde mental e aos serviços sociais, o estigma profundamente enraizado e os equívocos em torno das condições de saúde mental e as atitudes públicas desempenham um papel na utilização de medidas coercivas nos cuidados de saúde mental nigerianos. As sugestões dos utilizadores e dos prestadores de serviços para reduzir a coerção na Nigéria centraram-se na melhoria da comunicação, no aumento dos recursos para a saúde mental e na implementação de políticas e regulamentos para regular as medidas coercivas, em consonância com as intervenções existentes para diminuir a coerção nos cuidados de saúde mental. Na terceira fase, os profissionais de saúde mental em Portugal identificaram factores sócio-legais, factores relacionados com o pessoal, serviços ineficientes e recursos insuficientes como factores contextuais que influenciam a utilização da coerção nos cuidados de saúde mental portugueses. O SACS validado mostrou propriedades psicométricas aceitáveis e indicou que os profissionais de saúde mental portugueses exibem atitudes pragmáticas em relação à coerção, com diferenças observadas nas atitudes com base na idade e nos anos de experiência profissional. A P-AES também apresentou propriedades psicométricas satisfatórias, com o modelo bifactorial a apresentar melhores propriedades de ajuste em comparação com os modelos anteriormente propostos. A experiência subjectiva de coerção entre os utentes dos serviços em Portugal aumentou durante a segunda avaliação, com alterações previstas pelo estado de admissão percebido, em vez do estado de admissão legal e da justiça processual inicial na admissão.

Conclusões: Os resultados da investigação de doutoramento contribuem para a nossa compreensão de como os factores contextuais contribuem para a dependência de medidas coercivas para a prestação de cuidados aos PMHCs. A tese sublinha a importância da resolução de problemas fundamentais no âmbito do sistema de cuidados de saúde mental para prestar efetivamente cuidados de saúde mental de elevada qualidade que excluam a necessidade de medidas coercivas. Ao envolver todas as partes interessadas e ao promover a colaboração, todos os países, independentemente do nível de rendimento, podem esforçar-se por reformar e estabelecer sistemas de saúde mental que dêem prioridade aos direitos, à dignidade e à recuperação.

Palavras-chave: Coerção, Medidas coercivas, Legislação de saúde mental, Contexto, Nigéria, Portugal

Table of contents

List of publications.....	ii
Acknowledgements	iii
Abstract	v
Resumo.....	viii
List of tables and figures	xvii
List of abbreviations.....	xix
I. Introduction.....	1
1.1 A brief historical perspective of coercion in mental health care	2
1.2 Coercion and conceptual definitions	2
1.3 The subjective experience of coercion	6
1.3.1 An overview of qualitative studies on the subjective experience of coercion	7
1.4 Factors influencing the use of coercion in Mental health care	9
1.4.1 Staff Attitudes towards coercion	11
1.5 Key statements and international mechanisms on mental health and human rights.....	13
1.5.1 Global conventions and declarations on mental health and human rights	14
1.5.2 European conventions and declarations on mental health and human rights	17
1.5.3 African conventions and declarations on mental health and human rights	18
1.6 Contextual analysis of coercion in mental health care	19
1.6.1 Mental health care and coercion in Nigeria	19
1.6.2 Mental health care and coercion in Portugal	22
II. Research aims and hypothesis.	27
2.1 First phase of research	27
2.2 Second phase of research	27
2.3 Third phase of research	28

III. Materials and methods	30
3.1 Research Phase 1	30
3.1.1 Data abstraction and analysis	31
3.2. Research Phase 2	31
3.2.1 Qualitative study design	32
3.2.2 Recruitment and sample selection	32
3.2.3 Data collection procedures	33
3.2.4 Rigor and Reflexivity	33
3.2.5 Ethical approval and conduct	33
3.2.6 Data analysis	34
3.3 Research Phase 3	36
3.3.1 Focus group discussions among mental health professionals in Portugal	36
3.3.1.1 Recruitment and sample selection	36
3.3.1.2 Data collection procedures	37
3.3.1.3 Rigor and reflexivity	37
3.3.1.4 Ethical considerations	37
3.3.1.5 Data analysis	37
3.3.2 Staff attitudes towards coercion	37
3.3.2.1 Study instrument	38
3.3.2.2 Data collection procedures	38
3.3.2.3 Validation and psychometric analyses	38
3.3.2.4 Associations between the characteristics of mental health professionals and their Attitudes towards coercion	39
3.3.2.5 Ethical considerations	39
3.3.3 Evaluating the subjective experience of Coercion among patients in psychiatric departments in Portugal	39
3.3.3.1 Study instruments	39

3.3.3.2 Validation and psychometric analyses	40
3.3.3.3 Predictors of the changes in the subjective experience of coercion during admission	41
IV. Results.....	44
4.1 Scientific Paper n° 1	
Beyond patient characteristics: A narrative review of contextual factors influencing involuntary admissions in mental health care	45
Abstract	46
Introduction	47
Methods	48
Results	52
Discussion	68
References	73
4.2 Scientific Paper n° 2	
Nigeria's mental health and substance abuse bill 2019: Analysis of its compliance with the United Nations convention on the rights of persons with disabilities.	106
Abstract	107
Introduction	108
The UNCRRPD	110
The Mental health and Substance Abuse Bill 2019	112
Discussion	118
References	121
4.3 Scientific Paper n° 3	
Experiences and perceptions of coercive practices in mental health care among service users in Nigeria: a qualitative study.	125
Abstract	126
Introduction	127
Methods	128

Results	131
Discussion	138
References	143
4.4 Scientific Paper nº 4	
Use of coercion in mental healthcare services in Nigeria: Service providers' perspective. ...	147
Abstract	148
Introduction	149
Methods	150
Results	152
Discussion	162
References	165
4.5 Scientific Paper nº 5	
A qualitative integrative analysis of service users' and service providers' perspectives on ways to reduce coercion in mental health care.....	169
Abstract	170
Introduction	171
Methods	173
Results	176
Discussion	181
References	186
4.6 Scientific Paper nº 6	
A new era for mental health care in Nigeria	191
Discussion	192
References	194
4.7 Scientific Paper nº 7	
Contextual factors influencing the use of coercive measures in Portuguese mental health care	195
Abstract	196

Introduction	197
Methods	198
Results	200
Discussion	208
References	212
4.8 Scientific Paper nº 8	
A Portuguese study of Staff Attitudes towards Coercion in Mental health care.....	216
Abstract	217
Introduction	218
Methods	220
Results	222
Discussion	229
References	232
4.9 Scientific Paper nº 9	
Revisiting the psychometric properties of the McArthur Admission Experience Survey (AES): Validating the Portuguese version using a Bifactor approach.	237
Abstract	238
Introduction	239
Methods	241
Results	244
Discussion	250
References	254
4.10 Scientific Paper nº 10	
Exploring the Subjective Experience of Coercion Among Patients in Five Portuguese Psychiatric Departments.....	260
Abstract	261
Introduction	262
Methods	263

Results	265
Discussion	278
References	282
V. Discussion	290
5.1 Discussion of main findings	290
5.1.1 The influence of mental health legislation	291
5.1.2 The influence of mental health services and human resources	293
5.1.3 The influence of Staff attitudes and subjectivity	294
5.1.4 Interplay of factors	295
5.1.5 Subjective experience of coercion among service users	296
5.1.6 Validation of study instruments in Portuguese	298
5.2. Limitations and strengths	300
5.3. Future research directions	303
5.4. Policy implications	305
5.5 Conclusions	309
VI. References.....	311
VII. Appendices	327

List of tables and Figures

I.	Introduction	
	Figure 1-1: A Taxonomy of coercion in mental Health care as used in the thesis.....	5
II.	Research aims and hypothesis.	
	Table II-1: Aims, methodological approach and research outputs of each research phase.....	29
III.	Materials and Methods.	
	Table III-1: Inclusion and exclusion criteria for selected studies.....	31
	Table III-2: Overview of the methods employed for the research studies conducted in the second phase.	35
	Table III-3: Overview of the methods employed for the research studies conducted in the third phase.	43
IV.	Results	
	Table IV-1.1 Inclusion and exclusion criteria.....	49
	Figure IV-1.1 Flow chart of articles included and excluded after the review	51
	Table IV-1.2. A summary table of derived themes and subthemes.....	65
	Figure IV-1.2 Interactions among contextual factors influencing involuntary admission.	67
	Table IV-1.3 Overview of included articles	81
	Table IV-3.1: Participant socio-demographic characteristics	131
	Table IV-4.1: Perception of Coercion	153
	Table IV-4.2: Reasons for the use of coercion	155
	Table IV-4.3: Facilitators and barriers to the use of coercion	159
	Table IV-5.1: Socio-demographic characteristics of service users and service providers	173
	Table IV-5.2: Suggestions proposed by service users.....	177
	Table IV-5.3: Suggestions proposed by Service providers	179
	Table IV-5.4. Key themes identified from the suggestions proposed by service users and mental health professionals.....	181
	Table IV-7.1: Socio-demographic characteristics of Focus Group participants	200
	Fig IV-7.1: A diagram of contextual factors at play in the use of coercion in Portuguese mental health care	207
	Table IV-8.1: Socio-demographic characteristics of the sample	222
	Table IV-8.2: Descriptive statistics of the SACS items and domains	224

Table IV-8.3: Standardized loadings (pattern matrix) on the polychoric matrix using Diagonally Weighted Least Squares	226
Table IV-8.4: Fit indexes for models tested.	227
Figure IV-8.1: Path diagram of the three-factor structure obtained showing the estimated three-factor model with the factor loadings of each item and their residuals.	228
Table IV-9.1: Reliability of the P-AES	244
Table IV-9.2: Standardized loadings of the three models	246
Table IV-9.3: Comparisons of model fit	247
Table IV-9.4: IRT parameterization for the P-AES	248
Table IV-9.5: Convergent validity and discriminatory power of the P-AES scores	249
Table IV-10.1: Bivariate associations between the AES and its domains with socio-demographic and clinical variables	268
Table IV-10.2: Correlation matrix	272
Table IV-10.3: Multivariable linear regression models of the predictors of the initial AES and each domain (Perceived coercion, Negative pressure, and Voice) scores.....	274
Table IV-10.4: Multivariable linear regression models of the predictors of changes in the AES and each subscale (Perceived coercion, Negative pressure, and Voice) scores	276
Table IV.1: Overview of research publications, main results, and implications	285

List of Abbreviations

AES: Admission Experience Survey

ECHR: European Convention on Human Rights

ECPT: European Convention for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment

ECT: Electroconvulsive Therapy

EU: European Union

ICESCR: International Covenant on Economic, Social and Cultural Rights

HIC: High Income Country

HIV: Human Immunodeficiency Virus

LMIC: Low-and-Middle-Income country

MHC: Mental Health Condition

P-AES: Portuguese version of the Admission Experience Survey

PMHC: Person with a Mental Health Condition

SACS: Staff Attitude to Coercion Scale

UDHR: Universal Declaration of Human Rights

UNCRPD: United Nations Convention on the Rights of Persons with Disabilities

WPA: World Psychiatric Association

I. Introduction

The focus of this thesis centers on the contextual factors that impact the use of coercion in the field of mental health care. It sheds light on the intervening factors that extend beyond the patient and often fall outside the purview of mental health professionals. Evaluating these contextual factors has the potential to enhance our comprehension of broader macro- and meso-level factors that contribute to the use of coercive measures in mental health care. These contextual factors hold particular significance because interventions aimed at reducing coercive practices in mental health settings are typically formulated and tested in controlled, idealized environments that fail to fully reflect the complexities of real-world mental health systems. As a result, the recommendations derived from these studies often lack specificity in addressing the practical barriers that mental health professionals face when trying to adapt these strategies to their organizational and societal contexts. Understanding these contextual factors is crucial, as they are more amenable to modification and must be acknowledged in the design or adaptation of interventions aimed at reducing coercion in mental health care. Given that the use of coercion in mental health care is a pervasive issue, the PhD research was conducted in Nigeria and Portugal, encompassing diverse contexts that underscore shared challenges as well as distinctive circumstances.

The content of the thesis is structured into five main sections. This first section delves into a brief history of coercion in mental health care, conceptual definitions, an overview of key studies related to the themes covered in the thesis, key statements on mental health and human rights at global and regional levels, as well as a situational analysis of coercion in mental health services in Nigeria and Portugal. The literature in this section is presented to provide the reader with a background to the thesis, highlight research gaps, and provide a rationale for the research studies conducted in the thesis. The second section of the thesis describes the aims, specific objectives, and hypotheses of the thesis. The third section describes the methodology employed in each research study conducted. The fourth part, which is the results section, is a collection of ten scientific papers published or under review in international peer-reviewed journals. The fifth and last part of the thesis is the discussion section, which combines and articulates all the gathered information to provide a comprehensive understanding of the impact of contextual factors on coercion in mental health care. It provides the strengths and limitations of the study, policy implications and highlights recommendations for future research. The thesis ends with a conclusion.

1.1 A brief historical perspective of coercion in mental health care

Throughout history, People with Mental Health Conditions (PMHCs) have endured numerous human rights violations. These violations have included acts such as unlawful killings, unjust imprisonments, and cruel institutionalization in deplorable conditions within Asylums. Additionally, PMHCs have faced the horrors of the eugenics movement and suffered psychiatric abuse under totalitarian regimes, as well as enduring forced treatments. Coercion in mental health care has a long history that may be traced back to deeply held beliefs about Mental Health Conditions (MHCs), advances in psychiatric theories and therapies, and power relations between patients and mental health practitioners. Mental health conditions have always been stigmatized and PMHCs were perceived to be dangerous, unpredictable, or morally deficient. These perceptions contributed to the acceptance of coercive measures in the care of PMHCs.

In the 18th and 19th centuries, asylums and psychiatric hospitals were established to provide care for the growing number of PMHCs, and inevitably, became places of confinement and control. Advances in psychiatry in the 19th and 20th centuries led to a focus on biomedical approaches to the treatment of MHCs. Treatments such as electroconvulsive therapy (ECT), lobotomy, and psychotropic medications were developed and administered to PMHCs, often without their informed consent. At the same time, mental health laws were passed in many jurisdictions that endorsed the involuntary treatment of PMHCs when they met certain criteria, such as being considered a danger to themselves or others (1). These laws provided a basis for coercive practices, including involuntary hospitalization and treatment without consent. Since the mid-20th century after the second world war, there has been a steadily increasing recognition of the need to address human rights violations in mental health care. Mental health care has undergone paradigm shifts from the paternalistic bio-medical model to more patient-centered care, a recovery-oriented approach, and now the human rights approach. Legal reforms in many countries have aimed to safeguard the rights of individuals receiving mental health care, including the right to refuse treatment and protection against coercive practices.

1.2 Coercion and conceptual definitions

Coercion is the act of using force or threat to persuade a person to do something against their will. It refers to a wide range of practices in the context of mental health care, ranging from mild actions such as persuasion to evidently compulsive acts such as the application of restricting devices (2). It also encompasses unclearly defined situations within the mental health ward system like blanket restrictions which are often perceived as coercive (3,4). A coercive measure is an action performed against the will of a PMHC (5). When coercive measures are regulated by legislation, they are referred

to as formal coercive measures. Formal coercive measures usually include involuntary admission, Outpatient commitment, mechanical restraint, chemical restraint, and seclusion. Involuntary Admissions also known as compulsory admissions refer to the unconditional, forced hospitalization and treatment (in most cases) of PMHCs who fulfill specific criteria set by the mental health legislation of a particular country (6). Involuntary community treatment or outpatient commitment on the other hand refers to a variant of involuntary treatment where the PMHC is mandated to receive treatment in the community or as an outpatient without having to be admitted in a hospital (7). Seclusion refers to the involuntary segregation of PMHC to a specially secured room, which is often only sparsely furnished with or without cameras. On the other hand, restraints relate to a range of actions taken with the intention of limiting a person's ability to move physically. It includes physical restraint, chemical restraint, and mechanical restraint (8). Psychological restraint is another form of restraint more closely related to informal coercion. It refers to the deprivation and control of a person by not permitting him to make a choice, having them perform an action or placing restrictions on their freedom without physically interfering. It incorporates the use of leverage and threats (9).

Informal Coercion is a subtler form of coercion that includes a wide variety of treatment pressures and interventions that might be used to encourage treatment adherence to avoid formal coercion and are typically not regulated by law. They include persuasion, interpersonal leverage, inducements, and threats (10,11). Persuasion is the use of logical arguments to influence the decisions of service users; interpersonal leverage is the use of conditional changes in emotional attitudes in interpersonal relationships; inducements are proposals that improve people's lives if they accept them, and threats are proposals that worsen people's lives if they reject them (12).

It is crucial to differentiate and define the concept of perceived coercion, distinguishing it from coercion in a broader sense. Perceived coercion is linked to the subjective experience of coercion (13,14). It is the feeling of being compelled or pressured in relation to being directed towards treatment which can stem from various sources such as the legal system, family, healthcare system, or from within (self-criticism) (15). Furthermore, a significant number of patients experience a sense of obligation to willingly undergo treatment due to their apprehension that declining it could lead to the application of force, referred to as the "coercive shadow (2)." Other practices in mental health care such as continuous observation, time outs, and blanket restrictions are also deemed to be coercive practices.

The central theme of the thesis will revolve around formal coercive measures, primarily involuntary admissions, and to a lesser extent, mechanical restraints. The research will also delve into the subjective aspect of coercion, measuring and discussing service users' experiences in this regard.

Seclusion is not explored in detail because it is not routinely practiced in Nigeria and Portugal. While these actions are often governed by a country's mental health laws and are classified as formal types of coercion, it is crucial to highlight that there was no specific regulation of coercive measures in Nigeria at the time this research was conducted. Similarly, in Portugal, although the principle of employing the least restrictive measure is upheld by the country's mental health law and the criteria for involuntary admission are outlined, the use of restraints and seclusion was not explicitly regulated by the prevailing mental health legislation at the time the research was conducted.

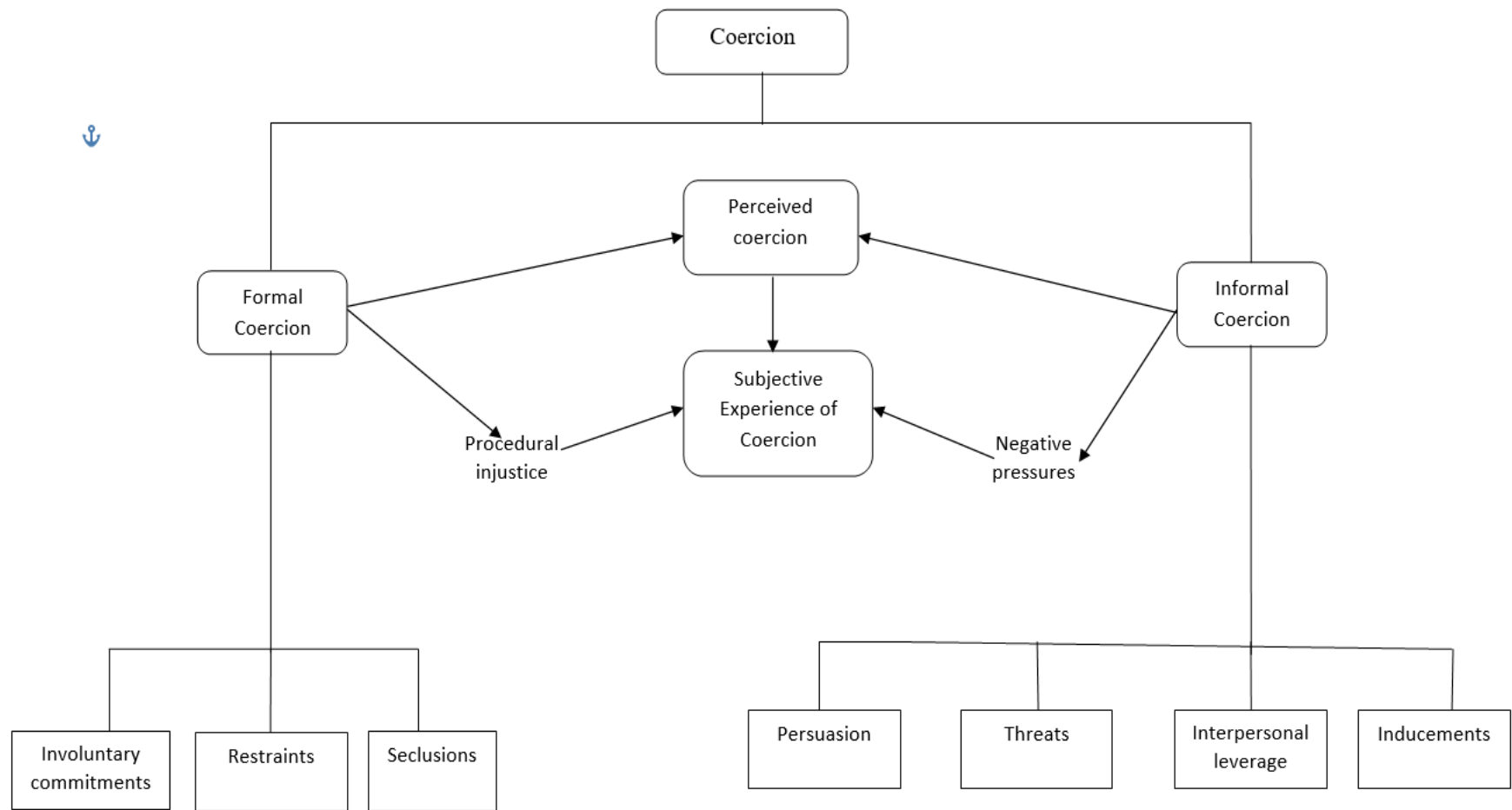


Figure 1: A Taxonomy of coercion in mental Health care as used in the thesis

1.3 The subjective experience of coercion

Since a portion of the research done for this thesis relates to the subjective experience of coercion among service users, a more in-depth discussion of this topic will be covered in this subsection. The experience of coercion is distinctively profound and is not to be equated with formal coercive measures (16,17). While not as extensively examined as other types of coercion, a systematic review of 18 papers including 3489 patients revealed that three-quarters of individuals who are involuntarily hospitalized and a quarter of those who voluntarily seek admission for mental health conditions still report experiencing perceived coercion (14). Recent studies are suggesting that beyond legal status, the perceived admission status and even the perceived usefulness of admission are contributing factors to the overall subjective experience of coercion (18). A study conducted among 140 voluntarily admitted patients in a Swiss hospital has shown that the perceived coercion of voluntarily admitted patients can be impacted by a previous history of coercion (19).

Some studies have investigated perceived coercion, as a primary or indirect outcome of the impacts of seclusion and restraint (20,21), forced medication (21), the patient's legal status (14,22–26), and the patient's capacity for decision-making (27). An important factor closely linked to the subjective perception of coercion is the perceived fairness and justice during treatment, referred to as procedural justice (28–31). Other factors that have been observed to influence perceived coercion include age (32), and the quality of communication with health professionals (28). Numerous negative effects of the subjective experience of coercion have been noted, including an elevated risk of suicide following discharge (33), a preference for avoiding mental health services (2), and feelings of dehumanization and isolation (14).

Differences in culture and mental health legislation have also been identified to be influencing factors in the subjective experience of coercion among PMHCs. For example, significant variations in levels of perceived coercion were observed in a study that compared levels of perceived coercion among committed patients in five Nordic countries (34). Lower levels of perceived coercion during admission among committed patients were linked to the Civil Commitment Act's extensive definition of coercion. In countries like Norway and Finland, where the Civil Commitment Act applies a broad interpretation of coercion, more patients were formally committed, even if they were voluntary patients. Thus, these patients tended to perceive less coercion upon admission. The difference in local care traditions was suggested to be a contributing factor to variations between healthcare centers within countries (34). A systematic analysis was conducted to identify the key factors influencing the subjective experience of coercive measures in psychiatric inpatients. These factors, which include the

provision of information, staff presence and interaction, communication with professionals, the physical environment of the psychiatric ward, and the level of respect, humane treatment, and support from staff, were found to significantly impact the overall experience. Additionally, debriefing sessions and individual characteristics of patients and their admission or treatment were also identified as relevant factors (21).

Multiple instruments have been created to quantitatively assess the perceived coercion of patients undergoing psychiatric admissions, including the Cantril Ladder (35–37), Coercion Experience Scale (38–42), and Nordic Admission Interview (36,43). However, the Admission Experience Survey (AES), developed for the MacArthur Coercion Study, remains one of the most comprehensive, widely employed tools and has been utilized in numerous studies (35,42–51). The AES, derived from the MacArthur Admission Experience Interview, is a 16-item questionnaire designed to explore different aspects of psychiatric patients' hospitalization experiences (51). It covers choice, interactions with clinical staff and family members, and external influences on the decision to enter the hospital. Experiences are grouped into three categories by the questionnaire: (i) perceived coercion or feelings of coercion; (ii) negative pressures; and (iii) voice or procedural justice. Regarding hospital admission, the perceived coercion domain focuses on ideas like freedom, choice, initiative, control, and influence (32,52). Experiences of being physically, verbally, or physically threatened into entering the hospital are included in the negative pressures' domain (50). Lastly, the voice or procedural justice domain relates to having the opportunity to express one's opinion regarding admission (51,53). The AES demonstrated reliable psychometric properties after it was translated into various languages including French (54), Italian (32), and Chinese (50), and has proven valuable in evaluating subjective coercion in diverse psychiatric clinical settings. However, doubts have arisen regarding the actual factor structure of the AES due to concerns about the methodology used in the previous psychometric analyses. At the time the Ph.D. was conducted, no study had validated the Portuguese version of the instrument, and the subjective experience of coercion among patients in Portuguese psychiatric services was unknown.

1.3.1 An overview of qualitative studies on the subjective experience of coercion

Given that the qualitative technique can capture the most in-depth characteristics of subjective and complex experiences, such as the feeling of coercion (25), numerous qualitative research has been done on the topic. The majority of the themes connected to the impression of coercion were negative, including emotions of contempt, violation, isolation, and dehumanization, according to one of the first comprehensive reviews of the literature on the experience of coercion that included qualitative studies (24). There was no strong quantitative evidence that the experience of coercion was associated

with psychopathology, and it was not possible to predict the risk factors for perceived coercion (24). However, several patients in specific studies also cited favorable outcomes and assessments, such as retroactive acceptance of therapies, feelings of protection or safety, and a return to normalcy (24,55,56). It is yet unknown if it is typical for the same patient to experience both beneficial and detrimental effects of coercion (55).

The negative effects of restraints and other coercive interventions on patients' experiences were validated in another review that examined patients' reported perceptions of the events connected with the process of coercion (57). The authors emphasized the importance of respectful communication before, during, and after such episodes, as being subjected to staff control was identified as a significant precursor to aggression leading to coercive measures. Patients noted that relationships with staff were harmed by a lack of respectful communication (57). Strongly negative consequences, such as anxiety, shame, resignation, re-traumatization, and punishment, were frequently observed in studies examining patients' experiences with restraints (58,59). Patients described their experiences with restraint in starkly negative terms, such as feeling "like a slave," "like a bug," or "ready to be raped"(58).

A lack of effective communication and an unequal distribution of power among the stakeholders were found to be problems, which were made worse by the attitudes of mental health professionals, according to a systematic review of 37 qualitative studies from 11 countries that included 731 service users, 100 informal caregivers, and 291 mental health professionals (60). During the decision-making process for admission, service users expressed a strong desire to have their voices heard and to gain a better understanding of their situation. Families, on the other hand, felt a sense of responsibility towards the service users, attempting to maintain positive relationships while struggling to receive support from the mental health system. Despite the requests of the service users or their families, the professionals thought that danger or possible harm to others should be the main considerations when deciding if admission is essential. Several professionals believed it was unnecessary to notify service users because they would likely not be able to understand it. Service users encountered challenges during the admission process adjusting to the ward atmosphere and building relationships with the personnel. They were particularly against forced medication and other forms of coercion. Particularly as the service users' discharge approached, families expressed their dissatisfaction over being excluded from the treatment planning process. The use of coercion, however, was regularly justified by professionals, who firmly believed that they understood what was best for the service users (60). Patients' opinions of their hospitalization and the limitations it imposed varied, according to a recent review and synthesis of qualitative studies evaluating the impact of involuntary admission (61). While

some patients saw it as a sort of care and protection against the negative effects of their condition, others saw it as a violation of their rights and autonomy, leaving them feeling helpless and powerless. Patients' experiences of admission were found to be significantly influenced by their level of decision-making, the quality of their interactions with personnel, and their general satisfaction with hospital care. The feeling of coercion was managed by patients using a variety of approaches. Nevertheless, patients reported considerable negative effects in several areas of their lives in spite of the efforts they made. As a result, they highlighted the need for the adoption of less coercive strategies and better alternatives for forced admission (61). The conspicuous absence of studies from Low- and Middle-income countries is a typical limitation of most reviews on this topic. In LMICs, particularly in African countries where the prevailing mental health laws are frequently colonial era outdated mental health legislations, very few studies have investigated this topic.

1.4 Factors influencing the use of coercion in Mental health care.

Many studies conducted worldwide have assessed the risk factors for coercion linked to the sociodemographic and clinical characteristics of patients. Several socio-demographic factors have been linked with increased risks of being subjected to various coercive measures. A prior systematic review found racial differences in the risk of compulsory detentions, with black Caribbean and black Africans having the highest risks of being detained under the Mental Health Act (62). Although there were some racial differences in clinical treatment prior to admission, research into the association between clinical care practices and ethnic inequalities in involuntary admission indicated that these differences had a negligible effect on the inequalities in involuntary admission (63). Regarding other restrictive practices such as restraints, although existing evidence indicates that specific ethnic minority groups were more prone to encounter restrictive practices compared to other groups (64,65), a scoping review of international literature on the topic surmised that existing research lacks consensus and consistency on this matter (66). The review argues further that there is significant variation in the definitions of ethnicity and restrictive practices utilized across studies, which hinders the understanding of researchers and clinicians regarding this issue (66).

Additionally, it has been noted that immigrant groups have a much greater rate of compulsory admission (67). According to an Italian study, compulsory admission was associated with male gender, poorer education, language proficiency, a diagnosis of schizophrenia spectrum disease, and violent behavior in the sample of migrants, somewhat different from the natives (67). According to a systematic review of 77 studies from 22 countries, the odds of being involuntarily admitted were significantly higher for men, single people, the unemployed, welfare recipients, those with psychotic or bipolar disorders, and those who had previously been involuntarily hospitalized. Additionally,

associations between involuntary admission and perceived risk to others, positive psychotic symptoms, diminished insight into the condition, diminished adherence to treatment prior to hospitalization, and police participation in admission were discovered. (68). According to the systematic review, being diagnosed with a psychotic disorder and previously experiencing involuntary hospitalization were the two major risk factors for being involuntarily hospitalized. The presence of either of these factors significantly increased the likelihood of involuntary hospitalization (68). Schizophrenia spectrum disorders were the most prevalent diagnosis among admitted patients, according to research done at the University General Hospital in Ioannina, Greece, which examined the social patterns of involuntary psychiatric admissions from 2008 to 2017 (69). Lack of social support and financial hardship were prominent factors among those admitted, with 70.2% being single and 64.8% unemployed. Additionally, a significant majority of patients (64.2%) had previous admissions to the psychiatric ward (69). In Cyprus, a similar study at the reference psychiatric facility showed that the majority (72.9%) of involuntary admissions were due to schizophrenia or other related psychotic disorders. "Disorganized behavior," non-adherence to pharmacotherapy, and gender differences were noted as contributing factors to admission (70).

Another study examined how often restraint occurs in people with psychoses and its risk factors. The review found that younger age, a diagnosis of schizophrenia, male gender, and belonging to ethnic minority backgrounds were linked to higher rates of restraint (64). Although there may be a link to mood disorders, a more recent and comprehensive review that covered a wider spectrum of diseases suggests that the influence of diagnosis is minimal (65). Additionally, the current knowledge suggests that, despite this area's relative lack of research, the severity of symptoms may play a more substantial role as a risk factor (65). The use of coercive practices was shown to be the result of multiple risks in the review that sought to determine the risk factors related to their usage in persons who had been hospitalized for inpatient psychiatric treatment for severe mental illness (SMI) (65). The evidence consistently highlighted certain patterns regarding patient sociodemographic and clinical factors associated with coercive measures. These included being younger, male, belonging to an ethnic minority, having more severe symptoms, and having a mental disorder diagnosis (65). It was acknowledged, however, that the results differed between studies and that the methodologies employed were often of poor quality. The difficulty in reaching definitive conclusions from the evaluated information and the inconsistent results were attributed to a number of variables. Firstly, there was significant variation in study design, including differences in sampling methods and analytical approaches. Secondly, the definition of constructs varied across studies, possibly influenced by geographical factors (65). The studies also failed to address a number of crucial

elements, including attitudes toward mental healthcare, health beliefs, community and family factors (such as neighborhood characteristics and the impact of social networks), as well as past trauma (65).

The majority of the literature on factors influencing the use of coercion has focused on the individual characteristics of PMHCs. Wide variations in the prevalence of coercive measures among countries (68,71), within countries (72,73), and even hospitals within a region (74) have highlighted the influence of external variables other than patient characteristics. An increasing number of studies have started to explore other factors other than those linked to service users, that could influence the use of coercive measures such as those related to mental health services (75,76), mental health legislation (71,77,78), and staff attitudes towards coercion (79–81). A recent study on crisis care systems in England found that certain models or characteristics appeared to be linked to a decrease in admissions and detentions, such as the presence of crisis cafés and crisis telephone lines. On the other hand, having a separate crisis assessment team was associated with a higher rate of admissions and detentions (82).

Despite the growing body of research linking non-patient factors to the use of coercive measures, systematic efforts to summarize and assess these studies have not been made. Moreover, most of the studies about contextual factors evaluate one or two contextual factors at a time, without taking cognizance of the interacting influences of other contextual factors. Additionally, studies that look at the factors impacting the use of coercion in LMICs are conspicuously absent from the body of literature on the subject.

1.4.1 Staff Attitudes towards coercion

This subsection explores staff attitudes towards coercion because the thesis has focused in part on these attitudes, which are increasingly acknowledged to have an impact on the use of coercive measures and must be considered in interventions to reduce coercion. The decision to use a coercive measure is influenced by subjective factors such as the traits, emotions, past experiences, and attitudes of the clinical staff (83–85). The attitudes of clinical staff play a significant role in influencing professional behavior, including behaviors related to the use of coercion (79).

Attitudes have been defined as “learned predispositions to think, feel and behave in a specific manner to a certain object” (86). These attitudes have been linked to their socio-demographic characteristics such as age (87,88), gender (88,89), professional category (90), hierarchical position (91), and proximity with patients (92). Previous studies have shown the differences in attitudes towards coercion between and within professional groups. Some studies imply that nurses tend to approve of coercive tactics more than psychiatrists do and are less critical of their usage (85,93,94). Research

conducted over time has demonstrated a shift in nurses' perception of coercion, transitioning from considering it as a therapeutic approach to perceiving it primarily as a safety measure (80,95,96). The safety paradigm favors using the least invasive treatments and views the use of coercive measures as a last resort. The move has put nurses in a difficult position because they must accept both the necessity of coercion and its tendency to arouse negative emotions.

According to a literature review conducted by Doedens et al. (2020), the extant literature does not provide a clear understanding of how characteristics specific to nurses affect their attitudes toward the use of physical coercive measures. This suggests that further research is necessary to close this knowledge gap (80). It remains unclear what external factors, beliefs, and traits could influence professionals' attitudes towards coercive measures. In a recent study carried out in Spain, it was observed that participants held the belief that completely eradicating the use of mechanical restraints is not feasible (97). They believed that such restraints were required in dire situations to protect both users and professionals. Additionally, employees who were actively involved in the physical application of mechanical restraints were noticeably more likely to concur with assertions that doing so helps to ensure safety, provide care, and maintain order (97).

In the United States, psychiatrists' opinions on providing fundamental requirements, respecting patients' choice to refuse treatment, and the unpredictability of the future all influenced their support for compulsory hospitalization (98). Although many mental health experts in Switzerland acknowledged coercion as a violation of fundamental human rights, they maintained that coercion was essential and helpful for psychiatric patients (99). According to a study conducted in Germany, a broad positive disposition towards coercion had a notable impact on decisions regarding its implementation in specific instances. People with this attitude were therefore more likely to be in favor of using coercion (100). Psychiatric nurses who were older, female, highly qualified, and had been employed for a longer period of time as well as those who had not participated in coercive interventions in the previous year showed a low level of support for the use of physical coercive measures, according to an Israeli study that looked at the attitudes and perceptions of staff members at a mental health center regarding the use of such measures. The majority of the sample, however, expressed a reluctance to limit the use of such methods, and they felt a lack of institutional support after engaging in a coercive event (101).

The use of physical restraints has been described as a distressing experience for staff members by Bonner et al.(102) and Bigwood and Crowe (103) because they must deal with their own emotional responses, such as fear, frustration, wrath, guilt, and the innate urge for self-preservation. Importantly, Krieger et al. (2021) concluded that increasing staff members' ability to reflect on their

own attitudes, feelings, and actions is likely to reduce the likelihood of coercive interventions (104). These findings imply that it is crucial for institutions to facilitate open and engaging discussions between staff members and their superiors regarding the emotional and psychological impact of coercive events. A study of Swiss mental health professionals found that hopeful recovery expectations were linked to more critical attitudes toward coercion (94). Given that mental health professionals' attitudes have been identified as critical for reducing coercive interventions (105), recovery orientation training has been proposed as a promising and viable approach, along with other strategies, to improve critical reflection regarding the use of coercive measures in acute psychiatric wards (94).

Insufficient research exists to thoroughly comprehend the fundamental mechanisms that elucidate how the attitudes of staff members impact the occurrence of coercion, as well as whether these attitudes can be effectively changed through specific approaches to decrease coercion. To conduct such investigations, it is crucial to have the ability to evaluate attitudes in a well-defined and consistent manner. The SACS (Staff Attitude to Coercion Scale) is a self-reported instrument developed by Husum et al. in Norway to systematically assess staff attitudes towards coercion(106). Three distinct attitude patterns were identified that were later incorporated as separate subscales within the SACS. The SACS suggests that staff members can possess a critical attitude (perceiving coercion as offensive), a pragmatic attitude (regarding coercion as necessary for care and security), or a positive attitude (considering coercion as a form of treatment). Thus, the instrument consists of 15 items and is divided into three subdomains: critical attitude toward coercion, pragmatic attitude toward coercion, and positive attitude toward coercion. The SACS has gained widespread international use and has been translated into multiple languages, including Arabic (107), Chinese (108), German (109), Japanese (110), Italian (111), and Polish (112). It has been administered over 5,000 times. However, there have been some concerns raised in the psychometric literature regarding the factor structure and cross-cultural validity of the SACS. The attitudes of mental health practitioners in Portugal towards the use of coercion were unknown at the time of the Ph.D. research since no Portuguese translation of the instrument had been validated for use. Understanding the attitudes of mental health professionals toward coercion is crucial for implementing effective strategies for the reduction of coercion in mental health care.

1.5 Key statements and international mechanisms on mental health and human rights

In the context of this thesis, it is essential to highlight the key statements and international mechanisms on mental health and human rights because they serve as the foundation for advocating

for an ethical and human-rights-oriented approach to mental health care that upholds people's autonomy and dignity while ensuring they receive the appropriate support and treatment.

1.5.1 Global conventions and declarations on mental health and human rights

Several key statements and documents have been instrumental in highlighting the intersection between mental health and human rights. These statements emphasize the rights of PMHCs and advocate for the promotion of dignity, autonomy, and non-discrimination. The most important declarations include the following:

The Universal Declaration of Human Rights (UDHR) which was adopted in 1948 by the United Nations General Assembly following the end of the Second World War is a foundational document that sets out fundamental human rights for all individuals. It includes freedom from torture and cruel, inhuman, or humiliating treatment or punishment (Articles 3 and 5) and the right to equality before the law (Articles 7 and 8). The International Covenant on Economic, Social, and Cultural Rights (ICESCR) is another United Nations treaty adopted in 1966 which protects a wide range of rights related to work, living conditions, education, health, and cultural participation. States that have ratified the ICESCR are legally obligated to uphold and fulfill these rights. The ICESCR emphasizes the interconnectedness of civil, political, economic, social, and cultural rights, recognizing that they are all essential for human dignity and well-being. The Universal Declaration of Human Rights (UDHR) and the International Covenant on Economic, Social, and Cultural Rights (ICESCR) are the two primary international agreements that make up the International Bill of Human Rights. The importance of these rights in relation to mental health and the care of PMHCs lies in the absence of any exemptions or limitations on their complete fulfillment.

The first time a universal declaration on human rights was made specifically for PMHCs was in 1991 when the United Nations General Assembly adopted the Principles for the Protection of Persons with Mental Illness and the Improvement of Mental Health Care (113). The principles provide guidance for the protection of the rights of persons with mental illness. They emphasize the importance of respect for human rights, non-discrimination, informed consent, access to appropriate care, and the prohibition of torture and other cruel, inhuman, or degrading treatment.

The World Psychiatric Association (WPA) adopted the Madrid Declaration in 1996 in response to cases of political misuse of psychiatry in countries such as the former Soviet Union, Romania, and South Africa that came to public attention in the early 1970s (114). The patient's role as an equal partner in the therapeutic process is emphasized particularly in the declaration's second section. It emphasizes that for the patient to be independent and make informed decisions, the therapist-patient

relationship must be built on mutual trust and respect. The Madrid Declaration further asserts that when a PMHC is unable to exercise sound judgment and capacity, the psychiatrist should consult with the patient's family and, if necessary, seek legal advice to protect the patient's human dignity and legal rights. The declaration stipulates that no treatment should be given against a patient's wishes unless doing so would put the patient's life or the lives of those around them in danger.

The most widely praised international legislative framework that specifically addresses coercion in mental health care is the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) (115). To reflect a paradigm change from a medical to a human rights-based approach, the UNCRPD emphasizes that equality should be the primary goal of laws, policies, and practices that affect people with disabilities (116). With over 177 countries signing on, the convention is one of the most ratified treaties in history. Every signatory is required to adapt its current laws and regulations to the convention's requirements (117). It emphatically states that every person always has legal capacity, notwithstanding their mental status, and further decries all forms of compulsory hospitalizations and substitute decision-making (118). The use of coercion in the treatment of PMHCs runs contradictory to the UNCRPD's fundamental concept of autonomy, which aims to give PMHCs the freedom to choose their own course of treatment. The UNCRPD promotes supported decisions in which the required concessions are made, and resources are made accessible to ensure that people can express their own preferences and will (117). The interpretation of the UNCRPD by the general committee has drawn criticism from some UN bodies, many governments, researchers, practitioners and users who argue that its universal application could unintentionally deprive some people of their right to health and increase the risk of impairment by denying treatment to those who might need it in an emergency or who might be in danger of harming themselves or others (118).

The UNCRPD addresses the problem of coercion in mental health care by emphasizing the following fundamental values:

1. **Autonomy and Informed Decision-Making:** The UNCRPD's Article 12 covers the concepts of autonomy and informed decision-making particularly. The article has the title "Equal recognition before the law" and focuses on the legal capacity of people with disabilities, especially those who have MHCs. It emphasizes that people with disabilities have the same rights as other people to use their legal capacity. The need to provide suitable support to people with disabilities to aid them in decision-making is also acknowledged in the article. The support must ensure that the person can make decisions free from excessive influence or coercion while still respecting their autonomy, will, and preferences.

2. **Free and Informed Consent:** Within Article 25, the concept of free and informed consent is referenced about healthcare services. It highlights that persons with disabilities have the right to give their free and informed consent for medical treatments, interventions, and procedures. This emphasizes the importance of individuals being provided with adequate information, understanding the implications and potential risks of the proposed treatment, and making decisions based on their own will and preferences. Coercive practices, such as forced treatment or involuntary admission, are seen as violations of the right to consent and are discouraged.
3. **Access to Support and Alternatives:** Article 19 of the UNCRPD largely addresses the idea of access to support and alternatives for people with disabilities, including those who have mental health disorders. The focus of Article 19 on "Living independently and being included in the community" is the right of people with disabilities to live in the community and have access to support services. It promotes the creation of community-based alternatives to involuntary admissions and care.
4. **Right to Legal Protection:** Article 13 of the UNCRPD addresses the right to legal protection for people with disabilities, including those who have MHCs. The goal of Article 13's "Access to Justice" section is to guarantee that people with disabilities have efficient access to the legal system and protections for their rights. The objective of the article is to give people with disabilities the chance to exercise their legal rights, look for justice, and have their interests safeguarded. To resolve human rights abuses, it emphasizes the significance of creating efficient complaint systems and access to justice.
5. **Least Restrictive Alternative:** The UNCRPD does not specifically mention the least restrictive alternative principle as a separate idea. However, the UNCRPD implicitly incorporates the least restrictive environment concept throughout, particularly in relation to the right to live independently and participate in society. Article 19 of the UNCRPD, headed "Living independently and being included in the community," emphasizes the right of people with disabilities to live in the community and have access to the support services they require. Although the least restrictive option is not specifically mentioned, it promotes the creation of community-based alternatives to institutionalization and stresses the significance of offering people with disabilities a wide range of support services and accommodations. It encourages the exploration and promotion of alternatives to coercive practices such as involuntary hospitalization or treatment, focusing on community-based support and services.

6. **Safeguards against Abuse and Torture:** The safeguards against abuse and torture for persons with disabilities, including those with MHCs, are primarily addressed in Article 15 of the UNCRPD. Article 15 is titled "Freedom from torture or cruel, inhuman or degrading treatment or punishment" and focuses on protecting individuals with disabilities from any form of abuse or mistreatment. Additionally, Article 15 underscores the obligation of states to investigate and address allegations of abuse or mistreatment promptly, impartially, and effectively. It highlights the need to safeguard people with disabilities, particularly those who have MHCs, against any type of abuse or mistreatment in environments that provide mental health care and encourages the deployment of efficient protections.

These principles work together to promote a human rights-based approach to mental health care, with a focus on respecting the autonomy, dignity, and well-being of individuals with disabilities, including PMHCs.

1.5.2 European conventions and declarations on mental health and human rights

Several European instruments and declarations have been enacted to protect the human rights of PMHCs. Some key documents include:

1. **European Convention on Human Rights (ECHR):** The ECHR (119), adopted by the Council of Europe in 1950, guarantees fundamental human rights and freedom. It applies to all individuals within the jurisdiction of member countries, including those with MHCs. Articles relevant to the use of coercion in mental health care include Article 3 (prohibition of torture and inhuman or degrading treatment), Article 5 (right to liberty and security), and Article 8 (right to respect private and family life).
2. **European Convention for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment (ECPT):** The 1989-enacted ECPT (120) established a framework for the prevention of torture and cruel or degrading treatment in detention facilities, including mental health facilities. It strives to avoid abuse and protect the human rights of those who are imprisoned by setting criteria for their care and living situations, including those who have MHCs.
3. **The Oviedo Convention,** another significant instrument that covers human rights in the context of biomedicine, particularly mental health, is known officially as the Council of Europe Convention on Human Rights and Biomedicine. The Council of Europe accepted it in 1997, and it went into effect in 1999. The protection of human rights in healthcare, particularly mental health, is specifically covered by the Oviedo Convention (121). It covers

various aspects such as informed consent, privacy and confidentiality, protection of vulnerable individuals, and the rights of patients involved in biomedical research. Regarding mental health, the Oviedo Convention acknowledges the importance of respecting the dignity and autonomy of PMHCs. It emphasizes the need for informed consent in psychiatric treatment and the protection of personal data in mental health records. The convention also emphasizes the importance of safeguarding the rights of individuals who are unable to consent, ensuring that their best interests are considered. The Additional Protocol to the Oviedo Convention was adopted in 2005 and entered into force in 2008. It establishes precise rules and safeguards for human subjects' biomedical research. The agreement strives to achieve a compromise between supporting scientific advancement and safeguarding the rights, dignity, and well-being of study participants, especially vulnerable participants such as PMHCs. The Council of Europe's stances emphasize the importance of informed consent, the protection of vulnerable individuals, privacy and confidentiality, equal access to research benefits, and independent ethical assessment.

4. European Framework for Action on Mental Health and Well-being: The Joint Action on Mental Health and Well-being, launched in 2013 and ran until 2016 resulting in the European Framework for Action on Mental Health and Wellbeing (122). It was developed by the European commission and provides guidance to European countries on improving mental health services, promoting mental well-being, and protecting the rights of PMHCs.
5. Additionally, while not specific to mental health, the Charter of Fundamental Rights of the European Union (123) also provides protections relevant to PMHCs. The Charter was created in 2000 and went into effect in December 2009 together with the Lisbon Treaty. It covers a range of fundamental rights, including the prohibition of cruel, inhumane, or degrading treatment, as well as the rights to integrity, health, and dignity. All citizens of the European Union, including those who have MHCs, are entitled to these rights.

1.5.3 African conventions and declarations on mental health and human rights

There are also African statements and legal instruments that address the human rights of PMHCs in the region. Some notable examples include:

1. African Charter on Human and Peoples' Rights: This charter, which was established by the African Union in 1981, protects a wide variety of civil, political, economic, social, and

cultural rights (124). Although it does not reference mental health specifically, it offers a framework for defending everyone's human rights, including those of those with MHCs.

2. Abuja Declaration: The 2001 Abuja Declaration (125), although not exclusively centered on mental health, addresses health issues in Africa, including mental health, and emphasizes the necessity for greater investment and resources to meet the health requirements in the region.
3. African Union Convention on the Rights and Welfare of Persons with Disabilities: Adopted in 2009, this convention specifically focuses on the rights of persons with disabilities, including those with mental health conditions (126). It recognizes their right to healthcare, rehabilitation, and support services, as well as their right to live independently and be included in society. The convention calls for the elimination of discrimination, ensuring accessibility, and promoting the full participation and social integration of persons with disabilities.

1.6 Contextual analysis of coercion in mental health care

1.6.1 Mental health care and coercion in Nigeria

According to World Bank estimates (127), Nigeria is the most populated nation in Africa, home to approximately 218 million people, more than half of whom are under the age of thirty. During the 16th century, Portuguese explorers were among the first Europeans to initiate direct commercial interactions with the inhabitants of southern Nigeria establishing trade connections along the Slave Coast region and since then, various European nations contacted the region now known as Nigeria (128). Among them, the British emerged as significant players and eventually established it as a colony in the early 20th century. Since gaining independence in 1960, Nigeria has struggled to recover from the effects of colonization and the forced amalgamating of different regions. Periods of political turmoil were experienced in Nigeria, including a three-year civil war and several coup d'états. In the 1980s, healthcare advancements led to improvements in Nigeria's healthcare system, resulting in reduced maternal and infant mortality rates and an increase in life expectancy at birth. In 1999, the country attained a degree of political stability with the election of its first democratically elected president. However, Nigeria continues to face challenges related to infectious diseases such as Malaria, Tuberculosis, HIV, and various neglected tropical diseases. The Life expectancy at birth of 53 years is significantly lower than the global average of 73.3 years (129).

Approximately 12.1% of Nigerians have had at least one DSM-IV disorder over their lifetime, according to the results of the Nigerian Survey of Mental Health Disorders, which was carried out in 2002 as part of the World Mental Health Survey (130). Even though this data is nearly twenty years old and there have been no subsequent nationally representative epidemiological surveys conducted, estimations from the Global Burden of Disease (GBD) study indicate a growing occurrence of mental disorders among the Nigerian population (131). Treatment gaps for mental disorders can reach 80% in most LMICs, including Nigeria (132). In Nigeria, only twenty percent of people with severe MHCs received any kind of therapy in the previous year, and of those who did, only ten percent received care that was at least minimally adequate (133). The government spends 4.1% of the entire health budget on mental health, well below the recommendation that the health budget should match the percentage of DALYs caused by mental and neurological disorders (134). Nearly 90% of this funding goes to the eight psychiatric hospitals in the country, with the remaining 9% going to other psychiatric treatments such as those offered by university departments of psychiatry and other tertiary hospital settings (135). Nigeria has a psychiatrist-to-population ratio of approximately 1:1,000,000 (136), 9.7 psychiatric nurses per 1,000,000 people, and correspondingly lower ratios for clinical psychologists, social workers, and occupational therapists. The integration of mental health services into primary healthcare is outlined as a policy objective in the mental health policy, which acknowledges the lack of mental health professionals in the country (137). Due to the poor state of the majority of primary health centers, accomplishing this goal is difficult in reality (138). Furthermore, as these services are generally paid for out of pocket by users, their cost is a concern. Nigeria has ratified numerous international human rights treaties, notably the UNCRPD and the African Charter on Human and Peoples' Rights. In 2019, Nigeria passed a law protecting the rights of people with disabilities. The outdated 'Lunacy Act,' originally implemented by the British in 1916 and amended in 1958, served as Nigeria's mental health legislation for approximately 60 years until January 5th, 2023, when a new mental health legislation was passed (139). The 'Lunacy Act', besides employing offensive and stigmatizing labels for individuals with mental and psychosocial disabilities, contains numerous ambiguities regarding the specific conditions covered by the law. This gave medical professionals and judges plenty of discretion, which could lead to the unlawful detention of people without a mental disability (140,141). Despite the legal requirement for certification by both a medical practitioner and a magistrate to declare an individual as a 'lunatic' for commitment, the law does not address the issue of treatment for those who are committed (141,142). The absence of provisions for the treatment of PMHCs has been identified as a significant catalyst for the mental health law reform movement in the country (141). Several attempts have been made over the course of 20 years to update the mental health laws. The revised Mental Health Bill of 2003 aimed to update the outdated Lunacy Act and had provisions for defining terms, treatment, proxy consent, and review

mechanisms. However, it lacked addressing socio-political issues and specific regulations for treatments and coercive practices. After the senator who proposed it passed away, the bill was abandoned and later withdrawn in 2009. The Mental Health Bill of 2013 attempted to address some of the issues, but it failed to gain support after the sponsoring senator's unsuccessful bid for reelection. The goals of the Mental and Substance Abuse Bill 2019 were to improve and regulate mental health and substance abuse services, safeguard people with mental health needs, and create a National Commission. It was formulated based on the WHO's Resource Book on Mental Health Legislation but diverges from some recommendations of the UNCRPD. It drew criticism for suggesting that substance abuse and MHCs are related in its title and for placing restrictions on human rights based on mental capacity.

The recently enacted National Mental Health Act 2021 marks a significant milestone in the country's efforts to reform its mental health care. The new law upholds human rights principles and safeguards the rights of PMHCs, addressing the limitations of previous proposed bills. The National Mental Health Act of 2021 makes laudable changes, including the recruitment of peers who have lived experience, the creation of community mental health services, and the inclusion of mental health in initiatives addressing specific diseases like HIV. By establishing a Mental Health Fund, which will be financed by funds authorized by the National Assembly, the Ministry of Health, and donations, it also acknowledges the problem of insufficient funding. Nigeria also approved a law creating the National Health Insurance Authority with the intention of providing health insurance for vulnerable groups, such as PMHCs. Despite these progressing steps, difficulties still exist. Given the rising rates of poverty and the falling affordability of health insurance, it is uncertain to what extent the Vulnerable Fund will adequately serve the intended population (143). The National Mental Health Act 2021 also falls short in addressing procedures like advance directives and supported decision-making that are recommended by the UNCRPD.

The lack of effective service organization, poor availability of services, shortage of mental health professionals, and the high costs associated with healthcare lead many individuals to turn to traditional and religious healers as a more accessible and affordable option for care. In Nigeria and other places, the utilization of traditional non-western methods for mental healthcare, referred to as "unorthodox approaches," has been observed for many years (133,144). This preference for alternative methods can be attributed to cultural factors, where spiritual interpretations of mental disorders are favored over biomedical explanations (145,146). Nearly half of people in Africa who need care for MHCs choose complementary and alternative practitioners as their first care provider

before visiting conventional medical facilities, making them a significant part of the mental health care system in sub-Saharan Africa (147). However, a variety of harmful practices and violations of human rights have been reported among these traditional practitioners, including shackling, flogging, cage-keeping, overcrowding, forcing patients to fast (or starving them), and preventing patients from taking their own bath(132). A survey of religious and traditional healers in three countries in sub-Saharan Africa reported that the use of physical restraints was approximately 63.4%(132).

Instances of human rights abuses of PMHCs in Nigeria within traditional and religious treatment facilities have primarily been documented by various human rights organizations such as Human Rights Watch. These violations have garnered significant media coverage and public attention (148,149). Human rights violations including the use of coercive measures in formal psychiatric services in the country have not received corresponding attention. The 2006 report from the World Health Organization Assessment Instrument for Mental Health Systems (WHO-AIMS) shed light on the limited information available regarding mental health services in Nigeria (135). Unfortunately, not much has changed since then. The report indicated that around 51% of patients receiving care in community-based psychiatric units (i.e., psychiatric units within general hospitals or secondary healthcare facilities) and 64% of patients in mental hospitals were admitted involuntarily. Additionally, the report estimated that approximately 11-20% of patients in both community and mental hospital settings had been subjected to restraint or seclusion in the previous year. The report highlighted the lack of a framework for routinely disseminating patient and service data to the health ministry, but it did not go into depth on the methodology utilized to arrive at these estimates (135). Before this Ph.D. study, no research had been done on the use of coercion in Nigerian mental health care.

1.6.2 Mental health care and coercion in Portugal

Portugal has a population of 10.3 million people and is in Southern Europe. Following the end of a fascist era characterized by forty years of oppression, inequality, and colonial wars, the country has undergone tremendous transformations. The formation of a democratic system in 1974 resulted in the creation of a welfare state, which addressed material deprivation and improved access to healthcare (150). As a result, the overall health of the Portuguese people has significantly improved (151). Despite these advancements, several areas of vulnerability persist, including child poverty, unhealthy behaviors such as substance abuse, and health disparities, particularly among the elderly population. Portugal stands out as having one of the highest levels of inequality in the European Union (152). Additionally, Portugal experiences comparatively lower levels of income, with a median equivalized

net income of 9,346€ in 2018, way below the European Union average of 17,468€ (153). Portugal faces the difficulty of an aging population because of variables such as increased life expectancy, lower birth rates, and a negative migration balance. Chronic diseases are responsible for most deaths, impairments, and healthcare utilization in the country. In 2018, Portugal's average life expectancy at birth was 81.5 years, slightly higher than the European Union average of 81 years.

In 1979, Portugal established the National Health Service (NHS) as a tax-funded system to provide comprehensive, equitable, general, and generally free healthcare services to all residents. The Ministry of Health is in charge of central planning, organization, and regulation of the healthcare sector, while five regional health administrations handle these tasks at the regional level. The financing of the healthcare system relies primarily on public funds, but there is a notable portion of total healthcare expenditure that comes from private sources (154). Out-of-pocket expenses, co-payments, healthcare support programs, and private voluntary insurance are included. Portugal's government spent 6.3% of its GDP on health in 2018, lower than the 7.1% average for the European Union (155).

In modern times, Portugal has witnessed two waves of reform in mental health policy and the organization of services (156,157) The initial phase, lasting from 1963 (law 2118) until 1990, brought about primary care collaboration and district mental health centers. Subsequently, between 1990 and 1995, there was a period of consolidation during which psychiatric hospitals gained prominence while mental health centers were abolished. The current phase of reform was formalized by the enactment of the mental health law in 1998 (Law 35/98 and Decree Law 36/99) after a comprehensive nationwide consultation. This law introduced the principles of community-based services and psychosocial rehabilitation, which was to be provided by interdisciplinary teams. When necessary, inpatient care was ideally administered in district general hospitals. Despite the introduction of this legislation, progress was limited, prompting the government to establish the National Mental Health Plan Committee in 2006(157). The National Plan proposed the establishment of a national network of localized mental health services with a community-based focus, complemented by the availability of beds in District General Hospitals, responsible for serving the local population. Furthermore, the plan suggested the provision of regional services for specialized care such as eating disorders and forensic care. Emphasis was placed on the need for collaboration between sectors. This was particularly crucial for the effective operation of two key areas. Firstly, mental health services should support primary care to assist family doctors in identifying, diagnosing, and treating many patients with common mental health disorders like anxiety and depression, which the specialist mental health system lacks the capacity to handle. Secondly, it was crucial that local authorities develop residential

and vocational services, offering alternatives to hospital beds and providing ongoing support in community settings for patients with chronic conditions. Finally, the National Mental Health Plan underscored the need to establish mental health services specifically tailored to vulnerable groups requiring specialized interventions, such as child and adolescent services and services for the elderly, both of which heavily rely on partnerships with other sectors (156)

Meanwhile, the Great Recession began and had a significant impact on Portugal. Over a span of several years, the economy experienced a slowdown, leading to a decrease of more than 6% in GDP between 2011 and 2013. Compounded by mounting deficits (9.9% of GDP in 2010) and a high public debt (129% of GDP in 2013), the country faced a severe financial crisis) (158). In April 2011, the Portuguese government sought an emergency bailout package of €78 billion from the Troika. In return, Portugal entered a "Memorandum of Understanding" which involved committing to various reforms aimed at reducing public expenditures (159). As part of the austerity measures, the healthcare sector also faced cutbacks including reduced public spending on pharmaceuticals, salary cuts for health workers, and increased and expanded copayments. Exceptions were made to safeguard those in poverty, the unemployed, and other vulnerable groups. These measures, however, posed significant barriers to accessing healthcare and resulted in a reduction in equipment and infrastructure investments (154). The financial crisis had a huge impact on the implementation of the mental health plan. The development of community mental health teams for specific areas and the collaboration between primary healthcare workers and mental health specialists remain insufficient. The existing network of comprehensive community-based services falls short of meeting the demand, and coordination with other rehabilitation programs in the same catchment areas is lacking. Despite the efforts outlined in the National Mental Health Plan (2007-2016) to move the focus of mental health care away from hospitals and towards outpatient programs, the system continues to heavily rely on inpatient admissions and emergency visits, which consume more than 80% of the allocated mental health resources (160,161).

Portugal has a comparatively low number of mental health professionals when compared to other European nations. There were 5.99 psychiatrists per 100,000 people, 10.87 nurses, 2.56 psychologists, 0.84 social workers, and 0.68 occupational therapists per 100,000 people, according to WHO Mental Health ATLAS 2020 (162). The most extensive study to evaluate psychiatric morbidity in Portugal using a nationally representative sample was the National Epidemiological Study on Mental Health, carried out as part of the World Mental Health Survey Initiative in 2008 (163). The findings revealed that Portugal, with a prevalence of 22.9% and a lifetime prevalence rate of 47.4%, had the second-highest prevalence of 12-month mental disorders among European

countries (163). Other South European countries like Italy (9.7%) and Spain (8.8%) exhibited notably lower rates. The survey also emphasized the important role that mental disorders play in disability among Portuguese people, accounting for 20.2% of days missed from work (164), a figure that is higher than that of other high-income nations (16.0%) (165). A substantial treatment gap was reported, ranging from 81.8% of untreated cases in mild disorders to 33.6% in severe disorders.

The mental health law of 1998 (Law 36/98) establishes the principles and regulations regarding the compulsory detention and treatment of individuals with mental disorders. The law states that compulsory detention may be justified in cases where the person has a serious mental disorder that puts them or others at risk, refuses necessary medical treatment, is incapable of understanding the implications of consent, and if left untreated, their condition would significantly worsen (166). The Mental Health Law grants patients with MHCs additional rights and duties compared to the Fundamental Health Law, recognizing the unique nature of mental illness and its impact on an individual's capacity for self-determination. The law focuses more on guardianship and protection rather than medical or social care, emphasizing the legal framework surrounding mental health rights. Constitutional principles of equality and non-discrimination guide the assessment of the legal status of PMHCs. The Mental Health Law serves as a fundamental declaration of mental health rights within the legal system of Portugal, prioritizing the juridical model over the therapeutic model (167).

According to WHO Mental Health ATLAS 2020, the mental health law of 1998 is partially in line with human rights covenants. A dedicated authority conducts irregular audits of mental health facilities and irregularly reacts to reports of human rights abuses. The percentage of the healthcare budget devoted to mental health was not disclosed (162). A new mental health law that adheres more closely to the UNCRPD principles with provisions for advance care planning and a nominated representative has been passed into law and took effect from August 20, 2023 (168). There is a lack of information on the use of coercive methods in Portugal, with few studies examining the extent and factors contributing to coercion in mental health care in the country. The available study investigated the risk factors associated with involuntary admissions to psychiatric hospitals, focusing on patient-related factors. The results showed that having a psychotic disorder, being male, and having a secondary or higher education all raised the likelihood of being admitted involuntarily (169). Being married or cohabitating, as well as having a history of suicide attempts, were protective factors against involuntary admission. The study also observed variations among psychiatric services, suggesting that the organization of services might have influenced the rate of involuntary admissions. However, the study did not analyze service-level characteristics, so specific variables within the services that could predict rates of compulsory admissions were not identified (169). Additional contextual factors,

unrelated to the patients, were not examined, nor have the patients' experiences been investigated within the context of Portugal.

This thesis seeks to learn more about the contextual factors influencing coercion by synthesizing existing literature and exploring the experiences and perspectives of mental health professionals and service users in both countries studied. This is done in recognition of the diverse contexts presented for both countries studied in this thesis, as well as the paucity of research on coercion in mental health care in these contexts. The research aims and methodologies are explained in the following chapters, together with the findings, discussion, policy implications, and context-sensitive recommendations.

II. Research aims and hypothesis.

This thesis aims to present systematized knowledge about the influence of contextual factors on the use of coercion in mental health care, with Nigeria and Portugal serving as case studies of LMICs and HICs, respectively. Four specific objectives have been proposed to attain this goal:

1. To review the available empirical evidence on contextual factors that contribute to the use of coercion.
2. To describe the experiences and perceptions of coercion among service users in psychiatric services in Nigeria and Portugal.
3. To identify the contextual factors that influence the use of coercion in Nigeria and Portugal.
4. To propose recommendations on ways to reduce coercion.

The Ph.D. research employed both quantitative and qualitative approaches and is organized into three phases:

2.1 First phase of research

The first specific objective of the research was addressed in a narrative review of relevant articles (inception of database-2022) reporting on the contextual factors influencing involuntary admissions in mental health services. This narrative review intended to 1) identify the contextual factors influencing involuntary admission, 2) categorize them and evaluate how they interact with each other to influence involuntary admission 3) identify opportunities presented by these contextual factors for comprehensive efforts to reduce involuntary admissions. It was hypothesized that current mental health legislation, the availability and quality of mental health services, staff attitudes, and public views could all impact involuntary admissions. One original paper was produced during this phase:

- Beyond patient characteristics: A narrative review of contextual factors influencing involuntary admissions in mental health care.

2.2 Second phase of research

The second phase of the Ph.D. research used Nigeria as a case study to assess the contextual factors impacting the use of coercion in an LMIC. This phase partly addressed the second and third specific objectives. The second objective was to evaluate the experiences and perceptions of coercion among service users. It was hypothesized that service users in Nigeria will report negative experiences. The third objective was to identify the contextual factors that influence the use of coercion in Nigeria. It was hypothesized that the obsolete mental health legislation at the time the study was conducted, and

the socio-cultural context of Nigeria would influence the use of coercive measures in mental health services. The fourth objective of the research, to propose recommendations on ways to reduce coercion, was achieved in this phase. It was hypothesized that the recommendations proposed by service users and mental health professionals in Nigeria, an LMIC, will be significantly different from existing suggestions that are predominantly from high-income settings. Two qualitative studies were conducted among mental health professionals and service users in this phase. Narrative analyses of the mental health law under consideration in Nigeria, and the approved law were also conducted. Five papers (Four original research papers and one commentary) were produced in this phase:

- Experiences and perceptions of coercive practices in mental health care among service users in Nigeria: a qualitative study
- Use of coercion in mental healthcare services in Nigeria: Service providers' perspective
- A qualitative integrative analysis of service users' and service providers' perspectives on ways to reduce coercion in mental health care.
- Nigeria's mental health and substance abuse bill 2019: Analysis of its compliance with the United Nations Convention on the Rights of Persons with Disabilities
- A new era for mental health care in Nigeria

2.3 Third phase of research

The third phase of the Ph.D. research aimed to evaluate the contextual factors influencing the use of coercion in a High-income country (HIC) using Portugal as a case study. This phase partly addressed the second and third specific objectives. The second objective was to assess the experience and perception of coercion among service users. It was hypothesized that service users in Portugal would report high levels of subjective experience of coercion and that the feeling of coercion would increase during admission when examined again. The third objective was to identify the contextual factors that influence the use of coercion in Portugal. It was hypothesized that prevailing mental health legislation, organization of mental health services, staff attitudes, and public attitudes could influence the use of coercive measures in Portuguese mental health services. Two quantitative studies were conducted among mental health professionals and service users, and one qualitative study among mental health professionals was carried out in this phase. Four original research papers were produced.

- Contextual factors influencing the use of coercive measures in Portuguese mental health care.
- A Portuguese study of staff attitudes towards coercion in mental health care
- Revisiting the psychometric properties of the McArthur Admission Experience Survey: Validating the Portuguese version using a Bifactor approach

- Exploring the Subjective Experience of Coercion Among Patients in Five Portuguese Psychiatric Departments

Table II-1: Aims, methodological approach and research outputs of each research phase.

Research Phase	Aim	Methodological approach	Number of research papers
1 st	To review the available empirical evidence on contextual factors that contribute to the use of coercion, and to elucidate how these factors can serve as a foundation for sustainable interventions aimed at reducing its prevalence.	Narrative synthesis	1
2 nd	To evaluate the contextual factors influencing the use of coercion in an LMIC using Nigeria as a case study.	Qualitative	5
3 rd	To evaluate the contextual factors influencing the use of coercion in a HIC using Portugal as a case study.	Qualitative and Quantitative methods	4

III. Materials and methods

The three study phases included quantitative and qualitative methods, and this part will go through each research phase's methods and procedures sequentially. The first phase was a systematized synthesis of existing literature using a narrative approach. The second research phase comprised qualitative studies conducted in Nigeria. The third research phase is comprised of qualitative and quantitative studies conducted in Portugal. The selection of research methodologies in each country for data collection in the various studies included in this thesis was guided by practical considerations of what was feasible in each context. At the time the research study was conducted, Nigeria lacked a mental health legislation to regulate coercive measures, making it challenging to define formal coercion, and to conduct a quantitative study. Therefore, a contextual-based qualitative approach was preferred. Conversely, in Portugal, strict COVID restrictions and ethical concerns hindered qualitative studies among patients in the psychiatric wards, making the quantitative estimation of the experience of coercion using questionnaires a more viable option.

3.1 Research Phase 1

Following the SANRA guidelines a narrative evaluation of the literature on the contextual factors impacting the use of coercion in mental health services was conducted in the first phase of the study (170). Specific search strings were utilized to conduct iterative searches in four electronic databases (PubMed, PsychINFO, EMBASE, and Web of Science). Initially, the search strings were used individually, and subsequently, they were combined with contextual factors that were both hypothesized and identified from existing literature. Search terms employed include “involuntary admission”, “mental health services” “staff”, “prevalence”, “predictors”, “context” “socio-legal”, “socio-economic”, “public attitudes”, “legislation”, “attitudes”, and “factors” in various combinations. Boolean operators and wildcards were used to maximize the search effectiveness, and a manual search using backward and forward citation tracking methods based on selected studies was carried out.

Table III-1: Inclusion and exclusion criteria for selected studies

Aspects considered	Inclusion criteria	Exclusion criteria
Population	Adult population with any type of mental condition in general adult psychiatry.	Patients with substance use problems alone, those with eating disorders, dementia, or intellectual disabilities, forensic patients, adolescent or geriatric patients.
Outcome	Clearly stated associations between the decision to commit or initiate involuntary admission and one or more variables unrelated to the patients. Public opinions about involuntary admission.	Focused on other type of coercive measures apart from involuntary admission
Design	Observational studies such as ecological, cross-sectional, case-control and longitudinal studies	Review articles, editorials, theoretical papers, and qualitative research Studies testing an intervention to reduce IA
Language	English	Other languages
Setting	Psychiatric/mental health inpatient services	Non-psychiatric care; residential care, Primary care; psychiatric/mental health outpatient services; Nursing homes

3.1.1 Data abstraction and analysis

The selection and review of 54 papers were done with careful consideration. A table was created by extracting the necessary details from these articles. The goal was to organize and integrate the studies that were selected because the scope of current literature on contextual factors influencing involuntary admission was diverse and fragmented. A combination of deductive reasoning, utilizing hypothesized factors, and inductive reasoning, based on the analysis of the selected papers was employed. This approach enabled the formation of categories of contextual factors, which served as a framework for organizing the papers accordingly. The identified categories encompassed factors related to services, seasonal and temporal variations, the influence of significant events, the impact of mental health laws, factors related to staff, and public attitudes. Since the intention of the review was to encompass a broad range of literature on the subject, no specific quality rating of the articles was conducted, as it is considered optional for narrative reviews (170). However, the main limitations of the selected studies were highlighted and discussed.

3.2. Research Phase 2

For the second research phase, a qualitative study design was employed for the studies conducted in Nigeria. Two of the eight neuropsychiatric hospitals in the country, which serve about a quarter of the population's mental health requirements, were conveniently chosen for the study. In the two

psychiatric institutions, focus groups with patients were held, and semi-structured interviews were used to collect information from mental health professionals.

3.2.1 Qualitative study design

With consideration of the sensitive nature of the research topic, its exploratory nature, and the practicalities of carrying out research in the study setting, a qualitative study design was chosen to collect data collection method in both groups of participants in the study. Focus group discussions were selected as the suitable method for gathering information about coercion among psychiatric hospital service users. This decision was based on the understanding that focus groups offer a supportive environment for participants to share challenging experiences, and they have been successfully utilized in previous studies on the same topic (171,172). The objective of the focus group was to explore the experiences and perceptions of coercive measures among patients receiving care in Nigerian psychiatric hospitals. A secondary objective was to explore their suggestions regarding ways to reduce coercion in the study setting.

Following consultation with some mental health professionals, semi-structured interviews were determined to be the best method for ensuring participants' honest perspectives on the subject. Also, given the acute shortage of mental health professionals in Nigeria, available mental health professionals are often very busy with erratic schedules, and individual semi-structured interviews were deemed more feasible than focus group discussions. The objective of the semi-structured interviews was to explore the perception of coercion of mental health professionals and their perspectives on contextual factors that influenced the use of coercion in the study setting. A secondary objective was to explore their suggestions on ways to reduce coercion in the study setting.

3.2.2 Recruitment and sample selection

The eligibility criteria for the service users being at least 18 years old, being admitted to the inpatient departments, being certified to be stable by a psychiatrist, and having the ability to give informed consent. Participants with differing socio-demographics (e.g., age, gender, ethnicity) and clinical characteristics in the case of service users (e.g., diagnosis, past hospitalization) were purposively selected to achieve an inclusive sample for the Focus group discussions. The study involved a total of 30 service users divided into four different focus groups, with one pair consisting of eight individuals each and another pair consisting of seven individuals each. Sixteen doctors and Fourteen nurses who met the eligible criteria of having worked for at least six months in the study setting were purposively selected to be part of the study. Semi-structured interviews were administered to all the mental health professionals who agree to participate in the study. Each participant was chosen based

on similarities or differences with previous patients interviewed, and sampling was repeated until no new themes emerged from the interviews (173).

3.2.3 Data collection procedures

A consultant psychiatrist was chosen as the primary point of contact with the research team in each hospital. All participants were informed about the study's general objectives. All participants provided informed consent, and measures were taken to ensure that informed consent from service users was processual. Authorization for audio recording of the interviews and focus group discussion was also requested. Given its exploratory nature and its purpose as a foundational study for future research in the country, this study examined a range of coercive measures, such as involuntary admissions, mechanical restraint, chemical restraint, and ECT administered without the patient's consent. A topic guide for the semi-structured interviews and focus group discussions was formulated and pretested to ensure that the questions were easy to comprehend.

3.2.4 Rigor and Reflexivity

Participants in the study were reassured that their involvement would not impact their care or work, and their responses would be kept confidential. To create a neutral and less intimidating environment for service users still admitted during the study, moderators with no prior relationships with them were selected for the focus group discussions. The research team members were conscious of their own roles, perspectives, and experiences. The main points of contact within the research team, who were psychiatrists at the study sites during data collection, interviewed the service providers but not the service users. The dual role was recognized and consistently reflected upon throughout the study, both individually and as a team, to minimize potential biases and ensure a comprehensive examination of coercion and strategies to reduce it in the study setting.

3.2.5 Ethical approval and conduct

The Research Ethics Committee of Nova Medical School, Nova University of Lisbon (100/2021/CEFCM), as well as the ethics committees of each participating psychiatric institution, approved the study's ethical considerations. Participants in the research were explicitly informed, both verbally and using informed consent forms, that they had the freedom to decline answering any questions they did not wish to and that they had the option to withdraw from the study at any point if they felt uneasy.

3.2.6 Data analyses

The verbatim transcripts of focus group and interview transcripts were recorded, read numerous times, and then analyzed. The PhD student who was the lead investigator, meticulously reviewed and reread the transcripts before coding, synthesizing, and organizing text fragments into groups based on similarity of meaning. The data were coded using a general inductive methodology until no new concepts could be derived from the data. One of the co-investigators verified the reliability of the coding. According to the similarity of meanings, text fragments were synthesized, and merged into categories, and the lead investigator with two other co-investigators discussed and agreed on the themes (174). Based on the recommendations of Braun and Clarke, themes were developed by examining trends both within and between categories (174). The analyses were performed by the lead investigator with the aid of MAXQDA software (175). The results were presented as a summary of the main themes supported by exemplifying quotes.

Table III-2: Overview of the methods employed for the research studies conducted in the second phase.

Type of research paper	Aims	Method of data collection	Participants	Analysis
Original research (Paper 2)	To assess the compliance of the proposed Mental and Substance Abuse Bill 2019 in Nigeria with the recommendations of UNCRPD and how it regulates the use of coercion in mental health care services	NA	NA	NA
Original research (Paper 3)	To explore the experiences and perceptions of coercive practices in mental health care among service users in Nigeria	Focus group discussion	Service users	Thematic analysis
Original research (Paper 4)	To explore what mental health professionals in Nigeria think about coercion, why it is used, and what contextual factors influence its use in mental healthcare services.	Semi-structured interviews	Mental health professionals	Thematic analysis
Original research (Paper 5)	To explore the suggestions of service users and providers in Nigeria on how to reduce the use of coercive measures in mental health settings.	Semi-structured interviews and Focus group discussions	Service users and mental health professionals	Thematic analysis
Commentary (Paper 6)	To evaluate the strengths and limitations of the approved mental health law and proffer recommendations for successful implementation	NA	NA	NA

NA: Not applicable

3.3 Research Phase 3

For the third research phase, both quantitative and qualitative study designs were used to collect data from Portugal. The research studies were cross-sectional and conducted in five public psychiatric departments situated in Lisbon, Porto, and Alentejo covering districts from both the northern and southern regions of Portugal. While Lisbon and Porto are urban areas, Alentejo is known for its rural environment. The psychiatric departments are associated with general hospitals and offer a variety of outpatient treatments and community mental health teams. Focus group discussions were conducted among mental health professionals in the five psychiatric departments, and their attitudes towards coercion were assessed using a validated Portuguese version of the Staff Attitudes towards Coercion Scale (SACS). The subjective experience of coercion among patients on admission in the five psychiatric departments was assessed using the McArthur Admission Experience Survey. The psychometric properties of the Portuguese version of the McArthur Admission Experience Survey were assessed and the factor structure was evaluated using a Bifactor model approach.

3.3.1 Focus group discussions among mental health professionals in Portugal

Given the limited amount of literature on this subject in the country and the exploratory nature of the research, a qualitative study design was selected to investigate the theme among mental health professionals. Focus group discussions were selected as the suitable method for gathering information about coercion from the mental health professionals in this setting after consultations with key contacts in the hospital. The group environment has the beneficial impact of stimulating ideas and verbal contributions. The focus group aimed to investigate the viewpoints of mental health professionals regarding the factors that influenced the application of coercive measures in Portuguese mental health services, apart from those related to the patients.

3.3.1.1 Recruitment and sample selection

The study enrolled doctors and nurses with a minimum of six months of experience in the selected psychiatric departments. Participant selection was purposive and considered profession, gender, and years of professional experience. Key contacts, who were mental health professionals included in the research team at each hospital, were responsible for selecting participants in a manner that would enhance the richness and diversity of the discussions.

3.3.1.2 Data collection procedures

Between February 2022 and February 2023, five focus group discussions were held, lasting 45 to 60 minutes each, guided by a flexible and semi-structured framework. The discussions took place in hospital halls, moderated by a trained research assistant, and recorded. Participants interacted dynamically, discussing contextual factors contributing to coercion. A focus group guide was prepared to facilitate the discussions.

3.3.1.3 Rigor and Reflexivity

The research team consisted of both clinician and non-clinician researchers, with a shared passion for mental health and human rights. Adhering to a reflexive thematic analysis approach (174,176), we were mindful of our own roles, perspectives, and experiences and how they might have an impact on our work. Data collection and analysis were carried out by the lead investigator and a research assistant who are both non-clinicians.

3.3.1.4 Ethical considerations

The Research Ethics Committee of Nova Medical School, Nova University of Lisbon (100/2021/CEFCM), as well as the ethics committees of each participating psychiatric service, gave their approval for the study.

3.3.1.5 Data analyses

Thematic analysis was employed for this study. The discussions in the focus groups were recorded, transcribed, and translated from Portuguese to English. Data were classified based on the similarity of meaning after carefully reading and rereading the transcripts. The coding procedure was continued until no new concepts arose using an inductive technique. Similar codes were grouped to identify themes. The identified themes were discussed between the lead investigator and the research assistant to ensure accuracy and coding consistency. Some focus group participants also reviewed the themes to verify data accuracy. Quotes were chosen to corroborate the research findings and exemplify each theme (177). MAXQDA (175) was used to aid the data analysis process.

3.3.2 Staff attitudes towards coercion

Considering how staff attitudes and subjectivity are contextual factors influencing the use of coercive measures, research was conducted to systematically evaluate the attitudes of Portuguese mental health professionals towards coercion.

3.3.2.1 Study instrument

The study instrument consisted of two parts: a short demographic form and the SACS. The SACS questionnaire is a 15-item survey that assesses professionals' attitudes about coercion using a 5-point Likert scale, ranging from strong disagreement to strong agreement. This questionnaire encompasses three dimensions: coercion as offending (critical attitude), which views coercion as offensive to patients; coercion as care and security (pragmatic attitude), which sees coercion as necessary for care and security without considering it desirable or positive; and coercion as treatment (positive attitude), which represents a favorable outlook on employing coercion as a treatment intervention (106). The SACS was translated to Portuguese and back translated to English.

3.3.2.2 Data collection procedures

All mental health professionals including doctors, nurses, psychologists, occupational therapists, and social workers working in the five selected psychiatric departments were invited to participate in the survey by the key contacts in each department. All willing participants were required to fill in the study instrument which was comprised of the SACS and a brief socio-demographic survey.

3.3.2.3 Validation and psychometric analysis

The SACS questionnaire was translated from English to Portuguese by a native Portuguese-speaking member of the research team. Furthermore, other team members, also native Portuguese speakers, reviewed the translation. To ensure accuracy, the Portuguese version of the SACS was then back translated to English by an independent translator.

For data processing and statistical analyses, the research employed R software (178) (Version 3.1.4) with various packages, including dplyr (Version 1.1.0), psych (Version 2.2.3), semTools (Version 0.5.6), semPlot (Version 1.1.5), and ggplot2 (Version 3.4.1).

First, descriptive statistics were conducted on the sample to determine the number of valid participants and their characteristics for subsequent comparative analysis. Univariate and multivariate descriptive statistics were then applied to each item of the instrument to identify the optimal correlation matrix for further analysis. Items expressing negative opinions about coercion were re-coded to maintain consistency. An exploratory factor analysis (EFA) was performed, preceded by tests of sample adequacy (KMO test), sphericity (Bartlett's test), and matrix determinants. Methods like optimal coordinates, parallel analysis, and the Kaiser criterion were used to determine the number of factors to extract. The obtained factor solution was then subjected to confirmatory factor analysis (CFA), evaluating fit measures like χ^2 statistic, the comparative fit index (CFI), the Tucker-Lewis Index (TLI), the Non-Normed Fit Index (NNFI), and the root mean square error of approximation (RMSEA) against specific criteria. Ordinal alpha, Guttman split-half, McDonald's omega, and

correlations between the scale's individual items and score were used in internal consistency analyses. Finally, Cronbach's alpha percent attenuation was calculated for the entire scale and each subscale (179).

3.3.2.4 Associations between the characteristics of mental health professionals and their Attitudes towards coercion

To investigate the relationships between staff characteristics and their attitudes towards coercion, the Pearson correlation coefficient, Mann-Whitney-Wilcoxon test, or Kruskal-Wallis test were employed to compare the total score and subscale scores with participant characteristics. Bonferroni correction was applied for pairwise comparisons when necessary.

3.3.2.5 Ethical considerations

Both the Nova Medical School's Research Ethics Committee (approval number: 100/2021/CEFCM) and the ethics committees of each of the participating hospitals approved the study. Additionally, each study participant signed a formal informed consent form.

3.3.3 Evaluating the subjective experience of Coercion among patients in psychiatric departments in Portugal.

The objective of this cross-sectional study was to evaluate patients' subjective experiences of coercion and observed changes during admission in the selected psychiatric departments. All consenting patients, irrespective of their admission status who were adults, able to give informed consent and not diagnosed with dementia were eligible to take part in the study. They were required to fill in the study instrument which was comprised of multiple questionnaires at two different times.

3.3.3.1 Study instruments

The McArthur Admission Experience Survey (AES): The MacArthur Admission Experience Survey was used to assess patients' perceptions of psychiatric hospital admission (51). Scores for each of the three domains—Voice, Negative Pressure, and Perceived Coercion—range from 0 to 3, 0 to 6, and 0 to 5, respectively.

The Global Assessment of Functioning (GAF): The GAF is a scale used for evaluating an individual's social, occupational, and psychological functioning (180). It is based on the DSM-IV (187), and its scores range from 1, which indicates severe disability, to 100, which indicates high functioning (180).

The Coercion Ladder: The Coercion Ladder (CL) is a visual analog scale that prompts the patient to indicate their perceived level of coercion on a range from 1 (representing the least amount of coercion

- "I came entirely on my own will and initiative") to 10 (representing the highest level of coercion) (181).

The Client Assessment of Treatment Scale: The Client's Assessment of Treatment Scale (CAT) is a self-reported assessment tool comprising seven items intended to evaluate the patient's evaluation of in-patient care (182). These items inquire about the patient's contentment with the treatment provided, the attending clinicians, other mental health practitioners, medications, other treatments received, and the overall quality of care. Each item is rated by participants on a 10-point Likert scale, with 0 representing "not at all" and 10 representing "completely yes" (182). The study instruments were translated to Portuguese by members of the research team who were native speakers and back translated to English by an independent translator. It was reviewed for accuracy and slight modifications were made.

3.3.3.2 Validation and psychometric analysis

As a result, non-parametric statistical methods were used because of the non-normal distribution of the data. Wilcoxon Signed Rank tests were used for the comparison of paired data. To measure the reliability of the MacArthur Admission Experience survey and its domains, McDonald's model-based Omega (ω) and Cronbach's alpha coefficient were used. Test-retest reliability was assessed by Spearman's rank correlation, with cutoff criteria based on Ko and Li's approach (183).

Significant changes in the Portuguese-AES (P-AES) scores between the first and second assessments were evaluated using Wilcoxon tests. To assess the reliability of the items, a two-parameter logistic (2PL) item response model was used since the items were dichotomous (184). This item response theory (IRT) approach helps understand the relationship between the latent trait (perceived coercion), the characteristics of the items within the scale, and individual responses.

Additionally, a Confirmatory Factor Analysis (CFA) was conducted with three models: a three-factor model including perceived coercion, negative pressure, and voice domains; a single-factor model with a general perceived coercion domain; and a 2PL Bifactor model, assuming all items load into a general domain, with subsets of items also loading into specific domains. The models were evaluated using various indicators like RMSEA, CFI, and TLI. Bifactor models are prone to overfitting, so four commonly used model selection indices including, Akaike's information criterion (AIC)(185), Bayesian information criterion (BIC)(186), Hannan–Quinn criterion index (HQ) (187), and sample size-adjusted BIC (SABIC) (188), were employed to compare the model fitting.

To assess the convergent validity of the P-AES with other scales, Spearman correlation coefficients were calculated. Convergent validity coefficients exceeding .30 were considered satisfactory, indicating a medium effect size. The discriminatory power of the P-AES was determined by conducting independent sample student t-tests to compare mean scores between patients admitted voluntarily and involuntarily.

All statistical analyses were conducted using R software (178), with two-tailed statistical tests and a significance level set at $\alpha = 0.05$. The *mirt* package in R was used for fitting the Item Response Theory (IRT) models (189).

3.3.3.3 Predictors of the changes in the subjective experience of coercion during admission

The data did not follow a normal pattern and so, non-parametric statistical methods were employed for the bivariate statistical analyses. Specifically, Wilcoxon signed-rank tests were applied to compare differences in AES scores and subscales between the initial and second assessments. Due to a considerable number of questionnaires having more than 20% unanswered questions, these incomplete surveys were excluded from our analysis. To understand any potential associations between the included and excluded samples in terms of socio-demographic and clinical attributes, Chi-squared tests were performed.

Because a significant number of questions were not answered (>20%) in some questionnaires, these incomplete questionnaires were excluded from the analysis. Chi-squared tests were conducted to understand the associations between the included and excluded samples in terms of socio-demographic and clinical features. Categorical variables were analyzed using Mann-Whitney and Kruskal-Wallis tests, followed by post hoc comparison tests using the Holm-Bonferroni correction. Continuous variables were examined using Spearman correlation coefficients.

Forward and backward stepwise multivariable linear regression models were conducted to further explore variables showing significant associations with the AES and its domains (18). The variable selection process relied on iterations in which predictors were added or removed until the Akaike Information Criterion (AIC) reached its minimum, indicating the optimal model fit. Prior to conducting any multivariate analysis, collinearity was assessed, ensuring variance inflation factor (VIF) values were below 3 and condition index values were below 4.432 for all models (190). Residual analyses were conducted to validate the regression model assumptions. The outcomes of the multivariate regression were presented in terms of beta values along with corresponding p-values. Additionally, the explained variance and p-value for each model were reported. All statistical

significance levels were set at less than 5% ($p < 0.05$). R (Version 4.1.3) was used to carry out the statistical analyses (178).

Table III-3: Overview of the methods employed for the research studies conducted in the third phase.

Type of research paper	Aims	Method of data collection	Participants	Analysis
Original research (Paper 7)	To explore the perspectives of mental health care professionals regarding the contextual factors that influence the use of coercion in mental health care in Portugal.	Focus group discussion	Mental health professionals	Thematic analysis
Original research (Paper 8)	- To investigate the psychometric properties of the Portuguese version of Staff Attitudes towards Coercion Scale (SACS) - To evaluate the attitudes of mental health professionals in Portugal towards the use of coercion.	Questionnaires	Mental health professionals	Reliability Confirmatory factor analysis Bivariate analysis
Original research (Paper 9)	To assess the psychometric properties of the Portuguese version of the McArthur Admission Experience Survey(P-AES)	Questionnaires	Service users	Reliability Confirmatory factor analysis
Original research (Paper 10)	- To evaluate the subjective experience of coercion - To investigate whether the subjective experience of coercion changed with time during admission, and what the relevant variables were that predicted this change	Questionnaires	Service users	Multivariable linear regression

IV. Results

The results of the Ph.D. research consist of nine original scientific articles and one commentary. This section presents the articles in their latest available version in accordance with the journal policies and recommendations. Each article's references are listed at the end of the article. A summary of the main findings and implications of all the scientific articles can be found at the end of the chapter in Table IV.1.

4.1. Original research article 1

Beyond Patient Characteristics: A Narrative Review of Contextual Factors Influencing Involuntary Admissions in Mental Health Care

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Review

Beyond Patient Characteristics: A Narrative Review of Contextual Factors Influencing Involuntary Admissions in Mental Health Care

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Abstract

Variations in the rates of involuntary admission (IA) reflect the influence of unexplained contextual variables that are typically too heterogeneous to be included in systematic reviews. This paper attempts to gather and analyze factors unrelated to the patients that have been linked to IA. The articles included in this review were selected by iteratively searching four electronic databases (PubMed, PsychINFO, EMBASE, and Web of Science). A total of 54 studies from 19 different countries and regions, including 14 European countries, the United States, Canada, China, Vietnam, and Taiwan, were selected. The factors were categorized as service-related factors, impactful events, seasonal and temporal factors, mental health legislation, staff factors, and public attitudes. The factors rarely act in isolation but rather interact and reinforce each other, causing a greater influence on IA. This paper explains how these factors present opportunities for robust and sustainable interventions to reduce IAs. The paper also identifies future directions for research, such as examining the effects of economic recessions. Enhancing global reporting standards is essential to validate future research and support further in-depth studies. The complexity of the factors influencing IA and the implicit role of society suggest that resolving it will require social change.

Keywords: involuntary admission; context; legislation; service; staff; coercion; public attitudes

Introduction

Coercive measures in mental health care, including involuntary admission (IA), are a significant infringement of human rights and autonomy (1). Their effectiveness for treating people with mental health conditions (PMHCs) is debatable (2,3), and they can have negative effects on therapeutic alliance, quality of life, and self-esteem (4,5). Involuntary admission has been criticized as a violation of international human rights treaties (6), and those who experience it are more likely to experience shame, self-stigma, and poorer recovery outcomes (7). However, in cases of severe danger to self or others, involuntary admission may be justified (8,9) and associated with improved psychosocial functioning and better motivation for treatment in some patients (10).

Although IAs are controversial and their effectiveness remains unclear because of the ethical problems associated with their investigation, they seem to be on the rise and deeply rooted in routine mental health care (11,12). Wide variations in IA rates have been reported, ranging from 282 per 100,000 individuals in Austria to 14.5 per 100,000 individuals in Italy, with higher rates of IA associated with a higher number of inpatient beds, higher GDP per capita purchasing power parity, lower levels of absolute poverty, and a higher proportion of immigrants (13). These variations have also been recorded among different regions within the same country (14,15). Variations in IA rates among hospitals within the same jurisdiction were reported in Ireland, and the differences in admission status between patients remained unexplained (8). These differences at different levels suggest that IA may not necessarily be employed as a last resort or in fulfilment of criteria specified in the mental health legislation (16), and that contextual factors may have a greater impact on IA than is often recognized.

Over the past two decades, there has been exponential growth in the literature on IAs and its contributing factors. Evidence syntheses from several studies globally have shown a socio-demographic patterning of IA, with gender, ethnicity, and level of social support consistently appearing to be universal factors associated with an increased risk of being involuntarily admitted (17,18). Clinical factors such as lack of insight, a diagnosis of psychosis, and poor functioning have also shown an association with a higher risk of IA (19–21). Most previous reviews about IA have focused on socio-demographic and clinical factors, usually with strict restrictive criteria that prevent exploring other potentially relevant variables. Despite the growing number of studies exploring non-patient related factors associated with IA, there has been no concerted effort to summarize and evaluate the findings from these studies. This review aims to fill this gap by including observational studies to provide a broad overview of factors, beyond those related to the patient, that could influence IA. Better information regarding contextual factors that influence IA is important for theoretical and

practical reasons. From a theoretical standpoint, gaining an understanding of these factors holds implications for fully comprehending the problem of IA, particularly considering the predominant emphasis placed on individual risk factors associated with patients. On a practical level, it is vital for healthcare providers and service managers to grasp these factors, which often lie beyond their sphere of control, in order to effectively plan and adapt their services as needed. Moreover, the identification of these factors and the recognition of this problem within the broader context of underinvestment in mental health systems are significant concerns that policymakers should be interested in. Finally, our discussion should assist future researchers in their attempt to conduct studies that will provide deeper insights into the ambiguous aspects of contextual factors impacting IA. Patient factors are not discussed in this paper because they have already been adequately explored in previous reviews (17,18). The objective of this paper is to identify and synthesize the literature on non-patient-related factors that have the potential to influence IA.

Methods

We adopted a narrative approach for this review, which proved highly valuable for this study as it encompassed not only the identification of the factors that influence IA within the existing literature, but also enabled the synthesis of these factors by organizing them into broader themes. The SANRA scale for the evaluation of the quality of narrative review articles informed the methodological approach of this narrative review (22).

Literature Search

In healthcare literature, contextual factors are often viewed as barriers or facilitators to implementing an intervention (23). For the purpose of this review, we define contextual factors as diverse elements within a specific setting that are unrelated to the patients themselves but that can exert a significant influence on IA directly or indirectly, while IA refers to compulsory admission under a mental health act. We hypothesized that the prevailing mental health laws, the quality of mental health services available, and stigma were factors that could significantly impact IA, irrespective of the patient's clinical and socio- demographic profile. Four accredited electronic databases (PubMed, PsychINFO, EMBASE and Web of Science) were iteratively searched between 20 July 2022 and 11 August 2022 using specific search strings, first alone and then in combination. Search terms used include “involuntary admission”, “mental health services”, “staff”, “prevalence”, “predictors”, “context”, “socio-legal”, “socio-economic”, “public attitudes”, “legislation”, “attitudes”, and “factors” in various combinations. Database queries with an overlap of variants and synonyms of the search terms were adapted for each database in accordance with the appropriate request vocabulary. Boolean

operators and wildcards were used to maximize the search performance. A manual search was further conducted by backward and forward citation tracking. All observational studies that investigated the association between any contextual factor and IA and were published in peer-reviewed journals since the inception of each database were considered. A total of 8660 articles were obtained from the four databases and uploaded into Rayyan software (24).

Selection of Studies for Review

A pilot screening of article titles and abstracts was performed by two authors (DOA and OA) using preliminary inclusion criteria. Careful deliberations after the pilot screening led to the establishment of a refined set of criteria for inclusion and exclusion (Table IV-1.1). Studies that explored the factors influencing the decision to commit were included. When a study included patient-related factors as well as a contextual factor of interest, only the contextual factor was considered. We chose to exclude qualitative studies because the majority of the qualitative studies that assessed contextual factors were related to the implementation of an intervention or the subjective opinions of professionals, service users, and their families. Studies conducted in specialized settings or among specific populations were also excluded because they often have distinct regulations, funding, outcomes, and ethical concerns that need analysis using different lenses; it would therefore exceed the scope of this review to include these settings. Although no research specifically investigated the direct link between public attitudes towards IA and IA rates, we recognized that this aspect is frequently disregarded despite its substantial influence on other contextual factors. Consequently, we chose to incorporate the existing studies that have examined public opinions on IA, even if they do not explicitly demonstrate their impact on IA rates. A PRISMA Flow Diagram illustrates the steps taken during the literature search and the number of articles included at each step (Figure IV-1.1).

Table IV-1.1 Inclusion and exclusion criteria.

Peer-reviewed published full-text articles available in English that met the following criteria:	
Inclusion criteria	• Explicit indication of association between involuntary admission or the decision to commit and factors(s) apart from those related to the patients. • Observational studies in general psychiatry for adults. • Studies that have explored the opinions of the general public about IA.

Excluded if one or more of the following criteria are met:

- Exclusion criteria
- Studies conducted exclusively among patients with eating disorders, dementia, or intellectual disabilities, forensic patients, adolescent or geriatric patients, or people with substance use disorders only.
 - Studies that explored factors related to patients treated involuntarily in the community or nursing homes rather than in a hospital setting were also excluded.
 - Qualitative studies, reviews, editorials, and theoretical papers
 - Studies testing an intervention to reduce IA
-

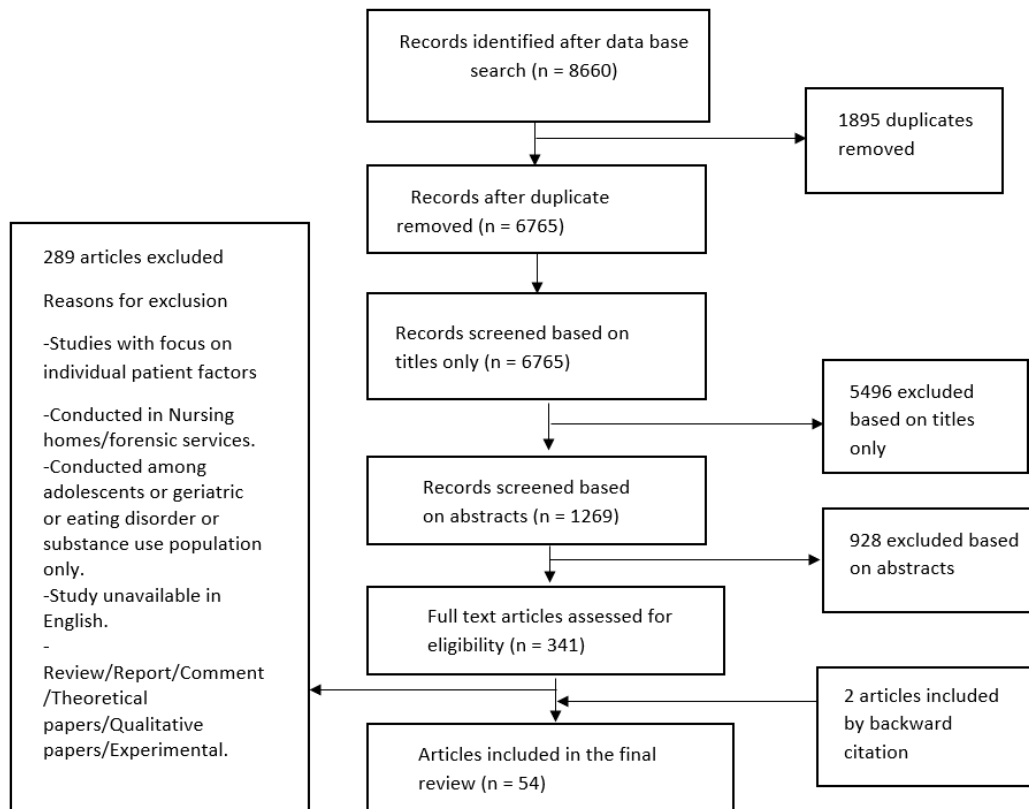


Figure IV-1.1 Flow chart of articles included and excluded after the review.

Data Abstraction and Analysis

A total of 54 articles were selected and read carefully. Relevant data were extracted into a table that enabled the contents of each article to be summarized (see supplementary file). The extant literature on contextual factors that influence IA is diverse and fragmented, so we attempted to organize and integrate the selected studies. We employed a combination of deductive reasoning, utilizing factors we hypothesized, and inductive reasoning, based on our analysis of the selected papers, to establish categories of contextual factors. These categories served as a framework for organizing the papers accordingly. They include factors related to the services, factors related to seasonal and temporal variations, the impact of significant events, the influence of mental health laws, factors related to staff, and public attitudes. The results section was organized according to these. The review was intended to encompass a wide range of literature on the subject, and no quality rating of the articles was performed as it is considered optional for narrative reviews (22).

Results

A total of 54 full texts articles were included in this review. The studies were from 19 different countries and regions, including 14 European countries, the United States, Canada, China, Vietnam, and Taiwan. A summary table with information about the selected studies can be found in the supplementary file.

Service-Related Factors

Sixteen articles that explored factors related to services that might affect IA were identified. These factors include the level of development of alternative services to hospitalization, the efficiency and extent of utilization of existing mental health services, the availability of supplementary social services, and the number and location of psychiatric hospital beds. Since patients who have received adequate care are less likely to experience crises requiring admission, IA can be an indicator of the quality of prior care received (25,26). The closure of large stand-alone psychiatric hospitals with the concurrent development of psychiatric departments in general hospitals and community-based mental health services is promoted as the ideal model of service organization in mental health care since it encourages continuity of care, higher user satisfaction, better protection of human rights, and reduces stigma (27). The lack of effective and less restrictive alternatives to inpatient treatment is frequently cited as a reason for IA (28).

Availability of Community-Based Services

Few studies have specifically assessed the impact of the availability of alternative services, such as intensive community programs, on IA. In a study to determine the effect of the development of alternative services in French psychiatric sectors on involuntary inpatient care, the likelihood of a patient being forced into full-time hospitalization decreased by 12% for every 10% increase in the level of development of alternatives (29). The same study also found that the number of community-based psychiatrists in each catchment area significantly influenced the rates of IA (29). In Denmark, an observational study that specifically examined the effect of assertive community treatment (ACT) on the use of several coercive measures, including IA, found that while the reduction in voluntary admissions was significant, there was no corresponding pattern in IA. There was a nonsignificant drop in IA due to the danger criterion, but no reduction in the other forms of IA. Admissions based on the treatment criterion occurred at the same rate before and after the use of ACT (30). According to a US study, the location of the assessment of a person undergoing a mental health crisis seems to influence the decision to admit involuntarily. IA was initiated three times more frequently when clients were assessed in hospitals and police stations as opposed to other community venues, like the

client's home(31). This indicates that if people experiencing a mental health crisis could be referred to intensive community programs with trained staff rather than hospitals, the rate of IA could decrease (31).

Efficiency of Mental Health Services

The availability of mental health services is apparently not the most important aspect of mental health systems but rather how well the services perform. Bindman et al.'s study in England on the effects of social deprivation and the functioning of local mental health services on IA discovered significant associations between measures of service function at a sector level and rates of IA, which persisted even when deprivation was considered (32). Teams that provided home visits to critically ill patients after 10 p.m. held fewer people for assessment (32). An earlier study in England and Wales found that locations with insufficient funding, and poorly coordinated emergency services had an increased risk of high rates of emergency IA (33). These studies suggest that fewer IA and high-quality aftercare can be expected in areas where services have formal or collaborative relationships. Another factor impacting the risk of IA is the extent of utilization of the available mental health services. In an Amsterdam study of acute psychiatry, more intensive psychiatric care received before an emergency consultation was significantly associated with a 70% lower risk of IA. A history of more than 14 outpatient contacts in the previous year was also associated with a lower risk of IA (34). In the same study, a referral from a general practitioner was associated with a reduced probability of an IA than referrals from the police or mental health services, highlighting the importance of working together with primary care physicians to lower the number of IAs. In another study conducted in Greece, individuals who had contact with community mental health services before being admitted had a six times lower risk of being subjected to IA than those whose previous contact with mental health providers had been through a previous hospitalization (35).

Availability of Complementary Social Services

Social services that complement the services provided by psychiatric services are necessary to meet the non-clinical needs of PMHCs. The number and variety of social services available in a given area may influence the risk of IA. An investigation into how these services could affect the voluntariness of admission in 13 German adult psychiatric hospitals found a correlation between the activities of social-psychiatric services, community-psychiatric cooperation, and complementary facilities and the IA index. Low levels of social-psychiatric services were found in regions with a high IA index, indicating that those services had a protective effect on acute psychiatry (36). Another German study discovered that clinics with low rates of IA were more community-oriented and had more crisis

intervention resources, such as home visits, close relationships, and low-threshold contact services, demonstrating that the range and quality of local social-psychiatric services had a significant influence on the rates of IA (37). The number of social workers in a mental health service was found to be a significant contextual factor influencing the rate of IA in an Italian study where IA was better predicted by the team structure and service organization than by patient characteristics. IAs rose as the number of social workers in the departments increased (38). The authors proposed a potential interpretation of this discovery, suggesting that the significant presence of social workers within the services resulted in an increased ability to identify crises situations within the community and exercise greater social control.

The Number and Location of Psychiatric Hospital Beds

The association between the number of psychiatric hospital beds and the rate of IA is unclear, with some research finding no association and others finding considerable effects. An international comparison of IA national rates among 22 countries across Europe, Australia, and New Zealand found no association with the number of beds (13). In Italy, even though the total number of psychiatric beds decreased by 62.5%, over the 18 years following the implementation of the new mental health law, the proportion of IA decreased from 17.1% to 10.6% (39). Of course, the reduction of psychiatric beds was not the only element at play in this situation because community-based services were also growing at the same time that the mental health legislation was changing. In contrast to the findings in Italy, an ecological study in England of the relationship between the availability of beds for people with mental illnesses and the rate of involuntary admissions in the NHS found that between 1988 and 2008, the rate of involuntary admissions increased by more than 60% while the availability of beds decreased by more than 60%, with the changes appearing to be synchronous (40). Smith et al., also discovered some evidence that cutbacks in mental health bed availability contributed to some of the post-2008 increases in IA and Place of Safety detentions in England (41). The decreased number of beds available amplified the impact of austerity measures implemented during the economic recession on IA (41). This demonstrates how reducing psychiatric beds without concomitant investment in community resources might result in unfavorable effects such as increasing IAs. In another study conducted in Virginia, US, it was discovered that when detention beds were available, patients had significantly higher risks of being detained (42). Having psychiatric beds close by seemed to reduce the use of IA in a Norwegian study that looked at how several factors, including the organization of mental health facilities, affected rates of compulsory admission. They found that the deinstitutionalized system with no local beds available had the highest levels of IA. For the systems with local beds, increased accessibility, local control, and integration of psychiatric beds and services

lowered the threshold for inpatient admission, enabling patients to be admitted voluntarily more easily before their condition worsened (43). Conversely, in a comparative case register study of seven Nordic catchment areas, Hansson et al., found that lower procedural accessibility of psychiatric specialist services, in terms of the need for a formal referral procedure, was associated with higher rates of compulsory care (44). Very few effects were found in a study that assessed the effect of service integration (defined as a variety of actions, such as reorganization, new support and consultation structures, and information system regrouping) on IA. Variables other than service integration appeared to be more significant in lowering IA, but service outcomes were generally better where mental health care was more integrated (45).

Temporal and Seasonal Factors

Eight papers investigated the relationships between IA and temporal and seasonal parameters.

Temporal Factors

A multi-center investigation of twenty acute psychiatric units in Norway found that IA happened more often during evenings and nights and by physicians who did not know the PMHC (46). Two separate Swiss studies reported that involuntary admissions occurred more often at nighttime and during the weekends (47,48). The link between “daytime hours” and fewer IAs was attributed to a combination of demographics, clinical features, and out-of-clinic service availability (such as ambulatory psychiatric–psychological praxis; day-clinic; and home treatment) (47). A German study likewise discovered that cases admitted unwillingly were admitted more frequently at night or on weekends (37). These studies emphasize the significance of putting in place after-hours outpatient crisis intervention programs. In contrast to this finding, a UK study of consecutive psychiatric hospital admissions found that IA was 15% less frequent on the weekend than it was during the week after correcting for other demographic and clinical characteristics (49). This was attributed to a shortage of required mental healthcare professionals and auxiliary personnel to implement IA throughout the weekend. The study findings were thus reflective of the poor availability of primary care, community mental health, and social care services on weekends (49). This pattern is not exclusive to European countries as a Taiwanese study also found that patients admitted on weekends tended to be compulsorily admitted (50).

Seasonal Factors

A thorough investigation of the environmental factors associated with involuntary hospitalizations could help predict and prevent high levels of psychiatric emergencies leading to IA. Few studies have specifically explored the impact of environmental factors on IA. The admissions of patients with

schizophrenia and bipolar disorder have been found to vary seasonally following variations in sunshine intensity (51,52). These variations have been linked to irregular chronobiology, which causes insomnia and dysregulation of circadian rhythms in those who have bipolar disorder (53) and could also be influenced by photoperiod changes, which cause symptoms to deteriorate and cause exacerbations in those with schizophrenia (52). An Italian study found a considerable rise in involuntary hospitalization with seasonal changes, particularly in spring/summer, with a peak in June (54). Patients who were admitted in the spring or summer (when the ratio of daylight to darkness is longer) had higher rates of IA, earlier onset of illness, longer hospital stays, and admissions for (hypo)manic episodes (55). IA was also found to be correlated with meteorological factors, such as maximum temperatures and the humidex index (the humidex is a commonly used discomfort indicator of perceived heat arising from the combined effect of excessive humidity and high temperature) (55). Heat waves due to global climate change are expected to become more frequent and intense and will have negative impacts on health, particularly for those with severe medical and mental health conditions (50,56). Another Italian study found that there were significantly higher maximum and medium temperatures, as well as humidex, during involuntary admissions compared to voluntary admissions (56). Studies have shown that heat waves can lead to an increase in hospital admissions for mental problems and emergency room visits (57,58). Certain drugs like lithium and psychotropics may also alter the effects of heat on the body (59).

Impactful Events

Here, nine papers were identified that examined the impact of significant events on IA. Significant development such as economic downturns, changes in cost-sharing policies, the COVID-19 pandemic, instances of public violence, and high-profile court cases connected to IA, were found to have some influence on IAs.

Economic Downturns and Austerity Measures

Economic recessions can increase the need for mental health care and the treatment gap, with major effects on both individuals and society. A systematic review of 17 studies from different countries found that economic crises were associated with increased prescription drug use and hospital admissions for mental health conditions (60). A study conducted in Florida found that declining regional economies led to a decrease in community tolerance for individuals seen as a threat, resulting in an increase in involuntary psychiatric hospitalization. This was determined through a time-series analysis of the correlation between unemployment claims and the number of people brought in by the police for examination. The results showed that increased unemployment claims were associated with

309 more male examinations than expected, but there was no association for women (61). Austerity measures during economic recessions that reduce access to mental health care could also increase IA. In a study investigating the impact of Medicaid cutbacks on state psychiatric hospital utilization (which were typically IA) among people with schizophrenia in the United States, it was found that people who retained Medicaid coverage had little change in involuntary hospitalization, whereas those who lost Medicaid coverage experienced a marked increase in IA over time when other variables were controlled for (62). Similarly, the rise in IA in the UK has been attributed to three specific impactful events: the economic recession, legislative changes, and the impact of austerity measures on health and social care services (41). Since the implementation of austerity measures and decreased funding for mental health services and trusts, admission rates for mental health have consistently increased yearly. The trend has risen higher than expected in just two years, indicating the negative impact of austerity measures on mental health services (63). In the Netherlands, a national reform that increased cost-sharing resulted in a decrease in the utilization of mental health services for both severe and mild problems, particularly in low-income areas. Although this decreased utilization resulted in overall net savings, the reform was linked to expensive increases in involuntary admission and acute mental health treatment for patients with psychotic disorder or bipolar disorder (64).

COVID-19 Pandemic

The COVID-19 pandemic was an unprecedented event that had a significant effect on global healthcare systems. Although the pandemic heightened public awareness of mental health issues, it first appeared to result in a neglect of care for PMHCs. There are conflicting results about the pandemic's effects in various countries, with some reporting rises in IA during the lockdown and others claiming no changes. While there was a general decrease in the overall number of psychiatric admissions in Portugal, when compared to before the pandemic, the proportion of admissions that were involuntary was greater during the pandemic (65). In an observational study at a large Swiss emergency department, patients admitted during the COVID-19 pandemic were significantly more likely to be involuntarily hospitalized following their psychiatric consultation (66). Similarly, a study in the UK during the first lockdown found that, although the overall number of admissions fell by 5.2%, the percentage of IAs increased significantly and steadily. Delayed illness recognition may have led to patients being more susceptible to a decline in insight and missing the window of opportunity for informal admissions, thus being subjected to compulsory admissions (67). In Italy however, all psychiatric admission rates significantly decreased in the 40 days after the start of the COVID-19 epidemic, but IA admission rates remained unchanged (68). It was hypothesized that

throughout the outbreak, patients and family members may have been more tolerant, avoiding referrals to hospital facilities out of concern for possible exposure to contamination, causing a decline in voluntary admissions (68).

Public Violence

Following violent events, community tolerance for deviant behaviors tends to reduce with a consequent increase in presentations for psychiatric evaluations. Although there have been some widely reported violent attacks committed by individuals displaying overt psychotic symptoms (69), most of the available evidence does not substantiate the notion that mental illness is a major risk factor for violent attacks like mass shootings, and it is instead supported by stigma and public misconception (70,71). In the weeks following the terrorist attack of September 11, 2001, law enforcement officials in Florida submitted more people for psychiatric examinations to prevent harm to others than would have been predicted by historical patterns (72). Although it was not reported whether these psychiatric examinations resulted in involuntary admissions, increased demand for IA should be anticipated in planning reactions to future terrorist incidents.

High-Profile Court Hearings

Other events like high-profile court hearings related to compulsory admissions could trigger a change in the rates of commitments in the following days. There was a sharp increase in IAs immediately after the Cheshire West decision, a high-profile court hearing in 2014 (41). The decreased informal admissions were attributed to widespread confusion over what constitutes a violation of liberty under the law and concerns that an informal admission would be retrospectively judged as such as in the Cheshire West decision (41). However, due to the ongoing increases even prior to the Cheshire West decision, the available information was not enough to definitively establish a strong connection between the rise in IA and the court ruling.

Mental Health Legislation

Six papers investigated how mental health laws and their distinct features affect IA. IA of PMHCs can also be viewed as an indicator of the underlying characteristics of mental health legislation and policies. Since the mid-1970s, several jurisdictions have limited the application of their mental health laws regarding IA to people deemed harmful to themselves or others. This is referred to as the obligatory dangerousness criterion (ODC). The ODC is a requirement for IA in the mental health legislation of many countries, however some other countries permit involuntary treatment without the ODC if the patient is deemed to be unable to consent. Many times, admission must be forced because few patients understand that their symptoms are the result of an illness. The ODC was widely adopted

in mental health laws in an effort to achieve a balance between the rights of PMHCs and the need to protect the general population (30). Patients with first-episode psychosis (FEP) who reside in jurisdictions that use the ODC criterion rather than alternative standards for involuntary treatment would take longer to receive treatment and, as a result, would experience a longer duration of untreated psychosis (DUP) (73). A recent study found that the mean DUP was on average around five months longer in jurisdictions with an ODC (73). The extent to which people with unusual social behavior are viewed as a burden depends on the cultural norms and values and could also be reflected in the mental health law (74). In addition to the ODC, “burden criteria,” such as those found in Swiss mental health law that take into account the burden the patient exerts on family members and other third parties, may also have an impact on IA decision-making.

Most of the studies relating mental health legislation with IA were pre–post studies that compared the rates of IA before and after the implementation of the mental health legislation. An observational study that assessed the routine data of 15,125 patients admitted to the University Hospital of Psychiatry Zurich between 2008 and 2016 found that the period following the implementation of the new regulation in January 2013 was strongly associated with lower risks of IA (74). The new law had the goal of reducing stigma and increasing patient autonomy, and the study findings demonstrated that it was indeed connected with a lower risk of IA as no significant changes in mental health care occurred in the catchment area that could have contributed to the disparities in IA risk before and after the new law’s introduction. Similarly, in the 18 years following the implementation of the new mental health law in Italy, the percentage of all admissions that were involuntary decreased significantly (39). A Chinese study that aimed to look at the rates and correlates of IA after a change in the mental health legislation found that there was a substantial but minor increase in rates of IA among hospitalized patients. Regulations for involuntary placement in the new Chinese mental health law that went into effect in 2013 required that patients demonstrate “self-harm in the immediate past or current risk of self-harm” or “behavior that had harmed others or endangered the safety of others in the immediate past or currently exposed a risk to the safety of others.” The ongoing high prevalence of IAs was attributed to China’s comparatively low number of psychiatric beds per 100,000 people. The legislation did not appear to have reduced IA because of the limited number of inpatient beds in China, cultural stigma, and patient denial of their mental health condition (75). A Dutch study found a 16% increase in commitments between 2000 and 2004, and a 30% increase in the dangerousness criterion of “arousing hostility”, suggesting a resurgence of paternalism among mental health professionals and a growing intolerance of deviant behavior (76).

Few studies have tried to compare IA rates among countries with different commitment criteria and procedures. The study by Salize et al. examined the association between mental health legislation and involuntary admission rates in European countries. They found that having a diagnosed mental health condition is a requirement for detention in every EU member state, with additional criteria such as potential harm to oneself or others being common. There were no significant differences in involuntary admission rates between countries that had the “danger” criterion and those that had the “need for treatment” criterion. Similarly, no significant differences were observed between countries where a non-medical authority—a judge, prosecutor, mayor, or another entity unrelated to the medical system—made the final decision regarding IA and other countries where psychiatrists or other medical specialists made that decision. The study found a tendency towards lower IA rates in countries where a legal representative was involved, which suggests that there are prospects for further investigation (77). A more recent comparison of annual involuntary hospitalization rates in 22 countries did not find any association with any characteristics of the legal framework (13).

Staff Factors

This category consisted of ten articles that examined staff-related factors including attitudes, personal characteristics such as risk-taking propensity, qualifications, and remuneration, which can potentially impact the decision to commit PMHCs. It is worth noting that most of these studies employed hypothetical scenarios, and it remains uncertain how accurately these scenarios reflect real-life decisions to commit patients. Rather than relying solely on medico-legal criteria and risk assessments, it is apparent that many other factors influence clinicians’ decisions to commit patients involuntarily. Practical considerations such as availability of transportation and lack of outpatient alternative treatments can override medico-legal criteria in making commitment decisions in some cases. Clinicians frequently have to take into account the evaluation setting and patient support networks as well as local resources (42). In a study to investigate the willingness of resident psychiatrists in North Carolina to commit hypothetical patients who did not fulfil commitment criteria, very few residents said that they would never commit such patients indicating the influence of other contextual variables other than statutory criteria in commitment decisions. Residents weighed the criteria for commitment against the constraints they face in emergency situations, such as the necessity for transportation, a lack of outpatient alternative therapy, and pressure from their superiors (78).

Attitudes

There are no consistent findings on which specific traits or attitudes of staff have the greatest influence on their decisions to admit patients involuntarily. Engleman and colleagues found that more

experienced US clinicians did not detain more patients but assessed them as being at a higher risk. The clinicians' detention record in the previous three months was a predictor of their general inclination to detain patients. The authors concluded that the decisions were heavily influenced by the clinicians' attitudes towards commitment, which were shaped by various factors such as guidelines, previous role models, legal impacts, and personality (42). A study in Illinois, US, found no link between psychiatrists' sense of responsibility and their willingness to involuntarily admit PMHCs. However, the study found that psychiatrists were more likely to support hospitalization if they believed in meeting basic needs and less likely if they believed in respecting the right to refuse treatment or the unpredictability of the future (79). Family pressures and frequent use of involuntary hospitalization were also found to impact the decision to commit a patient. A survey in China showed that one-third of psychiatrists admitted to committing patients against their will due to family pressures (80).

Past Experiences and Risk-Taking Potential

A patient's perceived danger may be more important than their actual behavior for a psychiatrist to decide whether to seek IA (81). This perception of danger is influenced by factors such as past experiences. For example, clinicians may become more likely to request involuntary commitment for other suicidal patients if they have previously witnessed a patient's suicide or if they face malpractice charges for failing to immediately hospitalize patients who later committed suicide (82). On the other hand, psychiatrists who have been accused of detaining patients against their will unlawfully may be less willing to request involuntary commitment. This leads some psychiatrists to engage in "defensive psychiatry" (defined as the practice of making decisions that limit a psychiatrist's liability while safeguarding patients and other people from potential harm) (82). A practicing psychiatrist runs some professional risk when they choose not to pursue an involuntary commitment. Therefore, it seems reasonable to hypothesize that a psychiatrist's perspective on taking risks affects their decision to seek out involuntary commitment. The findings of a pilot study with psychiatry residents in Massachusetts (US) suggested a significant relationship between an individual psychiatrist's risk-taking potential and their decision not to seek involuntary commitment. It was assumed that for psychiatrists who had a higher predisposition to accept risks in other areas of their lives, the inherent risks they faced when they chose not to seek involuntary commitment may have been more tolerable (82). A Swiss study found that more experienced clinicians were less worried about being prosecuted for their actions and having challenges comprehending the legal basis of their actions (83).

Qualifications and Knowledge of the Law

Other studies have tried to examine whether specialization in psychiatry could affect rates of IA. Psychiatrists are expected to be more knowledgeable about mental health legislation and more confident in their risk assessments compared to general practitioners, and some countries have restricted the right to commit patients involuntarily to psychiatrists as a measure to reduce the rates of IA. In a Swiss study by Eytan and colleagues, it was found that after the change in policy to make only certified psychiatrists authorized to require compulsory psychiatric admission, those hospitalized were significantly less likely to be hospitalized on a compulsory basis (84). Concerns of being prosecuted and a lack of knowledge regarding the legal justification for one's behavior were found to be connected in another Swiss study that sought to understand whether legal considerations varied with physicians' professional backgrounds and whether they were linked to specific attitudes toward coercion (83). Understandably, other physicians were more concerned about being indicted for their decisions. Nonetheless, compared to psychiatrists, they disagreed more frequently with the statement that risk assessments of suicide and danger should be exclusive to psychiatrists and agreed more frequently with the statement that a non-psychiatric physicians can assess the risk of suicide and danger (83). A Chinese study found that physicians with fewer professional titles and lower levels of education were more likely to lack records of the application of risk criterion on the checklists. This was attributed to insufficient systematic training on the IA procedure among those physicians, which may have made them unaware of the reasonable approach for assessing patients' risks and documenting the relevant circumstances. Psychiatrists who did not complete the risk assessment checklist were older than those who completed it, and this was attributed to elderly psychiatrists having more conservative attitudes and possibly making decisions based on their discretion (85). A Norwegian study that tried to determine the factors influencing the decisions of general practitioners to commit patients found that half of the GPs worked at public out-of-hour clinics and were less experienced doctors who often did not have any prior relationships with the patients they committed. The GPs also admitted that applying the medico-legal criteria for the referral of involuntary patients was challenging and that they often felt pressured to refer patients (86).

In a study of American Psychiatric Association members in the United States, results showed that psychiatrists may not be as knowledgeable about mental health laws as expected. The study found that there was support for limited definitions of mental disorder for involuntary commitment and limited legal grounds for commitment. When asked about involuntary outpatient commitment laws and legal justifications for commitment, many respondents provided incorrect information (87). Psychiatrists' support for the various commitment grounds has been reported to be most strongly

related to what they perceived the law to be in their state; they tended to support the grounds they thought to be the law. The psychiatrists may have embraced their states' commitment criteria as their preferences through a process of norm internalization (88).

Financial Incentives

Another less explored factor is staff incentives and compensation for involuntary admission orders. Lebenbaum et al. found that an involuntary admission was more likely to occur at emergency departments in Ontario with an increasing likelihood of financial compensation for ordering involuntary admissions (89).

Public Attitude and Stigma

This section includes seven papers that explore how negative attitudes and stigma among the general population are connected to support for coercive measures. An important yet frequently overlooked factor that is important in contextualizing IA is the attitude of the public towards PMHCs. Tolerance of deviant behaviors appears to be reducing especially in Western countries, coinciding with a greater emphasis on patient autonomy and rights, as well as strictly defined and regulated coercive measures (90). The fluctuation of this tolerance in response to impactful events such as economic recession was broached in a previous section of this article. People with mental health problems may exhibit risky behavior that necessitates close observation, sometimes leading to commitment. Their actions could also include, for instance, varying degrees of self-neglect, such as a failure to take proper care of oneself or engaging in other self-destructive behavior that could disrupt family or community life. Although such behavior can be addressed in an outpatient setting without commitment, a low tolerance for such behavior compounded by insufficient alternatives to inpatient care may increase the pressure to admit such people (91). People in many countries turn to involuntary admission as a result of the absence of sufficient community mental health services and social services.

Public Attitudes as a Reflection of Mental Health Laws

Empirical evidence suggests that public attitudes towards coercive measures appear to have a bidirectional relationship with the existing laws on coercive measures. In Norway, the majority of the adult population agreed with the existing laws and regulations governing compulsory admission and treatment in mental health facilities with a stronger societal consensus in favor of coercion based on caregivers' assessment of the risk of harm. The strongest arguments in favor of involuntary treatment were made when the patient could not care for themselves, such as when they had a depressive illness and suicidal thoughts (92). In a similar study conducted among French laypeople and medical professionals, 95% of participants agreed that involuntary hospitalization was acceptable in some

circumstances, particularly when the patient posed a risk to others in accordance with French law (93). According to the study, the majority of French laypeople and medical experts agreed that when mentally ill individuals pose a serious risk to themselves and, more significantly, to others, beneficence and public safety must take precedence over patient autonomy (93). Thus, the laws could be said to be a reflection of public opinion. Similarly, a survey of the acceptance of restrictions on people with mental health problems among the Vietnamese public found that more than three-quarters of the respondents generally accepted compulsory admissions under specific circumstances. This endorsement varied by age and gender reflecting some cultural expectations related to the gender roles in the community (94).

Stigma as a Factor in the Endorsement of IA

Other studies have explored the public's endorsement of restrictive measures and what they perceive to be an appropriate justification for using them. A violent attempt against others was the most endorsed reason for IA in an Austrian study that compared what medical students and journalists thought were legitimate circumstances for compulsory admission. However, about one-third of both groups said that prolonged neglect was a reason. Compared to journalists, the medical students were significantly more likely to endorse commitment, and this was attributed to their medical education with a focus on treatment and healing (91). A Swiss study found that more educated respondents, women, those with a high degree of social distance towards PMHCs, and those who held unfavorable stereotypes were more likely to endorse IA (95). Accepting compulsory admissions was found to be predicted by the perceived dangerousness of PMHCs, corresponding to the findings of another Swiss population study in which all three individual compulsory measures (involuntary hospitalization, involuntary medication, and seclusion) were significantly correlated with increased perceptions of danger in PMHCs (96). These findings corroborate the argument that support for IA by the public could imply support for the custodial component of psychiatry, and thus operationalizing the stigma towards those who have mental health problems (95).

A German study that sought to examine the extent to which initiatives for improving the rights of people with mental illness and anti-stigma campaigns were reflected in changes of public attitudes toward restrictions on PMHCs compared data from two population surveys conducted in 1993 and 2011(97). There was no change in the level of support for IA but there was a decrease in the opposition to compulsory admission due to reasons not included in the legal criteria in Germany (persecutory delusions, withdrawal from the environment, non-adherence to medication, at the patient's family's request, public nuisance). The study findings highlighted the two opposing trends of a general shift towards a more liberal view of patients' rights and a decreased tolerance and an increased desire for

restrictions for inappropriate behavior (97). The diminished objection to IA for unauthorized reasons was interpreted as a sign of the public's growing need for protection from those with mental health conditions, as reflected in the results of the 2011 study, which revealed a stronger agreement with the idea that psychiatric hospitals are required to protect society from those with mental health problems (98). In a similar pattern, a study conducted in the US to assess the evolution of public views on the likelihood of violence from people with mental health problems found that support for IA for those with schizophrenia, depression, and everyday problems increased steadily over the years from 1996 to 2018 (99).

Table IV-1.2. A summary table of derived themes and subthemes.

S/N Themes and Sub-Themes	
1	Service-related factors
	Availability of community-based services (29,30)
	Efficiency of services (32,34,38).
	Availability of complementary social services (36–38)
	The number and location of psychiatric hospital beds (13,39–41,43–45)
2	Temporal and Seasonal factors
	Temporal (37,46–50).
	Seasonal (54–56).
3	Impactful events
	Economic downturns and austerity measures (41,61,62,64)
	COVID-19 pandemic(65–68).
	Public violence (72)
	High-profile court hearings (41)
4	Mental health legislation (13,39,41,74,75,77)
5	Staff factors
	Attitudes and beliefs (42,79)
	Past experiences and personal traits (82,83)
	Qualifications and knowledge of MHL (78,84–88)
	Financial incentives (89)
6	Public Attitudes

Public attitudes as a reflection of mental health laws (92–94)

Stigma as a factor in the endorsement of IA (91,95,96,98)

Interactions among Contextual Factors Influencing Involuntary Admission

The number and distribution of mental health and social services is a core factor that is influenced by most other factors influencing IA. The temporal and seasonal associations reported are the result of insufficient service delivery capacity at specific times. Economic recessions that lead to austerity measures including cutbacks in public health spending invariably result in a decrease in service delivery capacity. Economic downturns are also known to reduce tolerance towards deviant behaviors in the community and increase utilization of mental health services causing an increased demand on service delivery capacity that is stretched thin by austerity measures. Another key element with an impact on other factors, and influenced by other factors, is legislation. The mental health legislation regarding IA reflects the general public's and mental health professionals' attitudes toward PMHCs. Conversely, mental health professionals and the general public internalize the prevailing mental health legislation. Public views and attitudes are also important in shaping staff attitudes towards coercive measures, interacting with other factors such as personal traits and practical considerations in deciding to commit PMHCs. Public attitudes are influenced by impactful events that foster stigma such as public violent attacks attributed to mental health problems (Figure IV-1.2).

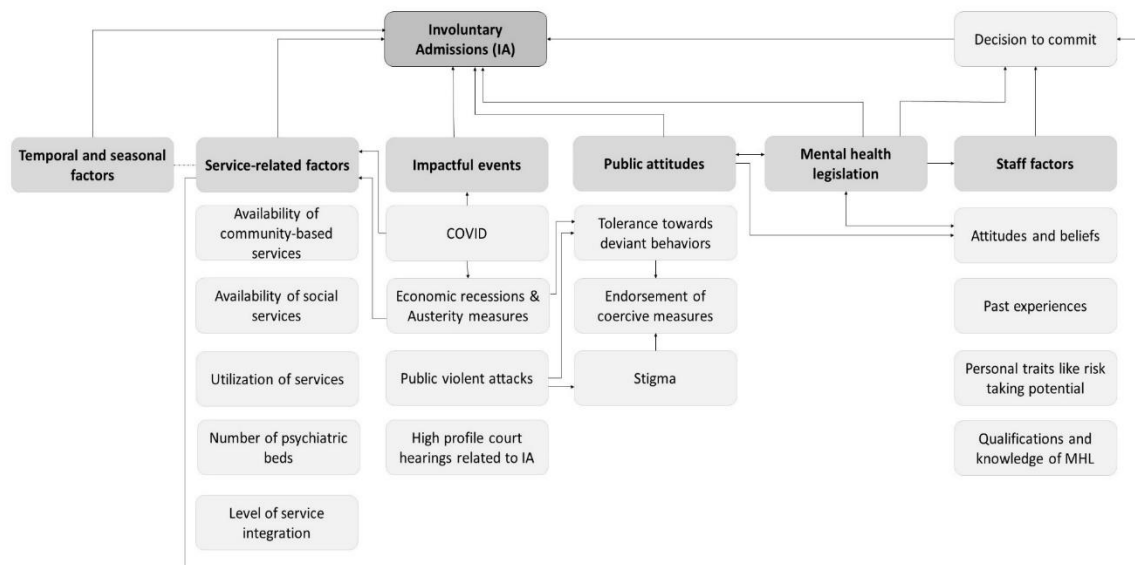


Figure IV-1.2 Interactions among contextual factors influencing involuntary admission.

Limitations and Biases of Selected Studies

The studies included in the review have several limitations that impact their validity and generalizability. First, there are limitations related to study design and methodology. For many reasons including ethical ones, none of the studies conducted in this field were RCTs. Many studies relied on retrospective data collection, introducing potential biases and incomplete information. Moreover, the use of administrative databases may have resulted in an incomplete understanding of the variables of interest, and the absence of standardized assessment instruments affects comparability and measurement validity. The heterogeneity of data gathered across various services, jurisdictions, and countries adds a significant level of complexity when attempting to make comparisons. Additionally, incomplete data on patients' admission history and illness profiles restricts a comprehensive understanding of the factors influencing outcomes. Inaccuracies and lack of standardization in diagnosis information impact the reliability of findings. The fact that some studies were cross-sectional hampers the ability to establish causal relationships and track changes over time. Studies with ecological study designs may have overlooked individual-level nuances. Furthermore, there are limitations regarding generalizability and the samples. The studies often focused on specific services, catchment areas, or countries, limiting the applicability of findings to different contexts. Unclear definitions of the base population also make it difficult to determine the relevance of the results. Some studies failed to measure all relevant variables, leading to potential confounding and incomplete understanding of the factor under investigation. Subjective information from questionnaires introduces social desirability bias, affecting response accuracy. Future research should aim for more rigorous study designs, standardized assessment instruments, and comprehensive data collection methods to enhance the validity and applicability of findings in the field.

Discussion

This review aimed to identify and synthesize the literature on non-patient-related factors that have the potential to influence IA. The paper identifies factors that contextualize IA in various settings, grouped under categories of service characteristics, mental health legislation, impactful recent events, temporal and seasonal variables, staff variables, and public attitudes and stigma. It also reveals interrelationships among these factors. The availability and distribution of mental health and social services significantly influence IA, with insufficient service capacity during certain periods leading to temporal and seasonal associations. Economic downturns and austerity measures reduce service delivery capacity, and also increase community intolerance towards deviant behaviors, further straining mental health services. Mental health legislation reflects public and professional attitudes towards psychiatric patients, and conversely, public attitudes and perceptions are shaped by stigma-

inducing events like violent attacks tied to mental health conditions. These factors, in conjunction with the personal traits of mental health professionals and practical considerations such as the availability of alternatives to in-patient care, interact in the decision-making process concerning IA. The relationships mostly center on the need for services and the ability to meet those needs. A few studies acknowledge the essential connection among the factors being examined, while others fail to do so. For example, the investigation to test the hypothesis that the contraction of regional economies affects the incidence of involuntary admissions to psychiatric emergency services focuses on reduced societal tolerance and fails to acknowledge the possible decline in access to mental health services as a result of the economic recession (61). The study investigating the consequences of austerity measures in the UK also overlooks the potential influence of decreased societal tolerance towards deviant behaviors during the economic recession (41). Similarly, the studies on the influence of staff-related factors on the decision to involuntarily admit only assume the impact of personality traits and existing laws on staff attitudes (82,83,88) and fail to consider how the prevailing public attitudes and stigma may have shaped those attitudes.

This review's assessment of various contextual factors that might affect IA is not exhaustive. Other factors such as poverty and inequalities, economic indices such as GDP, budgetary allocations for mental health care, number of forensic psychiatric services, and ethnic density have been linked with IA (13,18). However, it draws attention to the reality that IA often happens in the context of complex interwoven factors that are often not solely related to the patient or the mental health professionals. While it may be difficult to estimate the magnitude of the effect of these contextual factors, they seem to contribute significantly to the problem and could present opportunities for long-term sustainable interventions to reduce the need for IA. These contextual factors do not act in isolation but rather interact and reinforce each other, so strategies to reduce IAs have to be robust enough to address these influences by employing multimodal approaches. Given how other factors in the society are implicitly involved, it also appears that the task of reducing IA should not be left to only mental health professionals.

The existing laws concerning mental health care are crucial in shaping various contextual factors. Both the general public and psychiatrists internalize these laws, and their attitudes and beliefs towards involuntary admission are significantly influenced by them. Therefore, altering the laws and policies related to involuntary admission is essential in shaping psychiatrists' values and practices, possibly leading to a reduction in involuntary admission. However, legislation reform alone will not suffice to address the problem without the optimal reform of services and training of the staff required to implement the laws. A well-developed and responsive mental health care system will result in

consistent high-quality service delivery, preventing situations that lead to IA. It is evident that even when the legislation is very protective of the rights of PMHCs, other failings of the public health and social systems create situations that make IAs inevitable. Since nonclinical factors such as specific attitudes and previous experiences may influence clinicians' decisions to request involuntary commitment, perhaps generic education and training may not be enough to cause the needed change in practice and attitudes. Specific targeted interventions, particularly for residents at the beginning of their training, may be useful to reduce the influence of these nonclinical factors such as through peer assessment, monitoring, and, in certain cases, individual counseling and psychotherapy (82). The seasonal and temporal trends in the rates of IA imply that hospitals can anticipate quantifiable pressure using models that incorporate regular temporal and seasonal patterns. With the sophisticated analytical methods and prediction models employed in healthcare analysis and forecasting, it is possible to predict periods of increased demand for emergency care and plan appropriately since an overwhelming ratio of patients to staff is a frequently cited reason for IA and other coercive measures. This is particularly useful in optimizing staffing schedules and informing resource utilization in resource-limited settings. It is also suggested that psychiatrists closely monitor or modify therapy for patients that are sensitive to weather changes (100).

These study findings on the impact of economic downturns suggest that contracting economies may signal the need for greater capacity to meet increased demand for mental health care and avoid the worsening of symptoms in vulnerable populations. In the long run, austerity measures that cut back on funding for mental health care are costly since they invariably lead to an increase in the number of IAs. The estimation and prediction of demand for mental health services and variations in a society's tolerance for deviant behavior during economic downturns can assist healthcare managers in planning their services. Relevant authorities have the opportunity to develop measures to mitigate the negative effects of declining economies on mental health. For example, providing preventive mental health care instead of IA may be beneficial. Adapting techniques used to forecast short-term changes in employment to predict the need for psychiatric services and optimize resources is recommended for further investigation (61). Robust interventions that incorporate resilience mechanisms for mental health systems during adverse events such as economic recessions or the COVID-19 pandemic are particularly needed. During times of communal anxiety, police and care providers may well be made aware of, and cautioned against, diminished tolerance for those with mental health conditions (72). Sentinel surveillance of emergency psychiatric services could be useful, and those who monitor these services may want to look into other possible causes of unusually low or high usage. It is important to note that this will only be feasible in services and countries with the infrastructure required to maintain detailed uniform data about IAs.

All stakeholders involved in IA, including family, community members, police, mental health personnel, judiciary staff, legislators, and the individual with the mental health condition, are products of society and, to some extent, are shaped by prevailing norms and societal values. Given the evolution of public attitudes and stigma, it is important to monitor cultural beliefs, attitudes, and tendencies that link mental health conditions with violent behavior. Such beliefs are still prevalent, and the public may equate them with involuntary treatment, resulting in formal public health regulations that significantly restrict the liberties of PMHCs (99). The relationship between mental health legislation, stigma, and endorsement of the restriction of liberties of PMHCs (88,93,95,101) suggests that stigma reduction among the general public is fundamental in addressing the problem of IA. Perhaps a “fusion law,” as proposed by Dawson and Szmukler (102), that eliminates the exclusivity to PMHCs laws that restrict liberties based on impaired decision-making capacity and not on a mental disorder diagnosis, could be less stigmatizing and useful in reversing the rising trend of endorsement of IA for PMHCs.

Evaluating national and region-wide policies relies on internationally standardized and yearly updated IA rates (detailing several variables such as regular or emergency admission as well as socio-demographic and clinical characteristics) (77). It is not surprising that the majority of the research on the topic originates from high-income countries with seemingly high rates of IA, which is possibly because these countries have maintained reliable statistics on IA for a long time. Keeping reliable data on IA rates at local and national levels is possibly the first step in evaluating the problem and developing interventions to address it. Improving existing international standards for reporting on mental health is necessary to ensure the validity of future investigations and serve as a foundation for additional in-depth studies in the area. Other contextual factors that might affect access to mental health care and cause mental health conditions to worsen to the point where IA is required, such as the level of universal health care coverage and policies related to health care for immigrants, particularly in Western countries, have not been investigated. Out-of-pocket spending and a lack of legal framework are significant barriers to accessing mental health care in many developing countries, but few studies have explored how this affects IA in these contexts. Additionally, a country’s level of respect for the human rights of the general population can be used to estimate how well the rights of PMHCs are protected.

Strengths and Limitations

This review’s broad inclusion criteria, which limit quantitative synthesis, can be considered a strength because they allow us to see how different factors interact to influence IA. Although some studies did not establish a direct link between contextual factors and involuntary admission (IA), we included

them in our analysis to provide a broader perspective on the issue. Despite our conviction that a narrative review is more suitable for analyzing a wide range of factors, such as those discussed in this paper, it is important to note that narrative reviews allow authors a lot of flexibility in interpretation, which increases the likelihood of bias. Nevertheless, we have taken steps to reduce the potential for bias by concentrating on quantitative studies published in peer-reviewed journals. The exclusion of qualitative studies and studies published in other languages limits the scope of contextual factors explored in this article.

Future Directions

There is a gap in the literature in terms of studies that explore how the level of universal health coverage and universal human rights indices affect IA rates. Future temporal studies can explore the impacts of periods such as holidays while controlling for other variables such as general medical problems and poor treatment adherence, which may also contribute to the beginning of an acute clinical picture. Studies examining staff factors and public attitudes typically do not investigate their direct impact on IA. Therefore, it would be compelling to explore the potential direct impact they may have on IA. The impact of environmental factors on IA needs to be further investigated in light of the growing effects of climate change. In countries with public acts of violence like mass shootings in the United States, it would be interesting to examine the shifts in public attitudes towards PMHCs and approval of restrictions of liberties. It is also important to keep an eye on how other policies, such as those pertaining to gun control, may affect these attitudes and legislation pertaining to IA. Given that a small number of countries have conducted the majority of the research on the subject, it is crucial that other countries look into the contextual factors that are relevant to their setting. There is a need to better comprehend the complex interaction between austerity measures, policies, and IA. Considering how policymakers are interested in cost-saving interventions, it is particularly important to include economic outcomes in studies that investigate the effectiveness of alternatives to IA. The variety of contextual factors also emphasizes the need for multidisciplinary collaboration between healthcare researchers and researchers from other fields, such as the social sciences, to build sustainable strategies. Due to the diversity of contextual factors that may influence IA, it is apparent that some factors have been left out and so there is need a for more review articles, especially those including qualitative studies.

Conclusions

This paper has attempted to contextualize factors that contribute to the use of IA. The findings indicate that various interacting factors are at play, beyond lawful criteria for IA. The absence of a well-

developed mental health system, impactful events such as economic recessions, mental health legislations, seasonal and temporal factors, staff factors, and public attitudes are some of the contextual factors that can influence IA. They present opportunities for multimodal approaches to developing interventions that reduce IA. The complexity of the factors influencing IA and the implicit role of society as a whole also suggest that resolving it will require a social change.

Supplementary Materials: The following supporting information can be downloaded at: www.mdpi.com/xxx/s1, Table S1: Overview of included articles.

Author Contributions: D.O.A. conceptualized the study and search strategy, participated in screening and extraction of articles, and wrote the first draft of the manuscript. O.A. and B.O.U. participated in screening and data extraction and made contributions to the manuscript draft. M.S., U.G., B.P., M.S.-D., and G.C. made critical reviews of the manuscript draft. J.M.C.-d.-A. contributed to the conceptualization of the study and a critical review of the manuscript. All authors have read and agreed to the published version of the manuscript.

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Institutional Review Board Statement: Not applicable

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Data Availability Statement: A summary table with information about the selected studies can be found in the supplementary file.

Conflicts of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

References

1. Hoff P. Compulsory Interventions Are Challenging the Identity of Psychiatry. *Front Psychiatry*. 2019 Nov 6; 10:783.
2. Kallert TW, Glöckner M, Schützwahl M. Involuntary vs. voluntary hospital admission. A systematic literature review on outcome diversity. *Eur Arch Psychiatry Clin Neurosci*. 2008 Jun;258(4):195–209.
3. Shah A. The relationship between the use of mental health act and general population suicide rates in England and Wales. *J Inj Violence Res*. 2012 Jan 1;4(1):26.

4. Chieze M, Hurst S, Kaiser S, Sentissi O. Effects of seclusion and restraint in adult psychiatry: A systematic review. *Front Psychiatry*. 2019;10:491.
5. Jegede AS, Adegoke OO. Advance Directive in End of Life Decision-Making among the Yoruba of South-Western Nigeria. *BEOnline*. 2016 Nov 21;3(3):41.
6. Convention on the Rights of persons with Disabilities. General comments No.1. 2014.
7. Xu Z, Lay B, Oexle N, Drack T, Bleiker M, Lengler S, et al. Involuntary psychiatric hospitalisation, stigma stress and recovery: a 2-year study. *Epidemiol Psychiatr Sci*. 2019 Aug 1;28(4):458–65.
8. Umama-Agada E, Asghar M, Curley A, Gilhooley J, Duffy RM, Kelly BD. Variations in involuntary admission rates at three psychiatry centres in the Dublin Involuntary Admission Study (DIAS): Can the differences be explained? *Int J Law Psychiatry*. 2018 Mar 1; 57:17–23.
9. Freeman MC, Kolappa K, de Almeida JMC, Kleinman A, Makhshvili N, Phakathi S, et al. Reversing hard won victories in the name of human rights: a critique of the General Comment on Article 12 of the UN Convention on the Rights of Persons with Disabilities. *Lancet Psychiatry*. 2015 Sep 1;2(9):844–50.
10. Kortrijk HE, Staring ABP, Van Baars AWB, Mulder CL. Involuntary admission may support treatment outcome and motivation in patients receiving assertive community treatment. *Soc Psychiatry Psychiatr Epidemiol*. 2010 Feb;45(2):245–52.
11. Johnson S. Can we reverse the rising tide of compulsory admissions? *The Lancet*. 2013 May 11;381(9878):1603–4.
12. Sashidharan SP, Saraceno B. Is psychiatry becoming more coercive? *BMJ*. 2017 Jun 22;357.
13. Rains LS, Zenina T, Dias MC, Jones R, Jeffreys S, Branthonne-Foster S, et al. Variations in patterns of involuntary hospitalisation and in legal frameworks: an international comparative study. *Lancet Psychiatry*. 2019 May 1;6(5):403–17.
14. Hatling T, Krogen T, Ulleberg P. Compulsory admissions to psychiatric hospitals in Norway - international comparisons and regional variations. 2009 Dec;11(6):623–34.
15. Weich S, McBride O, Twigg L, Duncan C, Keown P, Crepaz-Keay D, et al. Variation in compulsory psychiatric inpatient admission in England: a cross-classified, multilevel analysis. *Lancet Psychiatry*. 2017 Aug 1;4(8):619–26.
16. Bakola M, Peritogiannis V, Stuckler D, Kitsou KS, Gourzis P, Hyphantis T, et al. Who is coercively admitted to psychiatric wards? Epidemiological analysis of inpatient records of involuntary psychiatric admissions to a University General Hospital in Greece for the years 2008–2017. 2023 Mar;69(2):267–276.
17. Walker S, Mackay E, Barnett P, Sheridan Rains L, Leverton M, Dalton-Locke C, et al. Clinical and social factors associated with increased risk for involuntary psychiatric hospitalization: a systematic review, meta-analysis, and narrative synthesis. *Lancet Psychiatry*. 2019 Dec;6(12):1039–1053.
18. Barnett P, Mackay E, Matthews H, Gate R, Greenwood H, Ariyo K, et al. Ethnic variations in compulsory detention under the Mental Health Act: a systematic review and meta-analysis of international data. *Lancet Psychiatry*. 2019 Apr 1;6(4):305–17.

19. Salize HJ, Dreßing H, Peitz M. Compulsory Admission and Involuntary Treatment of Mentally Ill Patients-Legislation and Practice in EU-Member States Final Report Compulsory Admission and Involuntary Treatment of Mentally Ill Patients-Legislation and Practice in EU-Member States. 2002.
20. Silva M, Antunes A, Azeredo-Lopes S, Loureiro A, Saraceno B, Caldas-de-Almeida JM, et al. Factors associated with involuntary psychiatric hospitalization in Portugal *Int J Ment Health Syst*. 2021 Apr 20;15(1):1–11.
21. Canova Mosele PH, Chervenski Figueira G, Antônio Bertuol Filho A, Ferreira de Lima JAR, Calegario VC. Involuntary psychiatric hospitalization and its relationship to psychopathology and aggression. *Psychiatry Res*. 2018 Jul 1; 265:13–8.
22. Baethge C, Goldbeck-Wood S, Mertens S. SANRA—a scale for the quality assessment of narrative review articles. *Res Integr Peer Rev*. 2019 Dec 26;4(1):1–7.
23. Coles E, Anderson J, Maxwell M, Harris FM, Gray NM, Milner G, et al. The influence of contextual factors on healthcare quality improvement initiatives: a realist review. *Syst Rev*. 2020 Apr 26;9(1).
24. Mourad Ouzzani, Hossam Hammady, Zbys Fedorowicz and AE. Rayyan — a web and mobile app for systematic reviews. *Syst Rev*. 2016; 5:210.
25. Hermann RC. Improving Mental Healthcare: A Guide to Measurement-Based Quality Improvement. American Psychiatric Publishing, Inc.; 2005.
26. WHO QualityRights Tool Kit [Internet]. [cited 2023 Jul 7]. Available from: <https://www.who.int/publications/i/item/9789241548410>
27. WHO. Transforming mental health for all. World Mental Health Report. 2022.
28. Turkheimer E, Parry CD. Why the gap? Practice and policy in civil commitment hearings. *Am Psychol*. 1992;47(5):646–55.
29. Gandré C, Gervais J, Thillard J, Macé JM, Roelandt JL, Chevreul K. Involuntary Psychiatric Admissions and Development of Psychiatric Services as an Alternative to Full-Time Hospitalization in France. *Psychiatr Serv*. 2017 Sep 1;68(9):923–30.
30. Aagaard J, Tuszewski B, Kølbæk P. Does Assertive Community Treatment Reduce the Use of Compulsory Admissions? *Arch Psychiatr Nurs*. 2017 Dec 1;31(6):641–6.
31. McGarvey EL, Leon-Verdin M, Wanchek TN, Bonnie RJ. Decisions to Initiate Involuntary Commitment: The Role of Intensive Community Services and Other Factors. <https://doi.org/10.1176/appi.ps000692012>. 2013 Feb 1;64(2):120–6.
32. Bindman J, Tighe J, Thornicroft G, Leese M. Poverty, poor services, and compulsory psychiatric admission in England. *Soc Psychiatry Psychiatr Epidemiol*. 2002;37(7):341–5.
33. Huxley P, Kerfoot M. Variation in requests to social services departments for assessment for compulsory psychiatric admission. *Soc Psychiatry Psychiatr Epidemiol*. 1993 Mar;28(2):71–6.
34. van der Post L, Mulder C, Bernardt C, Schoevers R, Beekman A, Dekker J. Involuntary admission of emergency psychiatric patients: report from the Amsterdam Study of Acute Psychiatry. *Psychiatr Serv*. 2009 Nov 1;60(11).

35. Stylianidis S, Peppou LE, Drakonakis N, Douzenis A, Panagou A, Tsikou K, et al. Mental health care in Athens: Are compulsory admissions in Greece a one-way road? *Int J Law Psychiatry*. 2017 May 1; 52:28–34.
36. Emons B, Haussleiter IS, Kalthoff J, Schramm A, Hoffmann K, Jendreyschak J, et al. Impact of social-psychiatric services and psychiatric clinics on involuntary admissions. *Int J Soc Psychiatry*. 2014 Nov 12;60(7):672–80.
37. Juckel G, Haußleiter I. [Involuntary admissions in accordance to the Mental Health Act (PsychKG) - what are the strongest predictors?]. *Psychiatr Prax*. 2015 Apr 1;42(3):133–9.
38. Donisi V, Tedeschi F, Salazzari D, Amaddeo F. Differences in the use of involuntary admission across the Veneto Region: which role for individual and contextual variables? *Epidemiol Psychiatr Sci*. 2016 Feb 1;25(1):49–57.
39. Guaiana G, Barbui C. Trends in the use of the Italian Mental Health Act, 1979--1997. *Eur Psychiatry*. 2004 Nov;19(7):444–5.
40. Keown P, Weich S, Bhui KS, Scott J. Association between provision of mental illness beds and rate of involuntary admissions in the NHS in England 1988-2008: Ecological study. *BMJ*. 2011 Jul 23;343(7816).
41. Smith S, Gate R, Ariyo K, Saunders R, Taylor C, Bhui K, et al. Reasons behind the rising rate of involuntary admissions under the Mental Health Act (1983): Service use and cost impact. *Int J Law Psychiatry*. 2020 Jan 1; 68:101506.
42. Engleman NB, Jobes DA, Berman AL, Langbein LI. Clinicians' decision making about involuntary commitment. *Psychiatric Services*. 1998 Jul 1;49(7):941–5.
43. Myklebust LH, Sørgaard K, Wynn R. Local psychiatric beds appear to decrease the use of involuntary admission: a case-registry study. *BMC Health Serv Res*. 2014 Feb 10; 14:64.
44. Hansson L, Christiansen L, Sandlund M, G6stas G, Zandr6n T, Lindhardt A, et al. The Nordic Comparative Study on Sectorized Psychiatry. *Soc Psychiatry Psychiatr Epidemiol*. 1997; 32:12–8.
45. Wierdsma AI, Mulder CL. Does mental health service integration affect compulsory admissions? *Int J Integr Care*. 2009 Sep 9;9(3).
46. Hustoft K, Larsen TK, Auestad B, Joa I, Johannessen JO, Ruud T. Predictors of involuntary hospitalizations to acute psychiatry. *Int J Law Psychiatry*. 2013 Mar 1;36(2):136–43.
47. Knorr M, Hofmann AB, Miteva D, Noboa V, Rauen K, Frauenfelder F, et al. Relationship Between Time of Admission, Help-Seeking Behavior, and Psychiatric Outcomes: “From Dusk Till Dawn.” *Front Psychiatry*. 2022 Apr 27; 13:578.
48. Arnold BD, Moeller J, Hochstrasser L, Schneeberger AR, Borgwardt S, Lang UE, et al. Compulsory Admission to Psychiatric Wards-Who Is Admitted, and Who Appeals Against Admission? *Front Psychiatry*. 2019; 10:544.
49. Patel R, Chesney E, Cullen AE, Tulloch AD, Broadbent M, Stewart R, et al. Clinical outcomes and mortality associated with weekend admission to psychiatric hospital. *Br J Psychiatry*. 2016 Jul 1;209(1):29.
50. Liu TY, Wu CS, Hsieh MH. Clinical characteristics and outcomes associated with weekend admissions to psychiatric wards in Taiwan. *Gen Hosp Psychiatry*. 2019 Sep 1; 60:20–6.

51. Hochman E, Valevski A, Onn R, Weizman A, Krivoy A. Seasonal pattern of manic episode admissions among bipolar I disorder patients is associated with male gender and presence of psychotic features. *J Affect Disord.* 2016 Jan 15; 190:123–7.
52. Hinterbuchinger B, König D, Gmeiner A, Listabarth S, Fellingner M, Thenius C, et al. Seasonality in schizophrenia-An analysis of a nationwide registry with 110,735 hospital admissions. *Eur Psychiatry.* 2020;63(1).
53. Geoffroy PA, Bellivier F, Scott J, Etain B. Seasonality and bipolar disorder: a systematic review, from admission rates to seasonality of symptoms. *J Affect Disord.* 2014 Oct 15; 168:210–23.
54. Aguglia A, Moncalvo M, Solia F, Maina G. Involuntary admissions in Italy: the impact of seasonality. 2016 Oct 1;20(4):232–8.
55. Aguglia A, Borsotti A, Cuniberti F, Serafini G, Amore M, Maina G. The influence of sunlight exposure on hospitalization in emergency psychiatry. 2017 Nov 26;34(10):1413–22.
56. Aguglia A, Serafini G, Escelsior A, Amore M, Maina G. What is the role of meteorological variables on involuntary admission in psychiatric ward? An Italian cross-sectional study. *Environ Res.* 2020 Jan 1; 180:108800.
57. Trang PM, Rocklöv J, Giang KB, Kullgren G, Nilsson M. Heatwaves and Hospital Admissions for Mental Disorders in Northern Vietnam. *PLoS One.* 2016 May 1;11(5).
58. Wang X, Lavigne E, Ouellette-Kuntz H, Chen BE. Acute impacts of extreme temperature exposure on emergency room admissions related to mental and behavior disorders in Toronto, Canada. *J Affect Disord.* 2014 Feb 1;155(1):154–61.
59. Lee S, Lee H, Myung W, Kim EJ, Kim H. Mental disease-related emergency admissions attributable to hot temperatures. *Sci Total Environ.* 2018 Mar 1;616–617:688–94.
60. Silva M, Resurrección DM, Antunes A, Frasilho D, Cardoso G. Impact of economic crises on mental health care: a systematic review. *Epidemiol Psychiatr Sci.* 2020;29.
61. Kessell ER, Catalano RA, Christy A, Monahan J. Rates of unemployment and incidence of police-initiated examinations for involuntary hospitalization in Florida. *Psychiatr Serv.* 2006;57(10):1435–9.
62. McFarland BH, Collins JC. Medicaid cutbacks and state psychiatric hospitalization of patients with schizophrenia. *Psychiatr Serv.* 2011 Aug 1;62(8):871–7.
63. Iacobucci G. Budget cuts force local councils into “narrow” focus on social care, warns watchdog. *BMJ.* 2018 Mar 8;360:k1113.
64. Ravesteijn B, Schachar EB, Beekman ATF, Janssen RTJM, Jeurissen PPT. Association of Cost Sharing with Mental Health Care Use, Involuntary Commitment, and Acute Care. *JAMA Psychiatry.* 2017 Sep 1;74(9):932–9.
65. Rodrigues CA, Rodrigues N, Nascimento M, Oliveira-Silva J. Patterns of adult and youth inpatient admissions before and after the COVID-19 pandemic in a psychiatric ward: an observational study. *BMC Health Serv Res.* 2022 Dec 1;22(1):1–11.
66. Ambrosetti J, Macheret L, Folliet A, Wullschlegler A, Amerio A, Aguglia A, et al. Impact of the COVID-19 Pandemic on Psychiatric Admissions to a Large Swiss Emergency Department: An Observational Study. *Int J Environ Res Public Health.* 2021 Feb 1;18(3):1–10.

67. Davies M, Hogarth L. The effect of COVID-19 lockdown on psychiatric admissions: role of gender. *BJPsych Open*. 2021 Jul;7(4).
68. Clerici M, Durbano F, Spinogatti F, Vita A, De Girolamo G, Micciolo R. Psychiatric hospitalization rates in Italy before and during COVID-19: did they change? An analysis of register data. *Ir J Psychol Med*. 2020 Dec 1;37(4):283–90.
69. Barnhorst A, Rozel JS. Evaluating threats of mass shootings in the psychiatric setting. 2021;33(7):607–16.
70. Metzl JM, Piemonte J, McKay T. Mental Illness, Mass Shootings, and the Future of Psychiatric Research into American Gun Violence. *Harv Rev Psychiatry*. 2021 Jan 1;29(1):81.
71. Skeem J, Mulvey E. What role does serious mental illness play in mass shootings, and how should we address it? *Criminol Public Policy*. 2020 Feb 1;19(1):85–108.
72. Catalano RA, Kessell E, Christy A, Monahan J. Involuntary psychiatric examinations for danger to others in Florida after the attacks of September 11, 2001. *Psychiatr Serv*. 2005 Jul;56(7):858–62.
73. Large MM, Nielssen O, Ryan CJ, Hayes R. Mental health laws that require dangerousness for involuntary admission may delay the initial treatment of schizophrenia. *Soc Psychiatry Psychiatr Epidemiol*. 2008 Mar 30;43(3):251–6.
74. Hotzy F, Hengartner MP, Hoff P, Jaeger M, Theodoridou A. Clinical and socio-demographic characteristics associated with involuntary admissions in Switzerland between 2008 and 2016: An observational cohort study before and after implementation of the new legislation. *Eur Psychiatry*. 2019 Jun 1; 59:70–6.
75. Ma Y, Zhang J, Rosenheck R, He H. Why did China’s mental health law have a limited effect on decreasing rates of involuntary hospitalization? *Int J Ment Health Syst*. 2022 Dec 1;16(1):1–6.
76. Mulder CL, Uitenbroek D, Broer J, Lendemeijer B, van Veldhuizen JR, van Tilburg W, et al. Changing patterns in emergency involuntary admissions in the Netherlands in the period 2000–2004. *Int J Law Psychiatry*. 2008 Aug 1;31(4):331–6.
77. Salize HJ, Dressing H. Epidemiology of involuntary placement of mentally ill people across the European Union. *Br J Psychiatry*. 2004 Feb;184:163–8.
78. Kaufman AR, Way B. North carolina resident psychiatrists knowledge of the commitment statutes: Do they stray from the legal standard in the hypothetical application of involuntary commitment criteria? *Psychiatr Q*. 2010 Dec 14;81(4):363–7.
79. Luchins DJ, Cooper AE, Hanrahan P, Rasinski K. Psychiatrists’ attitudes toward involuntary hospitalization. *Psychiatr Serv*. 2004 Sep 1;55(9):1058–60.
80. Shao Y, Xie B, Wu Z. Psychiatrists’ attitudes toward the procedure of involuntary admission to mental hospitals in China. *Int J Soc Psychiatry*. 2012 Jul;58(4):440.
81. Kress F. Evaluations of dangerousness. *Schizophr Bull*. 1979;5(2):211–7.
82. Sattar SP, Pinals DA, Din AU, Appelbaum PS. To Commit or Not to Commit: The Psychiatry Resident as a Variable in Involuntary Commitment Decisions. *Acad Psychiatry* 2006 30:3. 2014 Jan 10;30(3):191–5.

83. Hotzy F, Marty S, Moetteli S, Theodoridou A, Hoff P, Jaeger M. Involuntary admission for psychiatric treatment: Compliance with the law and legal considerations in referring physicians with different professional backgrounds. *Int J Law Psychiatry*. 2019 May 1; 64:142–9.
84. Eytan A, Chatton A, Safran E, Khazaal Y. Impact of psychiatrists' qualifications on the rate of compulsory admissions. *Psychiatr Q*. 2013 Mar;84(1):73–80.
85. Ma HJ, Zheng YC, Xie B, Shao Y. Risk assessment and its influencing factors of involuntary admission in patients with mental disorders in Shanghai, China. *Int J Soc Psychiatry*. 2022 Jun 1;68(4):745–53.
86. Rotvold K, Wynn R. Involuntary psychiatric admission: Characteristics of the referring doctors and the doctors' experiences of being pressured. 2015 Jul 1;69(5):373–9.
87. Brooks RA. Psychiatrists' Opinions About Involuntary Civil Commitment: Results of a National Survey. *Journal of the American Academy of Psychiatry and the Law Online*. 2007;35(2).
88. Brooks RA. U.S. Psychiatrists' beliefs and wants about involuntary civil commitment grounds. *Int J Law Psychiatry*. 2006 Jan 1;29(1):13–21.
89. Lebenbaum M, Chiu M, Holder L, Vigod S, Kurdyak P. Does physician compensation for declaration of involuntary status increase the likelihood of involuntary admission? A population-level cross-sectional linked administrative database study. *Psychol Med*. 2021 Jul 1;51(10):1666–75.
90. Gravier B, Eytan A. Enjeux éthiques de la psychiatrie sous contrainte [Ethical issues in psychiatry under coercion]. *Rev Med Suisse*. 2011 Sep 21;7(309):1806, 1808–11.
91. Holzinger A, Kaup B, Gutiérrez-Lobos K. Potentially dangerous behavior in the mentally ill: attitudes of journalists and medical students toward compulsory admission. *Int J Offender Ther Comp Criminol*. 2002;46(4):445–52.
92. Joa I, Hustoft K, Anda LG, Brønnick K, Nielssen O, Johannessen JO, et al. Public attitudes towards involuntary admission and treatment by mental health services in Norway. *Int J Law Psychiatry*. 2017 Nov 1; 55:1–7.
93. Guedj M, Sorum PC, Mullet E. French lay people's views regarding the acceptability of involuntary hospitalization of patients suffering from psychiatric illness. *Int J Law Psychiatry*. 2012 Jan 1;35(1):50–6.
94. Laqua C, Hahn E, Böge K, Martensen LK, Nguyen TD, Schomerus G, et al. Public attitude towards restrictions on persons with mental illness in greater Hanoi area, Vietnam. <https://doi.org/101177/0020764018763685>. 2018 Mar 9;64(4):335–43.
95. Lauber C, Nordt C, Falcato L, Rössler W. Public attitude to compulsory admission of mentally ill people. *Acta Psychiatr Scand*. 2002 May 1;105(5):385–9.
96. Steiger S, Moeller J, Sowislo JF, Lieb R, Lang UE, Huber CG. Approval of Coercion in Psychiatry in Public Perception and the Role of Stigmatization. *Front Psychiatry*. 2022 Jan 7; 12:2513.
97. Angermeyer MC, Matschinger H, Schomerus G. Attitudes of the German public to restrictions on persons with mental illness in 1993 and 2011. *Epidemiol Psychiatr Sci*. 2014;23(3):263–70.
98. Angermeyer MC, Matschinger H, Schomerus G. Has the public taken notice of psychiatric reform? The image of psychiatric hospitals in Germany 1990–2011. *Soc Psychiatry Psychiatr Epidemiol*. 2013 Oct;48(10):1629–35.

99. Pescosolido BA, Manago B, Monahan J. Evolving public views on the likelihood of violence from people with mental illness: Stigma and its consequences. *Health Aff.* 2019 Oct 1;38(10):1735–43.
100. Walker NJ, Van Woerden HC, Kiparoglou V, Yang Y. Identifying seasonal and temporal trends in the pressures experienced by hospitals related to unscheduled care. *BMC Health Serv Res.* 2016 Jul 26;16(1):1–10.
101. Steiger S, Moeller J, Sowislo JF, Lieb R, Lang UE, Huber CG. Approval of Coercion in Psychiatry in Public Perception and the Role of Stigmatization. *Front Psychiatry.* 2022 Jan 7; 12:2513.
102. Dawson J, Szmukler G. Fusion of mental health and incapacity legislation. *Br J Psychiatry.* 2006 Jun;188(6):504–9.

Supplementary material

Table IV-1.3 Overview of included articles

S/N	Title	Year of Publication	Country of study	Study Objective	Study design	Contextual factor	Main findings
1.	Mental health care in Athens: Are compulsory admissions in Greece a one-way road?[27]	2017	Greece	To estimate the frequency of compulsory admissions in a psychiatric hospital and to explore its underpinnings	Cohort	Service factors	Patients who had been in touch with mental health services provided by the community before being admitted to a hospital were 6 times less likely to experience civil commitment compared to patients who had only interacted with mental health professionals during a previous hospital stay.
2	Involuntary Psychiatric Admissions and Development of Psychiatric Services as an Alternative to Full-Time Hospitalization in France [23]	2017	France	To assess whether the development of such alternatives in French psychiatric sectors was associated with a reduction in involuntary inpatient care, taking into account other factors that	Cross-sectional	Service factors	The level of development of alternatives to full-time hospitalization was significantly and negatively associated with involuntary admission. With every 10% rise in the level of advancement of alternatives, the chance of a patient being involuntarily admitted to full-time

				are potentially associated with involuntary admission.			hospitalization decreased by 12%.
3	Involuntary Admission of Emergency Psychiatric Patients: Report from the Amsterdam Study of Acute Psychiatry [28]	2009	Netherlands	To determine which factors are associated with emergency compulsory admissions	Cohort	Service factors	Having over 14 outpatient interactions in the preceding year was linked to a decreased likelihood of being compulsorily admitted. Getting a referral from a general practitioner resulted in a lower risk of admission compared to referrals from the police or mental health services.
4	Poverty, poor services, and compulsory psychiatric admission in England [29]	2002	England	To examine the hypothesis that variation in rates of detention is related to social deprivation and also to the functioning of local mental health services.	Ecological	Service factors	A significant relationship between the rates of detention and social deprivation for both section types and for both genders, section type and service variables (delay in obtaining an acute bed, availability of visits after 10 p.m., and availability of visits to chronic patients more than twice weekly) were significant
5	Impact of social-psychiatric services and psychiatric	2013	Germany	To identify factors influencing the voluntariness of admissions to	Cross-sectional	Services factors	The quantity of supervised patients and home visits performed by social-psychiatric services

	clinics on involuntary admissions [30]			psychiatric hospitals. Especially the impact of demographic factors of the region, characteristics of the psychiatric hospitals and characteristics of the psychosocial services was analyzed.			indicated that in areas with a lower rate of involuntary admissions, a lesser number of clients required attention than in regions with a higher rate of involuntary admissions. The ratio of clients to staff in social-psychiatric services was approximately the same in regions with both low and high involuntary admission rates. However, regions with lower involuntary admission rates typically had a greater number of admissions from social-psychiatric services or general practitioners, on average.
6	The Nordic comparative study on sectorized psychiatry: rates of compulsory care and use of compulsory admissions during a 1-year follow-up [31]	1999	Multi-country	To perform a prospective investigation of organizational, clinical, and social predictors of being compulsorily admitted in seven Nordic catchment areas.	Cohort	Service factors	There was considerable disparity in the frequency of involuntary care among various services and Nordic countries. Analyzing three Swedish services that follow the same laws suggested that there may be a rural-urban trend, where the urban Stockholm service had higher rates of compulsory care. Furthermore, higher rates of compulsory care were

							connected with lower accessibility to psychiatric specialist services, as evidenced by the requirement for a formal referral process.
7	Involuntary admissions in accordance to the Mental Health Act (PsychKG) - what are the strongest predictors? [32]	2015	Germany	To compare voluntary and involuntary psychiatric admissions regarding personal, institutional, social-psychiatric and demographic characteristics.	Cohort	Service/Temporal factors	General practitioners were responsible for initiating the majority of voluntary admissions. Involuntary placement was frequently linked to certain admission characteristics, including admission during on-call hours (evenings and weekends) and emergency admission by the on-duty doctor. Clinics with a lower proportion of involuntary admissions reported being community-oriented, providing more crisis intervention resources such as home visits, close contacts, and low-threshold contact services. The sum of services provided was also associated with lower rates of involuntary admissions.
8	Does Assertive Community	2017	Denmark	To test the hypothesis that	Cohort	Service factors	The ACT teams exhibited declining admission

	Treatment Reduce the Use of Compulsory Admissions?[33]			Assertive Community Treatment (ACT) may have the quality to reduce the use of several type of coercion including compulsory admissions.			patterns, and there were noteworthy differences in trends for all admission types, including voluntary admission and admission based on danger criteria, compared to all other users of psychiatric services.
9	Trends in the use of the Italian Mental Health Act, 1979– 1997[34]	2004	Italy	to establish whether the proportion of all psychiatric admissions that were compulsory changed significantly or remained stable over the 18 years after the new Mental Health Law was implemented in Italy	Cohort	Service/ Legislation factors	Between 1979 and 1997, there was a significant reduction in the total number of psychiatric beds. During the same time period, the total number of compulsory admissions remained largely unchanged, but there was a decrease in the proportion of compulsory admissions made under the Act from 17.1% to 10.6%.
10	Differences in the use of involuntary admission across the Veneto Region: which role for individual and	2016	Italy	To explore the relation between mental health services provision, characteristics of population, individual factors	Cohort	Service factors	A higher prevalence rate of involuntary admission (IA) was predicted by higher ageing indices and rates of social workers. The contextual model explained

	contextual variables?[35]			and involuntary admissions.			more than 40% of the total variance.
11	Local psychiatric beds appear to decrease the use of involuntary admission: a case-registry study[36]	2014	Norway	To examine how a range of factors, including the organization of mental health services, affected rates of involuntary admission.	Cohort	Service factors	Patients from the deinstitutionalized system had a significantly greater risk of being involuntarily admitted. The deinstitutionalized system that did not have local beds available had the highest rate of involuntary admission.
12	Does mental health service integration affect compulsory admissions?[37]	2009	Netherlands	To evaluate the effect of varying level of service integration by naturalistic comparative analysis	Cohort	Service factors	Where mental healthcare was more integrated, services outcomes indicated improved results. Nonetheless, limited effects were observed, and it is possible that other factors beyond service integration may have played a more crucial role in preventing compulsory admissions.
13	Variation in requests to social services departments for assessment for compulsory psychiatric admission [38]	1993	England & Wales	Examines the reported frequency of requests for assessment for admission, and the variation in the rate of requests according to the	Cross-sectional	Service factors	There was a correlation between requests for assessment and treatment order, as well as requests for emergency admission, and greater social deprivation, but this relationship was only observed in London.

				type of local authority and the extent of social deprivation.			
14	Association between provision of mental illness beds and rate of involuntary admissions in the NHS in England 1988-2008: ecological study [39]	2011	England	To examine the rise in the rate of involuntary admissions for mental illness in England that has occurred as community alternatives to hospital admission have been introduced	Ecological	Service factors	Over the same period, the rate of involuntary admissions per year in the NHS rose by over 60%, while the provision of mental illness beds dropped by more than 60%.
15	Variations in patterns of involuntary hospitalization and in legal frameworks: an international comparative study [40]	2019	Multi-country	To compare trends over time, and to explore whether variations in legislation, demographics, economics, and health-care provision might be associated with variations in involuntary hospitalization rates	Ecological	Service factors/Legislation	There was no observed correlation between annual rates of involuntary hospitalization and any features of the legal framework. However, a larger number of beds was significantly associated with higher national rates of involuntary hospitalization.
16.	Involuntary admissions in	2016	Italy	To assess the prevalence of voluntary and	Cohort	Seasonality	The frequency of involuntary hospitalizations significantly increased

	Italy: the impact of Seasonality [41]			involuntary admissions with particular reference to seasonality and clinical correlates in a sample of patients consecutively admitted to our psychiatric unit during a period of 24 months.			during the seasonal changes, particularly in the spring/summer season with the highest peak in June. The seasonal changes have a significant impact on the development of psychiatric disorders, particularly in bipolar and related disorders. Therefore, seasonality may be an important factor influencing involuntary hospitalizations.
17.	The influence of sunlight exposure on hospitalization in emergency psychiatry [42]	2017	Italy	To evaluate the impact of photoperiod, and investigate the period of major/minor exposure to sunlight in a sample of patients consecutively admitted to our psychiatric unit during a period of 24 months,	Cohort	Seasonality	Patients admitted during the spring/summer seasons, which have a higher number of daylight hours, had a significantly higher occurrence of involuntary admissions compared to those admitted during other seasons.
18.	Clinical characteristics and outcomes associated with	2019	Taiwan	To investigate whether patients admitted to psychiatric wards in	Cohort	Temporal factor	The proportion of compulsory admissions on the weekend was

	weekend admissions to psychiatric wards in Taiwan [43]			Taiwan on the weekend different and whether outcomes are different for patients admitted on the weekend?			significantly higher than that on weekdays.
19	Clinical outcomes and mortality associated with weekend admission to psychiatric hospital [44]	2016	England	To investigate whether weekend admission to a psychiatric hospital is associated with worse clinical outcomes.	Cohort	Temporal factor	After adjusting for other demographic and clinical factors compulsory admission was less likely at the weekend than during the week.
20.	What is the role of meteorological variables on involuntary admission in psychiatric ward? An Italian cross-sectional study [45].	2019	Italy	To investigate the impact of meteorological variables and other indexes in a large sample of hospitalized patients, focusing on subjects who were involuntarily admitted	Cohort	Seasonality	The study found that there were significantly higher maximum and medium temperatures, as well as humidex, during involuntary admissions compared to voluntary admissions. Logistic regression analysis showed that maximum temperature and humidex remained significantly associated with involuntary admission.
21.	Relationship Between Time of Admission, Help-Seeking	2022	Switzerland	To investigate the relationship between time of admission, patients'	Cohort	Temporal factor	There were fewer compulsory admissions during office hours and daytime. The number of

	Behavior, and Psychiatric Outcomes: “From Dusk Till Dawn” [46]			demographic and clinical profile, and treatment outcomes.			compulsory admissions increased gradually from dusk until dawn and reached its peak around 5-6 a.m. The increase in compulsory admissions was more noticeable on weekends.
22.	Compulsory Admission to Psychiatric Wards-Who Is Admitted, and Who Appeals Against Admission? [47]	2019	Switzerland	to examine if specific sociodemographic and clinical characteristics are associated with involuntary admission and with an appeal against the compulsory admission order.	Cohort	Temporal factor	Patients who were admitted involuntarily were more likely to be admitted during nighttime or on weekends, as compared to patients who were admitted on a voluntary legal status.
23.	Predictors of involuntary hospitalizations to acute psychiatry [48]	2013	Norway	To compare involuntary referred with voluntary referred patients	Cross-sectional	Temporal factor	Patients who were admitted involuntarily showed a statistically significant higher likelihood of being admitted during the evening and night shifts.
24.	Involuntary Psychiatric Examinations for Danger to Others in Florida After the Attacks	2005	United States	To test the general hypothesis that the threshold for what constitutes sufficient danger to warrant involuntary treatment declines	Cross-sectional	Impactful event: Violent attack	In the aftermath of September 11, 2001, law enforcement officers in Florida brought in a greater number of individuals, both men and women, for psychiatric evaluations in

	of September 11, 2001 [49]			in a community after widely reported or witnessed violent behavior using interrupted time series design			order to prevent potential harm to others. This was a departure from the usual historical patterns and the number of people referred to mental health professionals.
25	Rates of unemployment and incidence of police-initiated examinations for involuntary hospitalization in Florida [50]	2006	United States	To test the hypothesis that contraction of regional economies affects the incidence of involuntary admissions to psychiatric emergency services by reducing community tolerance for persons perceived as threatening to others	Cross-sectional	Impactful event: Economic recession	In periods of unemployment, law enforcement officers referred approximately 309 more men for neglect compared to historical presentation rates and the number of individuals referred by mental health professionals and police.
26	Medicaid Cutbacks and State Psychiatric Hospitalization of Patients With Schizophrenia [24]	2011	United States	to examine state psychiatric hospital utilization among persons with schizophrenia who maintained or lost Medicaid coverage.	Cohort	Impactful event: Economic recession	Analyses controlling for age, gender, race-ethnicity, Medicaid eligibility, and Medicare coverage showed that persons who maintained Medicaid coverage had little change in state psychiatric hospitalization (Involuntary admissions), whereas

							utilization increased markedly over time for those who lost Medicaid coverage. There were minimal differences in the use of general hospital psychiatric units. It was generally observed that loss of Medicaid coverage occurred before the increase in hospitalizations.
27	Association of Cost Sharing With Mental Health Care Use, Involuntary Commitment, and Acute Care [51]	2017	Netherlands	To examine the association of higher patient cost sharing with mental health care use and downstream effects, such as involuntary commitment and acute mental health care use.	Cohort	Impactful event: Change in cost sharing policy	An increase in out-of-pocket expenses was linked to decreased utilization of mental health care, leading to cost savings overall, but also resulting in increased expensive use of involuntary commitment and acute care, especially among those with psychotic disorder or bipolar disorder.
28	Patterns of adult and youth inpatient admissions before and after the COVID-19 pandemic in a psychiatric ward: an	2022	Portugal	To understand whether COVID affected the main characteristics of psychiatric hospitalizations, measured by admissions in a Portuguese acute psychiatric ward.	Pre-post	Impactful event: COVID	Although there was a decrease in the overall number of patients admitted, severe conditions such as compulsory admissions and diagnosis of schizophrenia did not show a similar reduction.

	observational study [52]						
29	Psychiatric hospitalization rates in Italy before and during COVID-19: did they change? An analysis of register data [53]	2020	Italy	To assess admission rates to seven General Hospital Psychiatric Wards (GHPWs) located in the Lombardy Region in the 40 days after the start of Coronavirus disease 2019 (COVID-19) epidemic, compared to similar periods of 2020 and 2019.	Pre-Post	Impactful event: COVID	Between February 21 and March 31, 2020, which marked the beginning of the COVID-19 epidemic in Italy, there was a significant decline in psychiatric admission rates specifically for voluntary admissions, compared to a similar 40-day period prior to February 21, as well as two 40-day periods in 2019. However, there was no noticeable reduction in admission rates for involuntary admissions during the same time period.
30	Impact of the COVID-19 Pandemic on Psychiatric Admissions to a Large Swiss Emergency Department: An Observational Study [54]	2021	Switzerland	To investigate differences in admissions at a Swiss psychiatric ED from 1 April to 15 May during a “pandemic-free” period in 2016 and a “during-pandemic” period in 2020.	Pre-Post	Impactful event: COVID	During the COVID-19 pandemic, patients who were admitted to the psychiatric emergency department were significantly more likely to be hospitalized involuntarily after their psychiatric consultation compared to a period without a pandemic.
31	The effect of COVID-19	2021	United Kingdom	To examine whether the first UK	Pre-Post	Impactful event: COVID	Although there was a decrease in the overall

	lockdown on psychiatric admissions: role of gender [55]			lockdown changed the demographics of patients admitted to psychiatric hospitals (to include gender, legality, route of admission and diagnoses), independent of seasonal variation			number of admissions, there was a consistent and statistically significant rise in the percentage of admissions that resulted from formal sectioning throughout all six months of 2020. This trend was observed in both male and female patients.
32	Reasons behind the rising rate of involuntary admissions under the Mental Health Act (1983): Service use and cost impact. [40]	2020	United Kingdom	To explore potential impactful events that may have contributed to unexpected changes in rates of involuntary psychiatric hospitalization	Cohort	Impactful event: Economic recession/Legislation	Admission rates have steadily increased year after year since the conclusion of the National Service Framework for Mental Health and the start of austerity measures in 2010/11.
33	Why did China's mental health law have a limited effect on decreasing rates of involuntary hospitalization? [56]	2022	China	To examine the rates and correlates of IH in a large psychiatric hospital in Guangzhou from 2014 to 2017 after the implementation of MHL and a structured assessment of the need for IH.	Cohort	Mental health legislation	Following the implementation of a structured assessment of need for involuntary hospitalization, there was a noticeable but minor rise in rates of inpatient hospitalization in China. The legislation appeared to have been unsuccessful in reducing inpatient hospitalization due to a shortage of available

							hospital beds and the impact of cultural stigma.
34	Changing patterns in emergency involuntary admissions in the Netherlands in the period 2000–2004 [57]	2008	Netherlands	To investigate changes in demographic or diagnostic characteristics of committed patients in the Netherlands and whether there were changes in dangerousness criteria related to danger to the public, used to justify commitment.	Cohort	Legislation	After adjusting for changes in age and gender distribution, there was a rise in the number of commitments between 2000 and 2004. The most significant increase was observed in the 'arousing aggression' criterion for dangerousness.
35	Epidemiology of involuntary placement of mentally ill people across the European Union ill people across the European Union [58]	2004	Multi-country	To describe and compare the legal frameworks and routine procedures of compulsory admission and involuntary treatment of all European Union Member States in a	Cohort	Legislation	Member States that required the presence of a legal representative had significantly lower rates of compulsory admission and showed a tendency towards lower rates of compulsory admission overall. This was the only procedural feature among the assessed legal characteristics that

				systematic and standardized manner			effectively differentiated between clusters of Member States based on their legal regulations for involuntary placements of mentally ill individuals.
36	Clinical and socio-demographic characteristics associated with involuntary admissions in Switzerland between 2008 and 2016: An observational cohort study before and after implementation of the new legislation [22]	2020	Switzerland	To describe characteristics of a cohort of involuntarily compared to voluntarily admitted patients regarding clinical and socio-demographic characteristics before and after implementation of the new legislation	Cohort	Legislation	The implementation of the new legislation in January 2013 was significantly associated with a reduced risk of Involuntary Admission.
37	North Carolina Resident Psychiatrists Knowledge of the Commitment Statutes: Do They Stray from the Legal Standard in the Hypothetical Application of	2010	United States	To examine North Carolina (NC) resident psychiatrist's knowledge of commitment statutes and their willingness to involuntarily admit hypothetical patients who do not	Cross-sectional	Staff factors	North Carolina (NC) resident psychiatrists' decision to involuntarily admit patients was not affected by their understanding of commitment statutes. However, the decision was influenced by the need for transportation, particularly in cases of substance abuse

	Involuntary Commitment Criteria? [59]			meet statutory criteria			patients. Psychiatrists who deemed secure transportation to the hospital necessary were more likely to commit the patient.
38	Psychiatrists' attitudes toward involuntary hospitalization [60]	2004	United States	To examine whether psychiatrists' attributions of responsibility for mental illnesses affect their decisions about involuntary hospitalization	Cross-sectional	Staff factors	The study did not find any significant correlation between attributions of responsibility and the decision to commit individuals with mental illness. Psychiatrists surveyed showed reluctance to involuntarily hospitalize patients with mental illness in the absence of immediate harm.
39	US psychiatrists' beliefs and wants about involuntary civil commitment grounds [61]	2006	United States	To discover some of the apparent sources of psychiatric norms about commitment grounds.	Cross-sectional	Staff factors	The study found that the respondents' level of support for different commitment grounds was strongly linked to their understanding of the laws in their state. This suggests that the respondents had internalized the norms and preferences of their state's commitment grounds.
40	Risk assessment and its influencing	2021	China	To explore the application of risk criterion in	Cross-sectional	Staff factors	About half of patients were involuntarily admitted due to behaviors that posed a

	factors of involuntary admission in patients with mental disorders in Shanghai, China [62]			involuntary admission cases; especially risk assessed by psychiatrists at admission and its influencing factors.			risk to themselves or others. However, nearly 10% of patients were involuntarily admitted despite no documentation of risk assessment checklists being completed.
41	Psychiatrists' opinions about involuntary civil commitment: Results of a national survey [63]	2007	United States	To update knowledge about the opinions of psychiatrists through a survey based on a national random sample of members of the American Psychiatric Association	Cross-sectional	Staff factors	The survey respondents provided responses that were frequently inaccurate when it came to their knowledge of the grounds for commitment in their states, as well as their understanding of whether involuntary outpatient commitment was allowed in their respective states.
42	To commit or not to commit: the psychiatry resident as a variable in involuntary commitment decisions [64]	2006	United States	To study whether psychiatry residents' personal variables (such as age, gender, level of training, previous experience with patient suicide, or lawsuits) and their temperamental predispositions have an impact on their decisions to	Cross-sectional	Staff factors	The findings indicated a notable correlation between the inclination of psychiatrists to take risks and their level of education, and their choices to refrain from pursuing involuntary hospitalization for the patients in the five simulated clinical scenarios.

				seek involuntary commitment.			
43	Impact of Psychiatrists' Qualifications on the Rate of Compulsory Admission [25]	2013	Switzerland	To assess the impact of this *change of procedure* on the proportion compulsory admissions *Since October 2006, only certified psychiatrists are authorized to require a compulsory admission to the facility, while before all physicians were, including residents	Pre-post	Staff factors	From October 2006 onwards, patients who were hospitalized were less likely to be admitted involuntarily compared to the period before October 2006.
44	Involuntary admission for psychiatric treatment: Compliance with the law and legal considerations in referring physicians with different	2019	Switzerland	To examine whether legal considerations differed according to the physicians' professional backgrounds and attitudes towards coercion in general.	Cross-sectional	Staff factors	Around a third of the participants reported that they were unable to meet certain legal requirements aimed at promoting patient autonomy during involuntary admission, citing the patients' clinical condition as the most common reason for omitting procedures such as hearing

	professional backgrounds [65]						the patients' views, providing information about next steps, and the right to appeal. Psychiatrists demonstrated greater familiarity with the legal basis for involuntary admission compared to other physicians, and the physicians more frequently viewed coercion as a form of treatment.
45	Involuntary psychiatric admission: Characteristics of the referring doctors and the doctors' experiences of being pressured [66]	2015	Norway	To examine characteristics (gender, work place, work experience, prior knowledge of referred patient) of General Practitioners (GPs) that admitted patients involuntarily to a psychiatric hospital, and to examine how the GPs assessed this process	Cross-sectional	Staff factors	Almost half of the respondents stated that they had felt pressured/advised to refer the patient involuntarily to hospital. The pressure/advice to refer/refer involuntarily came from — in order of importance — the health service, the patient's family and the police
46	Clinicians' decision making about	1998	United States	To examine Clinicians' decision making about	Cross-sectional	Staff factors	Several factors were discovered to impact the decision to involuntarily

	involuntary commitment [67]			involuntary commitment, with a focus on the effects of patient and clinician characteristics and bed availability on decisions to detain patients, the first step in involuntary commitment.			commit patients, such as the clinician's inclination to detain patients and the accessibility of beds for detention.
47	Does physician compensation for declaration of involuntary status increase the likelihood of involuntary admission? A population-level cross-sectional linked administrative database study[68]	2020	Canada	To examine whether in a government-funded health care system, physician payments for filling forms related to an involuntary psychiatric hospitalization were associated with the likelihood of an involuntary admission.	Cross-sectional	Staff factors	The probability of being involuntarily admitted rose when there was a 10% increase in the absolute percentage of financially reimbursed forms at the Emergency Department.
48	Potentially Dangerous Behavior in the Mentally Ill: Attitudes of Journalists and Medical Students Toward	2002	Austria	To investigate what medical students and journalists consider legitimate conditions for compulsory admission	Cross-sectional	Public attitudes	The most commonly cited reasons for compulsory admission among both groups were instances of violence towards others. Approximately one-third of the participants in each group also believed that

	Compulsory Admission [69]						ongoing neglect warranted involuntary commitment. Students were more likely than journalists to endorse civil commitment in cases involving suicide attempts and violent behavior. Medical students who had personal experience with individuals with mental illness were significantly more likely to advocate for coercive measures in cases of suicide attempts.
49	Public attitude to compulsory admission of mentally ill people [70]	2002	Switzerland	Assessing the public attitude to the compulsory admission of the mentally ill in Switzerland, and analyzing the influence of demographic, psychological and sociological factors	Cross-sectional	Public attitudes	The majority of the respondents were in favor of compulsory admission for those with mental illness. However, factors such as level of education, negative stereotypes, and living in French-speaking regions of Switzerland were found to be associated with a higher likelihood of supporting mandatory admission.
50.	Public attitude towards restrictions on persons with mental illness in greater Hanoi	2018	Vietnam	To explore whether socio-demographic factors affect public attitudes toward restrictions on		Public attitudes	The majority of participants in the study supported two restrictions for individuals with mental illness: mandatory hospitalization under specific

	area, Vietnam [71]			mentally ill people in Hanoi, Vietnam.			circumstances and revocation of their right to vote in parliamentary elections. Men were found to be less likely than Vietnamese women to approve of mandatory hospitalization. Most participants agreed on three conditions that warrant involuntary admission: suicidal behavior, violent behavior towards others, and self-neglect and isolation due to persecutory delusions.
51.	French lay people's views regarding the acceptability of involuntary hospitalization of patients suffering from psychiatric illness [72]	2012	France	To understand how lay people and health professionals in France judge the acceptability of hospitalizing a psychiatric patient against his will	Cross-sectional	Public attitudes	Most of the participants in the study believed that involuntary hospitalization is appropriate in specific situations, particularly when the patient poses a danger to others, in accordance with French regulations.
52.	Public attitudes towards involuntary admission and treatment by mental health	2017	Norway	To examine the attitudes in a representative sample of Norway's population towards the use of involuntary	Cross-sectional	Public attitudes	The majority of Norwegian adults endorse the current laws and practices related to involuntary admission and compulsory treatment in mental health services. The most significant support for

	services in Norway [73]			admission and treatment, and under which circumstances does the general public consider compulsory treatment to be justified in the Norwegian mental health care services.			involuntary treatment was seen in cases where the patient was unable to take care of themselves, such as those with depression and suicidal thoughts. People with lower levels of education were more likely to have a favorable view of involuntary admission and treatment.
53.	Attitudes of the German public to restrictions on persons with mental illness in 1993 and 2011 [74]	2014	Germany	To explore to what extent these achievements are reflected in changes of public attitudes towards restrictions on mentally ill people.	Cross-sectional	Public attitudes	There are two contrasting trends in public opinions regarding limitations on individuals with mental illness. On one hand, there is a general shift towards more liberal views on patients' rights. However, there is also an inclination towards restricting the freedom of patients in cases of nonconformist behavior.
54.	Approval of Coercion in Psychiatry in Public Perception and the Role of Stigmatization [75]	2021	Switzerland	To examine the approval for coercive measures in psychiatry by the general public, and to explore its relation with person- and situation-specific	Cross-sectional	Public attitudes	The acceptance of coercion in psychiatric treatment was found to be positively correlated with perceived dangerousness and perceived effectiveness of the treatment. Familiarity with psychiatric treatment, particularly having a friend who has undergone

				factors as well as with stigmatization.			treatment, was associated with a decreased acceptance of coercion. The gender of the hypothetical patient, the gender of the participant, and the desire for social distance were not significant factors in the general acceptance of coercion.

4.2. Original research article 2

Nigeria's mental health and substance abuse bill 2019: Analysis of its compliance with the United Nations convention on the rights of persons with disabilities.

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Nigeria's mental health and substance abuse bill 2019: Analysis of its compliance with the United Nations convention on the rights of persons with disabilities

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Abstract

Countries are struggling with reconciling their national mental health legislation with the CRPD approach, which stresses equality as the focal point of legislation, policies, and practices that affect people with disabilities. Several failed attempts have been made over the last two decades to update Nigeria's obsolete mental health legislation. The most recent attempt is the Mental Health and Substance abuse Bill 2019, which aims to protect the rights of people with mental health needs. It addresses many areas neglected by previous bills, such as nondiscrimination of people with mental and substance use problems in the exercise of their civil, political, economic, social, full employment, religious, educational, and cultural rights. It categorically prohibits the use of seclusion in the treatment of people with mental health problems, makes provision for service users to be members of the Mental health review tribunal and allows for the protection of privacy and confidentiality of information about people with mental health problems. While keeping to most of WHO's recommendations for mental health legislation, the bill diverges from the CRPD's recommendations by allowing forced admission and treatment based on mental capacity, substitute decision-making by legal representatives or closest relatives, and non-prohibition of coercive practices. The bill does not make provisions for advance directives and is silent on informed consent to participate in research. Despite the bill's deficiencies, it would be a significant step forward for the country whose current mental health legislation is the Lunacy Act of 1958. Although the CRPD has left it unclear how countries, especially low resource countries, should go about creating a workable legal framework, it is clear that all countries are expected to join the current global effort to eliminate, or at least reduce to the barest minimum, the use of coercion in mental health care. We expect that future revisions of this bill will examine its limitations in light of Nigeria's socio-cultural context.

Keywords: Mental health legislation, Nigeria, UNCRPD, Coercion, Human rights

Introduction

The World Health Organization (WHO) estimated that while about 80% of African countries have mental health legislation, only about a third of these mental health laws were enacted later than 1990(1). The WHO set an ambitious global target for 50 % of countries to have developed or updated their mental health laws in line with regional and international human rights instruments by 2020 (2). However, according to the most recent WHO ATLAS, only 28% of WHO member states reported having a mental health law that was in the process of implementation and was fully compliant with human rights instruments, with the European Region having the highest percentage (49 percent of WHO Member States) and the African Region having the lowest (11 percent of WHO Member States)(3) .

With a population of more than 206 million people, Nigeria is Africa's most populous country. The life expectancy at birth is 55 years. The lifetime prevalence of at least one DSM–IV disorder in the Nigerian Survey of Mental Health Disorders was 12.1%(4) , and only 9.0 percent of those with any DSM-IV disorder in the previous 12 months had received treatment (5). Community mental health care is almost non-existent, and psychiatric hospitals receive more than 90% of the mental health budget (6). The existing mental health legislation in Nigeria was first enacted by the British colonial administration as the Lunacy Ordinance of 1916 and later amended and renamed ‘Lunacy Act’ of 1958(7) . Apart from the derogatory and stigmatizing labels for people with mental and psychosocial disabilities, the act has many ambiguities regarding the specific conditions that it relates to. This leaves too much to the discretion of medical practitioners and magistrates and sometimes leads to the wrongful confinement of people without a mental disability (8). Although the law requires that both a medical practitioner and a magistrate certify a person to be a ‘lunatic’ before they are committed, it does not refer to treatment for committed individuals (8). In addition, it fails to separate mental health institutions from the criminal justice system, thereby endangering the same people it was meant to protect. It contains no provisions for voluntary treatment or admission, implying that it is primarily intended for custodial care. The lack of provision for treatment for people with mental and psychosocial disabilities was cited as a major reason for the mental health law reform movement in the country (8).

The revised mental health bill of 2003 was aimed at updating the lunacy act to the existing recommendations at the time it was proposed. It clearly defined several terms, including the specific conditions the legislation applied to; made provision for the treatment of people with mental health problems; proxy consent for treatment; specified competence required for determination of mental health problems; and review mechanisms. Although the revised mental health bill of 2003 appeared to be a major leap forward from the obsolete Lunacy Act at the time it was proposed, it had significant flaws, such as the failure to address socio-political issues like discrimination, housing, employment, social security, civil rights, and protection

of people with mental health problems (9). Furthermore, no provisions were made for the regulation of specific treatments such as electroconvulsive therapy and coercive practices such as restraint and seclusion (9). After the death of the senator who proposed the bill, the updated Mental Health Bill of 2003 was abandoned after the second hearing due to a lack of support and was subsequently withdrawn after six years in April 2009. Four years later, the Mental Health Bill 2013, which addressed some of the deficiencies of the abandoned bill, was presented in the legislative assembly and went through two hearings before losing support after the failed re-election of the senator sponsoring the bill. Following a widely publicized British Broadcasting Corporation commentary on the high prevalence of substance abuse in Nigeria and the inhumane treatment meted to the victims, a committee was set up by the country's legislature to draft a substance abuse bill. The committee, which was primarily made up of psychiatrists, took advantage of the opportunity to revise and incorporate the Mental Health Bill 2013 into the proposed Substance Abuse Bill. This resulted in the Mental and Substance Abuse Bill 2019, which has passed a public hearing and is now waiting to be signed into law by the country's president. The recent bill aims to enhance and regulate mental health and substance abuse services, protect people with mental health needs, and establish a National Commission for mental and substance abuse services (10). It was formulated to address the limitations of the previous bills and is based on the Checklist on Mental Health Legislation published in the WHO's Resource Book on Mental Health Legislation (11). While the WHO resource book remains a comprehensive instrument for analyzing mental health legislation, it diverges from some key areas of recommendation by the more recently formulated UNCRPD and has been withdrawn (12,13). The bill also has influences from the Ghanaian Mental Health Act (2012), the Indian Mental Health Care Act (2017), and the Mental Health Act of the United Kingdom (1983). The new legislation has been criticized by some mental health advocacy groups for many reasons, including the title, which inadvertently encourages wrong perception of mental health problems being inextricably linked with substance abuse. Other criticisms are related to the limitations of human rights on the basis of mental capacity (14).

Nigeria is a signatory to many international human rights treaties, including the African Charter on Human and Peoples' Rights and the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD)(15)(16). The UNCRPD was ratified by Nigeria in 2007 and its optional protocol in 2010. Although the Discrimination Against Persons with Disabilities (Prohibition) Act 2018 was signed into law in 2019, the country's current mental health legislation contravenes most of the principles of UNCRPD. Some scholars have called attention to Nigeria's human rights emergency in mental health and have highlighted the need for human-rights oriented, culturally sensitive mental health legislation and mental health service reform (10,17). Given the increasing movement to increase the rights of people with disability and reduce coercion in mental health care, it is important to assess the compliance of the proposed Mental

and Substance Abuse Bill 2019 with the recommendations of UNCRPD and how it regulates the use of coercion in mental health care services.

The UNCRPD

The United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) is the most critically acclaimed international legal instrument that directly addresses the issue of coercion in mental health care and the protection of the rights of people with mental health problems (United Nations, 2006). The UNCRPD stresses that equality should be the focal point of legislation, policies, and practices that affect people with disabilities, reflecting a paradigm shift from a medical approach to a human rights-based approach (19). The Convention is one of the most widely ratified treaties in history, with about 164 countries being signatories (United Nations, 2006). All signatories are required to amend their existing laws and policies to accommodate the convention's stipulations (19). Article 12 of the UNCRPD declares that people with disabilities have equal legal recognition (United Nations, 2006). Article 12 was taken to mean that all people, regardless of their mental state, have legal capacity at all times in the General Comment on Article 12 by the Committee on the Rights of Persons with Disabilities, the UN institution charged with overseeing the Convention's implementation(21). The use of coercive measures in medical facilities such as seclusion and restraints has also been described as a violation of the right to liberty and security of a person(22). The involuntary treatment of people with mental problems goes against the UNCRPD's principle of autonomy, which aims to enable patients with mental health problems to make their own treatment decisions. The UNCRPD advocates for supported decisions rather than substitute decisions whereby necessary compromises are made and resources are made available to ensure that individuals can express their own will and preferences (19). The UNCRPD committee's general comment on the total abolition of substitute decision-making has sparked a lot of debate, with many countries disagreeing with this position while ratifying the treaty (23).

The inability to reach a consensus regarding the interpretation of the CRPD led to the infamous 'Geneva impasse'. On the one hand, the CRPD committee, supported by the Special Rapporteur on Disability, the first Special Rapporteur on the Rights of Persons with Disabilities, the UN Working Group on Arbitrary Detention, and the UN High Commissioner on Human Rights, argues for the absolute prohibition of involuntary detention and treatment; on the other hand, the Human Rights Committee and the Subcommittee on Prevention of Torture and Other Cruel, Inhuman, or Degrading Treatment or Punishment do not support the CRPD Committee's absolutist interpretation (24,25). The CRPD committee's interpretation has sparked a lot of criticism and arguments from clinical and legal scholars. Some authors have argued that universal application of the Convention's provisions may inadvertently deny some people the right to health and increase the risk of impairment since people who might need treatment in an

emergency or who might be at risk of harming themselves or others may not receive it (26). According to Scholten and Gather, the purpose of informed consent is to defend both our liberty and our well-being. They argue that when a person's decision-making capacity is severely compromised, they are often unable to discern which treatment choice will be most beneficial to their well-being and consistent with their understanding of what is good. In such instances, informed consent is rendered useless (23). Dawson disputes the Committee's interpretation of "discrimination," claiming that treating people differently if meaningful inequalities exist between their situations, even after necessary support and reasonable accommodations have been granted, is not always wrong (27). The Committee's interpretation of "respect the rights, will, and preferences of persons with disabilities" to mean absolute elimination of substitute decision making has also been described as problematic, especially when "will" conflicts with "preferences" or in some cases when "respect for will and preferences" leads to the denial of other rights (25). Most of the criticisms question whether the importance of a person's decision-making capacity can be overlooked in any situation (25). Flynn, however, argues that functional assessments of mental capacity cannot be used to determine whether a particular preference should take precedence over what others perceive to be the individual's will, or whether third parties' interpretation of a person's will can justify ignoring the individual's clearly expressed preference (28).

Some alternatives to conventional mental health laws that attempt to incorporate the principles of the UNCRPD have been proposed. Szmukler and Dawson claim that separate mental health legislation is fundamentally discriminatory and suggested the 'Fusion law', which combines mental health and mental capacity legislation to update existing mental health laws in accordance with the CRPD (29). The fusion law is intended to be a generic rule that applies to all patients (both physically and mentally ill), with involuntary interventions based on impaired decision-making capacity and being in the best interests of the patient (29–31). A single law that applies to all patients, in their opinion, could help to reduce the stigma associated with mental health problems. Scholten and Gather propose another model that combines the strengths of the competence model and supported decision-making (23). They argue that laws requiring health professionals to respect treatment refusals by people with significantly impaired decision-making capacity will harm their well-being and autonomy by exposing them to risks they would not accept if they were competent and jeopardizing their ability to live a life according to their definition of the good (23). They propose a competence model based on the functional approach that does not discriminate against people with mental disabilities and is in line with the CRPD's main goals of ensuring equal treatment and preventing discrimination against people with mental health problems (32). Also, there is increasing evidence of the efficacy of alternative non-coercive models of care that are in line with the submissions of the UNCRPD, preserving dignity and autonomy, while not compromising the right to treatment (19). Despite these advancements, it is important to recognize that there will always be occasions when ethically

acceptable arguments for actions deemed coercive can be given, at the very least in conditions with grave repercussions—for example, due to organic confusional states or neurodegenerative illnesses(25).

The Mental and Substance Abuse Bill 2019

The bill is titled “a bill for an act to provide for the enhancement and regulation of mental health and substance abuse services; protect persons with mental health needs; and the establishment of a national commission for mental and substance abuse services, for the effective management of mental health in Nigeria and other related matters.” (Mental and Substance Abuse Bill 2019, Page 1) It is divided into twelve parts that explain the rights of people of mental health problems including during their admission and treatment in mental health facilities. For the most part, the paper will focus on sections of the bill that deal with adult patient treatment and are relevant to its compliance with the CRPD.

Capacity

There have been a lot of controversies related to the distinction between legal and mental capacity as stipulated in the CRPD(25,26,33). According to the General Comment made by the Committee, mental capacity is viewed as a subjective medical construct with limited validity, while legal capacity is an intrinsic right and not dependent on cognition and mental state (16) This is especially contentious due to the nature of mental health problems, which impair decision-making abilities. Although it is widely acknowledged that the laws governing guardianship, substituted decision-making, and involuntary commitment were designed to protect those who were unable to do so, some critics argue that these laws have failed to provide adequate protection or equal treatment to people with disabilities (34). They argued that because people without disabilities are allowed to endanger themselves and others without state intervention unless and until they break the law, it is discriminatory for the state to deprive people with mental health problems of their legal capacity and freedom on the basis of mental health problems when no law has been broken (34). The Mental Health Bill 2019 imposes numerous limitations on the rights of people with mental and substance use problems on the basis of mental capacity. It specifically defines “mental or psychological incapacity” as the inability to: (a) understand the information given concerning the nature of the disorder; (b) understand the consequences that his or her decisions and actions have for his or her own life or health and for the life and health of others, which may be serious and irreversible; (c) understand that treatment might mitigate or remedy the condition and that lack of treatment might aggravate it; (d) understand the information about the nature of treatment proposed, including the means of treatment, its direct effects and its possible side effects; and (e) effectively communicate with others regarding his or her condition and his or her consent to treatment or hospitalization (Section 73).

Section 24 (4) of the bill allows specific limitations, based on an assessment of capacity, on the right of a person with a mental and substance use problem to enjoy a decent life as normally and fully as possible, including the right to education, vocational training, leisure, recreational activities, full employment, and participation in civil, economic, social, cultural, and political activities. However, the bill does not specify any procedures for determining a person's incapacity/incompetence as recommended by the WHO Checklist on Mental Health Legislation. Although it does not clarify what these specific limitations might be, any restrictions on these rights contravene Articles 24, 27, 29, and 30 of the UNCRPD, which require states to make provisions to ensure the full realization of the rights to education, vocational training, full employment, participation in civil, economic, social, cultural, and political activities, leisure, and recreational activities by people with disabilities. According to section 24(6)(b) of the bill, the right to have access to and spend personal money for personal purchases is limited by a person's mental capacity. Lack of mental capacity is also mentioned in sections 46 and 47 as a reason for a judge to manage and administer the properties of patients with substance and mental use problems in their best interests. These aspects contravene Article 12(5) of the UNCRPD, which states that "State Parties shall take all appropriate and effective measures to ensure the equal right of persons with disabilities to own or inherit property, to control their own financial affairs, and to have equal access to bank loans, mortgages, and other forms of financial credit, and shall ensure that persons with disabilities are not arbitrarily deprived of their property." Section 30(4) of the bill cites a lack of capacity to give informed consent as one of the requirements for a medical recommendation to a court for temporary involuntary treatment. This will be discussed in more detail in the following sections.

Consent for treatment

According to the bill, a person with mental health problems has the right to give free and informed consent before receiving treatment or care, and such consent must be documented in the patient's clinical record. It also states that informed consent is required for any surgical procedure that involves the destruction of brain tissue, as well as any other form of treatment that requires the patient to be informed of known risks for the patient to decide whether or not to accept such a form of treatment (Section 27, (1)(2)). However, it does not specify whether ECT falls in this category. Although modified ECT seems to be an effective procedure with minimal side effects (35), it is perceived to be a form of molestation when administered without informed consent from the patient (36). The bill goes on to explain that no patient will be treated unless the responsible medical officer certifies in writing that the patient understands the nature, purpose, and likely outcome of the treatment and has consented to it. Also, if patients desire, they can withdraw consent at any time before the end of treatment. However, treatment may be administered without the patient's consent if the patient lacks the capacity to consent and the treatment is likely to alleviate or prevent deterioration of

the condition. A clause in the section of the bill clarifies that the right of consent does not apply to any treatment that is "immediately to save the patient's life, which (not being irreversible) is immediately necessary to prevent a detention of his or her conditioning." (Section 27 (6)). Here, the bill adheres to the UNCRPD's mandate to protect the right to life of people with disabilities by providing care in life-threatening situations. Not everyone shares this viewpoint, however, since any loss of liberty based on the presence of a mental condition, even when combined with other causes, is deemed to be unlawful under the CRPD (37).

Involuntary treatment

Unlike the current legislation, the proposed mental health bill clearly distinguishes between voluntary and involuntary admission, stating that patients may choose to be voluntarily admitted to any hospital or other facility approved for that purpose under the Act, Section (28). Section (29) of the bill allows a person to be involuntarily admitted after a written request to the Medical Director of the mental health facility is submitted by anyone who knows the person needs treatment and receives written certification from a mental health expert that the person does. The risk of harm to self or others, the need for treatment for "mental disease", and reluctance to accept treatment due to a lack of mental capacity are all grounds for involuntary admission. Subsection (4) of Section 29 clarifies that refusal to undergo therapy is not evidence of a lack of judgment regarding the necessity of treatment. The temporary treatment order will place the person in an approved mental health facility for care, observation, or treatment in the "least restrictive environment compatible with the person's and society's health and safety." Involuntary admission allows a person to be admitted and detained for 28 days, which can be extended if the person becomes subject to compulsory admission again. Section (30(8)) permits an involuntary patient to change his or her status if a member of the facility's staff certifies that the patient has the mental capacity to understand the change and that the patient has the mental capacity to understand the change is in their best interests. The bill also clarifies that unless a person has a mental health problem, they will not be forced to seek treatment for substance abuse. The patient or primary caregiver has the right to challenge the involuntary admission or treatment under Section 32(2), and the patient has the right to seek an independent medical opinion under Section 32(3). Section 33 allows a psychiatrist or the head of a facility to order prolonged treatment for up to twelve months at a time, subject to review by the tribunal after six months if the severity of the condition warrants it and in consideration of the person's welfare and the public's safety. However, to be eligible for the prolonged treatment order, the patient must meet the conditions for being considered for a criminal offense, according to subsection (6). Patients and caregivers have the right to participate in appeal and complaint procedures. Section (38) provides for a leave of absence from the hospital to be granted in the best interests of the patient by the responsible medical officer. The order for the discharge of a patient detained

involuntarily may be made by the responsible medical officer or the medical director if the patient is detained pursuant to an observation application, or by the responsible medical officer, the medical director, or the nearest relative if the patient is detained pursuant to a treatment application 39(1). It does not specify that patients on voluntary admission may discharge themselves at any point during the admission. Application for the discharge of a patient detained in a hospital can only be made with 72 hours' notice under section 40 of the bill. The application will be denied if the responsible medical officer indicates that the patient would be likely to act in a manner dangerous to himself and others.

The section concludes by emphasizing that facilities that have not been accredited by the Commission, as well as those that have not been licensed or recognized by the Minister, are not permitted to admit involuntary patients for treatment. This is especially important in Nigeria, where there are many unregulated traditional and faith-based mental health facilities that are known to abuse and torture people with mental health problems (Human Rights Watch, 2019.). The bill diverges from the general committee's recommendation, which firmly declares the right to be free from involuntary detention in a mental health facility and not to be forced to undergo mental health treatment (Paragraph 31). However, not everyone agrees that eliminating mental health problems as a rationale for restricting liberty is a good idea(33) (26). People who break the law as a result of mental illness may be criminalized as a result of such a move. The Committee's stance on freedom from involuntary admissions for treatment is controversial and has also led many countries to disregard their recommendations (25).

Emergency Treatment

The procedures for emergency treatment are described in sections 35 and 36 of the Mental Health Bill 2019. In this scenario, the bill allows a police officer, a relative, or any other person to move a person suspected of having a "mental disease" to a facility or mental health facility for their best interests or public safety, with or without the help of a police officer. This section allows for the issuing of a certificate of urgency following an assessment and placement of a person with a mental health problem under care, surveillance, and treatment. It also permits a person suspected of having a mental health problem to be detained in any other safe location for up to 48 hours before being transferred to a mental health hospital (35(3)). Detention as an urgent case lasts 72 hours, after which the patient must either apply for involuntary admission or choose to be voluntarily admitted. Although the bill contravenes the UNCRPD's recommendation of freedom from forced treatment, it adheres to its mandate to protect the right to life by providing care without consent in emergency situations, particularly in cases of suicidal behavior.

Advance directives

The UNCRPD strongly advocates the use of advance directives, a borrowed concept from the field of palliative care (39). It endorses advance directives, noting that people with disabilities should have the right to engage in advance planning and be given the same chance as others to do so (Paragraph 17). The WHO checklist on mental health legislation also endorses advance directives for people with mental health problems. Provisions for advance directives for people with mental health problems are not included in the mental health bill, and no other legislation in Nigeria allows for this option for people without mental health problems either. For many cultural reasons, including the higher perceived value of societal norms and family decisions over individual decisions, advance directives are not routinely practiced in Nigeria (40). Many countries, including India, have adopted this guideline as part of their mental health legislation (41,42).

Nominated Representative

Article 12 of the CRPD dissuades the use of substitute decision-making and emphasizes the need for equal recognition before the law for people with mental health problems. It advocates the use of supported decision-making rather than substitute decision-making as a remedy for the impaired decision-making capacity associated with mental health problems, to respect the person's rights, will, and preferences (Article 12(4)). It recommends that decisions should be made to reflect 'the current and past wishes, the life history, values, cultural background, and the best interests of the person with mental health problems. The use of Nominated Representatives aligns with the committee's recommendation that countries review guardianship and trusteeship legislation and take active steps to replace substitute decision-making in the 'best interests of patients' with supported decisions based on a person's rights, will, and preferences (43). This is a key area of disagreement with the Checklist on Mental Health Legislation, published in the World Health Organization's (WHO) Resource Book on Mental Health Legislation which allows for guardianship and substitute decision-making (12). Although the proposed bill does not use the term "nominated representative," it does include a provision for a "legal representative," which it defines as a substitute decision-maker mandated by law to represent a patient in any specific undertaking or to exercise specific rights on the patient's behalf, or a person appointed in writing by the patient to act on his or her behalf, if the patient lacks mental capacity. If no legal representative is appointed and a person is deemed incapable, the bill lists people who are deemed suitable for the role, beginning with the spouse, children, parents, and a person appointed by the court. The bill is not consistent in specifying the role of the legal representative. It refers to the legal representative in only two aspects. These include section 24(5(d)), which states that if the patient is mentally incapacitated, the legal representative should be notified of admission to a facility within 24 hours, and section 8(a(ii)), which requires the court to reach a resolution if the patient's next of

kin or legal representative challenges the change of status from involuntary to voluntary admission. Section 32(5) explains that only the patient or ‘personal representative of the patient’ can grant access to the medical record of a patient. Other issues related to decision-making that the 'legal representative' is expected to carry out are entrusted to primary carers or closest relatives in the bill.

Restraint and Seclusion

The use of coercive techniques in mental health treatment has been a matter of dispute for decades. While the WHO resource book and checklist allow for the regulated use of restraints and seclusion in some instances, the CRPD advocates for the ultimate eradication of all forms of coercion in mental health care. No government has fully implemented the CRPD’s proposal, opting instead to utilize them only as a last resort and limiting their use to specific time frames. Although the proposed mental health bill does not refer to specific coercive measures such as mechanical and chemical restraints, it does state that a person with mental and substance use problems shall receive treatment in the least restrictive environment and restrictive manner; be protected from torture, cruel, inhuman, and degrading treatment (section 10 &11). Section 73 explains that the “least restrictive environment” means offering an option for treatment or a setting for treatment that meets the person’s treatment needs and imposes the least restrictions on the person’s rights. It may be necessary to enact specific regulations governing the use of specific coercive measures, such as the use of mechanical restraints, and indeed, devices permitted for mechanical restraint. Inhumane sadistic items such as chains have been documented to be used in formal psychiatric facilities in the country (44)(45). Section 24 of the proposed bill expressly states that people with mental health problems should not be subjected to solitary confinement. The prohibition of solitary confinement is a notable achievement in the proposed bill, as it is a controversial practice still permitted in many jurisdictions across the world (46). The use of seclusion and restraints in mental health care violates several CRPD principles, including the right to liberty and security, the prohibition of torture or cruel, inhuman, or degrading treatment or punishment, the prohibition of exploitation, violence, and abuse, and the protection of the person's integrity (Articles 14, 15, 16 & 17).

Privacy and Confidentiality

The CRPD does not explicitly mention confidentiality, but its definition of “privacy” includes confidentiality, since it states that “State Parties shall protect the privacy of personal, health, and rehabilitation information of persons with disabilities on an equal basis with others” (Article 22(2)). To some extent, the bill adheres to this principle. It specifies in section 24(5) that a person with a mental and substance use disorder is entitled to humane and dignified treatment at any time with respect to personal dignity and privacy. Section 24 (22) states that individuals with mental disorders have the right to the

confidentiality of all information about themselves, illness, and treatment in whatever form it is stored, as well as the right to effective participation in mental health legislation. Justifications for breach of confidentiality include life-threatening emergencies, the interest of public safety, and court orders. Access to the medical record of a patient by the primary caregiver is subject to the consent of the patient or the personal representative of the patient 32(5).

Consent for research purposes

The CRPD specifically states that “no one shall be subjected without his or her free consent to medical or scientific experimentation” (Article 15(1)). The proposed bill is silent on the issue of informed consent to participate in research involving people with mental health problems, falling short of the recommendations of both the CRPD and the WHO resource book and checklist.

Other areas of compliance with the CRPD

The proposed mental health bill 2019 makes provision for non-discrimination of people with mental and substance use problems in the exercise of their civil, political, economic, social, religious, educational, and cultural rights (4). It emphasizes that people with mental health problems or a history of mental health problems have the same fundamental rights as other citizens. It also asserts that a patient's mental state, as well as the multidisciplinary services available to meet their needs, treatment options, and treatment plan, must be communicated to them and gives the patients the right to contest any decision to withhold information about themselves 24(15-18). Another section also makes provisions for the protection of employment rights of people with mental health problems. There is a restriction on employers’ ability to terminate the employment of workers on the basis of present or past mental health problems, or while receiving treatment for mental health problems (24(25-28)). The bill also allows service users to serve on the Mental Health Review Tribunal, which is a significant step yet to be undertaken by many other jurisdictions.

Discussion

Nigeria's Mental Health and Substance Abuse Bill like most other legislation globally, does not fully adhere to the principles of the UNCRPD. Its limitation on the rights of people with mental health problems on the basis of mental capacity violates UNCRPD's universal legal capacity clause.

Despite various loopholes and flaws in completely protecting the rights of people with mental health difficulties, the Nigerian mental health bill, if signed into law, would be a huge step forward for a country whose present mental health legislation is the Lunacy Act of 1958. The bill could be improved to strengthen the rights of people with mental health problems in later revisions. Some of the bill's provisions, such as

substitute decision-making by a close relative, which may be construed as coercive, could be argued to reflect the strong family ties and social support that characterize most African societies, and are not discriminatory since they typically apply to people without mental health problems. Nigeria, like most African countries, has a strong collectivist culture (47), which means that families are tightly knit and are responsible for the well-being of individuals (with or without mental problems), sometimes for their entire lives. There has been much discussion about how socially acceptable advance directives and nominated representatives are in the Indian context, as well as how prepared people are to use them (48); the amount to which their use would affect treatment (49); and the influence they will have on families (50). Some authors have noted that the role of the family has been displaced by the nominated representative, which contradicts Indian culture (51,52). Similar debates can be anticipated in the Nigerian context as well, although the proposed bill makes no provision for advance directives and, in many instances, still delegates many responsibilities to the closest relatives and caregivers. The bill does not make provisions for the rights of people with mental health problems in the community although the WHO checklist, upon which the legislation is based, emphasizes the community perspective in several sections. It rather focuses on clinical settings, even when the majority of the population does not seek health care for mental health problems in this setting (5). Community-based mental health care is sparsely available in the country, thus, some of the bill's limitations may also be a reflection of the country's long-standing underinvestment in mental health treatment.

In 2006, the WHO-AIMS report on the mental health system in Nigeria affirmed that there was very limited information about mental health services in Nigeria (6), and not much has changed since then. The report notes that although there is a Human Rights Review Commission in the country, it does not monitor the activities of mental health facilities anywhere, as noted in many other African countries. The report further estimates the proportion of patients who have been restrained or secluded in the past year in both community and mental hospital settings to be 11-20%. The report, however, does not elaborate on how these estimates were reached as there are no formal documentation of these procedures (6). As there are no formal mechanisms in place to track the use of coercive practices in mental health facilities, it is difficult to plan and monitor interventions in the country's mental health system that may reduce these practices. Dealing with issues of coercion in mental health care is an important aspect of the quality of psychiatric care. Although mental health care is grossly underfunded and the majority of the population still lacks access to it, India's Mental Health Act(42) demonstrates that developing countries do not need to wait until they have resources for mental health before taking steps toward a human-rights-based approach to mental health care. The relatively high prevalence of coercion in mental health care in many high-income countries also suggests that more resources will not eliminate the use of coercion in mental health care unless targeted

efforts are made in that direction. Nigeria, and indeed all developing countries, must join the current global effort to eliminate or reduce the use of coercive practices in mental health treatment to the bare minimum.

The World Health Organization has emphasized that the employment of legislation is a critical but frequently overlooked step to promote social rights. However, as noted with India's mental health act, in an environment of limited resources, legislation alone is rarely adequate to implement social rights (53). The implementation of Nigeria's mental health bill will be very difficult in reality for many reasons. Apart from general problems related to weak management systems, frequent service disruptions, insufficient mental health professionals, and scarce community mental health care (54), funding for mental health care will be a major impediment to full implementation. Although the bill makes provisions for a funding mechanism for mental health services, it is not clear if this funding would translate to free mental health care delivery to those who need it. For example, because Nigeria's healthcare system has always been primarily funded by out-of-pocket payments, it is unclear who will bear the expense of treatment for involuntary admissions when they occur. The president recently signed into law a new health bill aimed at providing health insurance for vulnerable populations, which should improve the affordability of mental health care in the country. Other issues to be specifically addressed include widely held stigma, which may create a barrier to voluntary admissions as a way of avoiding the associated stigma. We expect that in the future, the issues presented in this assessment will be examined in light of Nigeria's socio-cultural context to strengthen the law's adherence to the UNCRPD's principles and ultimately, increase the rights of people with mental health problems. Finally, it is essential to emphasize that even the most UNCRD-compliant legislation will not protect the human rights of people with mental health problems if the country does not invest in the reform of mental health services (55).

Conclusion

States are struggling with reconciling their national mental health legislation with the CRPD approach (56). The CRPD leaves it unclear how countries should go about creating a workable legal framework, especially in resource-limited settings. The proposed mental health bill is certainly a huge advancement on the existing mental health legislation in Nigeria. The bill, if signed into law, will be one of the most progressive mental health laws in the region, guided by various international human rights instruments. However, certain aspects of the proposed bill relating to limitations of basic rights on the basis of mental capacity, involuntary admissions, non-regulation of coercive practices, non-provision for advance directives, and substitute-decision making violate the principles of the UNCRPD. Although the long-time lag, competing demands, and increasing adversities in Nigeria related to insecurity and mass emigration of health professionals evoke a bleak future for the mental health bill's implementation, increasing awareness of mental health issues and

the proliferation of mental health advocacy groups in Nigeria appear to increase the likelihood of the bill being signed into law, implemented, and for subsequent revisions to be more UNCRPD compliant.

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References

1. World Health Organization. The Mental Health Context. Mental Health Policy and Service Guidance Package. [cited 2021 Dec 19]. Available from: https://www.who.int/mental_health/policy/services/
2. WHO. Mental disorders fact sheets. World Health Organization. 2017;68(1):1–12.
3. WHO. Mental Health ATLAS 2020 [Internet]. 2020 [cited 2022 May 29]. Available from: <https://www.who.int/publications/i/item/9789240036703>
4. Gureje O, Lasebikan VO, Kola L, Makanjuola VA. Lifetime and 12-month prevalence of mental disorders in the Nigerian Survey of Mental Health and Well-Being. *Br J Psychiatry*. 2006; 188:465–71.
5. Gureje O, Lasebikan VO. Use of mental health services in a developing country. Results from the Nigerian survey of mental health and well-being. *Soc Psychiatry Psychiatr Epidemiol*. 2006 Jan;41(1):44–9.
6. World Health Organisation. WHO-AIMS Report on Mental Health System in Nigeria. Ministry of Health Nigeria. 2006.
7. Donald Kingdon. The laws of the Federation of Nigeria and Lagos; in force on the 1st day of June, 1958. (Microform, 1973). [cited 2021 Sep 3]. Available from: <https://www.worldcat.org/title/laws-of-the-federation-of-nigeria-and-lagos-in-force-on-the-1st-day-of-june1958/oclc/2173521?referer=di&ht=edition>
8. Westbrook AH. Mental Health Legislation and Involuntary Commitment in Nigeria: A Call for Reform. 2011 [cited 2021 Sep 4];397. Available from: https://openscholarship.wustl.edu/law_globalstudies/vol10/iss2/7
9. Ogunlesi AO, Ogunwale A. Mental health legislation in Nigeria: current leanings and future yearnings. *Int Psychiatry*. 2012 Aug 1;9(3):62-64.
10. Wada YH, Rajwani L, Anyam E, Karikari E, Njikizana M, Srour L, et al. Mental health in Nigeria: A Neglected issue in Public Health. *Public Health in Practice*. 2021 Nov 1;2:100166.
11. WHO Resource book on mental health, human rights and legislation | LHAC. [cited 2022 Mar 6]. Available from: <http://www.lhac.eu/?i=accessible-cities.en.reference-documents.41>
12. Duffy RM, Kelly BD. Rights, laws and tensions: A comparative analysis of the Convention on the Rights of Persons with Disabilities and the WHO Resource Book on Mental Health, Human Rights and Legislation. *Int J Law Psychiatry*. 2017 Sep 1;54:26–35.
13. Duffy RM, Kelly BD. Concordance of the Indian Mental Healthcare Act 2017 with the World Health Organization’s Checklist on Mental Health Legislation. *Int J Ment Health Syst*. 2017 Aug 18;11(1).

14. Chime A, Ojeifo H. The Silent Pandemic: Legislative Reforms to Protect Nigerian Minds During COVID-19. *Africa Policy Journal*. 2021.
15. African Charter on Human and Peoples' Rights | African Union. [cited 2021 Sep 4]. Available from: <https://au.int/en/treaties/african-charter-human-and-peoples-rights>
16. United Nations. Convention on the Rights of Persons with Disabilities and Optional Protocol [Internet]. 2006. Available from: <https://www.un.org/disabilities/documents/convention/convoptprot-e.pdf>
17. Ugochukwu O, Mbaezue N, Lawal SA, Azubogu C, Sheikh TL, Vallières F. The time is now: reforming Nigeria's outdated mental health laws. *Lancet Glob Health*. 2020 Aug 1;8(8): e989–90.
18. United Nations. Convention on the Rights of Persons with Disabilities and Optional Protocol. 2006.
19. Sugiura K, Mahomed F, Saxena S, Patel V. An end to coercion: rights and decision-making in mental health care. *Bull World Health Organ*. 2020 Jan 1;98(1):52–8.
20. United Nations Committee on the Rights of Persons with Disabilities. Summary record of the second part (public*) of the 405th meeting. (CRPD/C/SR.405/Add.1, 14 September 2018). 2018.
21. Convention on the Rights of Persons with Disabilities. United Nations Committee on the Rights of Persons with Disabilities General comment no 1: Article 12: Equal recognition before the law. (CRPD/C/GC/1, 19 May 2014). 2014.
22. Convention on the Rights of Persons with Disabilities. Guidelines on article 14 of the convention on the rights of persons with disabilities, The right to liberty and security of persons with disabilities. (CRPD/C/12/2, Annex IV, 5 November 2014). 2014.
23. Scholten M, Gather J. Adverse consequences of article 12 of the UN Convention on the Rights of Persons with Disabilities for persons with mental disabilities and an alternative way forward. *J Med Ethics*. 2018 Apr 1;44(4):226–33.
24. Szmukler G. "Capacity", "best interests", "will and preferences" and the UN Convention on the Rights of Persons with Disabilities. *World Psychiatry*. 2019 Feb 1;18(1):34–41.
25. Martin W, Gurbai S. Surveying the Geneva impasse: Coercive care and human rights. *Int J Law Psychiatry*. 2019 May 1; 64:117–28.
26. Freeman MC, Kolappa K, Almeida JMC de, Kleinman A, Makhshvili N, Phakathi S, et al. Reversing hard won victories in the name of human rights: a critique of the General Comment on Article 12 of the UN Convention on the Rights of Persons with Disabilities. *Lancet Psychiatry*. 2015;2(9):844–50.
27. Dawson J. A realistic approach to assessing mental health laws' compliance with the UNCRPD. *Int J Law Psychiatry*. 2015 May 1; 40:70–9.
28. Flynn E. The rejection of capacity assessments in favor of respect for will and preferences: the radical promise of the UN Convention on the Rights of Persons with Disabilities. *World Psychiatry*. 2019 Feb 1;18(1):50.
29. Dawson J, Szmukler G. Fusion of mental health and incapacity legislation. *Br J Psychiatry*. 2006 Jun;188(6):504–9.
30. Szmukler G, Daw R, Dawson J. A model law fusing incapacity and mental health legislation. *International Journal of Mental Health and Capacity Law*. 2010 Sep 8;(20):9–22.
31. Szmukler G, Kelly BD. We should replace conventional mental health law with capacity-based law. *Br J Psychiatry*. 2016 Dec 1;209(6):449–53.

32. Scholten M, Gather J, Vollmann J. Equality in the Informed Consent Process: Competence to Consent, Substitute Decision-Making, and Discrimination of Persons with Mental Disorders. *J Med Philos.* 2021 Feb 1;46(1):108–36.
33. Appelbaum PS. Saving the UN Convention on the Rights of Persons with Disabilities – from itself. *World Psychiatry* [Internet]. 2019 Feb 1 [cited 2022 Jan 29];18(1):1. Available from: [/pmc/articles/PMC6313245/](https://pubmed.ncbi.nlm.nih.gov/313245/)
34. Craigie J, Bach M, Gurbai S, Kanter A, Kim SYH, Lewis O, et al. Legal capacity, mental capacity and supported decision-making: Report from a panel event. *Int J Law Psychiatry.* 2019 Jan 1;62:160–8.
35. Seniuk P. I’m shocked: informed consent in ECT and the phenomenological self. *Life Sci Soc Policy.* 2018 Dec 1;14(1):1–19.
36. Weitz D. Electroshock Must Be Banned Now: Strategies of Resistance. In: *PsychOut: A Conference for Organizing Resistance Against Psychiatry*, OISE, Toronto, 2010. 2010.
37. Alexandrov N V., Schuck N. Coercive interventions under the new Dutch mental health law: Towards a CRPD-compliant law? *Int J Law Psychiatry.* 2021 May 1; 76:101685.
38. Nigeria: People with Mental Health Conditions Chained, Abused | Human Rights Watch. [cited 2022 Jan 30]. Available from: <https://www.hrw.org/news/2019/11/11/nigeria-people-mental-health-conditions-chained-abused>
39. Philip S, Rangarajan S, Moirangthem S, Kumar C, Gowda M, Gowda G, et al. Advance directives and nominated representatives: A critique. *Indian J Psychiatry.* 2019 Apr 1;61(Suppl 4): S680.
40. Jegede AS, Adegoke OO. Advance Directive in End of Life Decision-Making among the Yoruba of South-Western Nigeria. *BEOnline.* 2016 Nov 21;3(3):41.
41. Davidson G, Brophy L, Campbell J, Farrell SJ, Gooding P, O’Brien AM. An international comparison of legal frameworks for supported and substitute decision-making in mental health services. *Int J Law Psychiatry.* 2016 Jan 1; 44:30–40.
42. Duffy RM, Kelly BD. Compliance of India’s Mental Healthcare Act, 2017 with the United Nations’ Convention on the Rights of Persons with Disabilities. *India’s Mental Healthcare Act, 2017.* 2020;209–25.
43. Craigie J, Bach M, Gurbai S, Kanter A, Kim SYH, Lewis O, et al. Legal capacity, mental capacity and supported decision-making: Report from a panel event. *Int J Law Psychiatry.* 2019 Jan 1; 62:160–8.
44. Aluh DO, Ayilara O, Onu JU, Grigaitė U, Pedrosa B, Santos-Dias M, et al. Experiences and perceptions of coercive practices in mental health care among service users in Nigeria: a qualitative study. *Int J Ment Health Syst.* 2022 Nov 23;16(1):54.
45. Nigeria: People With Mental Health Conditions Chained, Abused | Human Rights Watch [Internet]. [cited 2022 Jan 30]. Available from: <https://www.hrw.org/news/2019/11/11/nigeria-people-mental-health-conditions-chained-abused>
46. Al-Maraira OA, Hayajneh FA. Use of Restraint and Seclusion in Psychiatric Settings: A Literature Review. *J Psychosoc Nurs Ment Health Serv.* 2019 Apr 1;57(4):32–9.
47. Evaluating Nigeria using Geert Hofstede’s six-dimension of culture - *Businessday NG.* [cited 2021 Dec 30]. Available from: <https://businessday.ng/columnist/article/evaluating-nigeria-using-geert-hofstedes-six-dimension-of-culture/>

48. Tekkalaki B, Patil V, Patil S, Chate S, Dhabale R, Patil N. How do Our Patients Respond to the Concept of Psychiatric Advance Directives? An Exploratory Study from India. *Indian J Psychol Med.* 2018 Jul 1;40(4):305.
49. Pathare S, Shields L, Nardodkar R, Narasimhan L, Bunders J. What do service users want? A content analysis of what users may write in psychiatric advance directives in India. *Asian J Psychiatr.* 2015 Apr 1; 14:52–6.
50. Duffy RM, Narayan CL, Goyal N, Kelly BD. New legislation, new frontiers: Indian psychiatrists' perspective of the mental healthcare act 2017 prior to implementation. *Indian J Psychiatry.* 2018 Jul 1;60(3):351.
51. Lepping P, Palmstierna T, Raveesh BN. Paternalism v. autonomy - are we barking up the wrong tree? *Br J Psychiatry.* 2016 Aug 1;209(2):95–6.
52. Rao GP, Math SB, Raju MSVK, Saha G, Jagiwalla M, Sagar R, et al. Mental Health Care Bill, 2016: A boon or bane? *Indian J Psychiatry.* 2016;58(3):244.
53. National CRPD Coalition and Convention on the Rights of Persons Disabilities. CRPD Alternate Report for India Submitted to the Committee on the Rights of Persons with Disabilities In response to the Initial report submitted by the Government of India National CRPD Coalition-India, towards Parallel report. 2017.
54. Gureje O, Abdulmalik J, Kola L, Musa E, Yasamy MT, Adebayo K. Integrating mental health into primary care in Nigeria: report of a demonstration project using the mental health gap action programme intervention guide. *BMC Health Serv Res.* 2015 Jun 21;15(1):1–8.
55. Caldas de Almeida JM. The CRPD Article 12, the limits of reductionist approaches to complex issues and the necessary search for compromise. *World Psychiatry.* 2019;18(1):46.
56. Alexandrov N V., Schuck N. Coercive interventions under the new Dutch mental health law: Towards a CRPD-compliant law? *Int J Law Psychiatry.* 2021 May 1; 76:101685.

4.3. Original research article 3

Experiences and perceptions of coercive practices in mental health care among service users in Nigeria: a qualitative study.

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RESEARCH

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Experiences and perceptions of coercive practices in mental health care among service users in Nigeria: a qualitative study

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Abstract

Background: People with mental health problems are more vulnerable to a broad range of coercive practices and human rights abuses. There is a global campaign to eliminate, or at the very least decrease, the use of coercion in mental health care. The use of coercion in psychiatric hospitals in developing countries is poorly documented. The primary aim of this study was to explore service users' perceptions and experiences of coercion in psychiatric hospitals in Nigeria.

Methods: Four focus group discussions were carried out among 30 service users on admission in two major psychiatric hospitals in Nigeria. The audio recordings were transcribed verbatim and then analyzed thematically with the aid of MAXQDA software.

Results: The Focus group participants included 19 males and 11 females with a mean age of 34.67 ± 9.54 . Schizophrenia was the most common diagnosis (40%, $n = 12$) and had a secondary school education (60%, $n = 18$). The focus group participants perceived coercion to be a necessary evil in severe cases but anti-therapeutic to their own recovery, an extension of stigma and a vicious cycle of abuse. The experience of involuntary admission revolved mainly around deception, maltreatment, and disdain. Participants in both study sites narrated experiences of being flogged for refusing medication. Mechanical restraint with chains was a common experience for reasons including refusing medications, to prevent absconding and in other cases, punitively. The use of chains was viewed by participants as dehumanizing and excruciatingly painful.

Conclusion: The experiences of coercion by participants in this study confirm that human rights violations occur in large psychiatric hospitals and underscore the need for mental health services reform. The use of coercion in this context reflects a long underinvestment in the mental health care system in the country

and obsolete mental health legislation that does not protect the rights of people with mental health problems. The study findings highlight an urgent need to address issues of human rights violations in psychiatric hospitals in the country.

Keywords: Coercion, Restraint, Qualitative, Experiences, Perception, Involuntary admissions, Nigeria

Introduction

There is a global campaign to eliminate, or at the very least decrease, the use of coercion in mental health care. The negative impacts of coercive methods on both service users and care professionals who administer or witness them are becoming increasingly apparent (1,2), while the evidence of their effectiveness and safety remains limited (3).

Coercion has been defined as “the act or practice of using force or threat to persuade a person to do something” (4). It is a concept that applies to a broad spectrum of activities, ranging from mild acts such as persuasion on one end to the most oppressive acts of compulsion, such as the use of restrictive devices on the other end (5,6). Coercion in mental health care is broadly categorized as formal and informal (7). While formal coercive practice describes tangible conspicuous acts of coercion such as compulsory admissions, seclusion (containing an individual in a secured room), physical (manual holding), mechanical (using restrictive devices like handcuffs) or chemical (pharmacological measures) restraint (4,6), informal coercion is less obvious and exerts control in a more covert manner by using psychological and social mechanisms such as forceful persuasion or implied threat (5). The study of coercion in mental health care is very relevant given that mental health problems could impair the ability to make decisions, making people with mental health problems particularly more vulnerable to a broad range of coercive practices and human rights abuses (8,9). The United Nations Convention on the Rights of Persons with Disabilities (UNCPRD), the most widely acclaimed international legislative instrument addressing the issue of coercion in mental health care (10), stresses the need for equality in legislation, policies, and practices that affect people with disabilities, including those with mental health conditions and psychosocial disabilities. It advocates a paradigm shift from the traditional paternalistic bio-medical approach to a human rights-based shared decision-making approach (11). The use of coercion in the treatment of people with mental health problems is incompatible with the UNCPRD's principle of autonomy, which seeks to empower people with mental health problems to make their own treatment decisions.

The mental health system in Nigeria is severely under-resourced, with a psychiatrist-to-population ratio of roughly 1:1,000,000 and about 9.7 psychiatric nurses per 1,000,000 people(12). Formal mental health care is accessed through psychiatric units in general hospitals/ secondary health care facilities, and mental

hospitals (i.e., standalone psychiatric hospitals). Service users are typically severely ill and brought in by their families who are usually the sole carers of people with mental health problems in the country (13). Although efforts are being made to incorporate mental health into existing primary health care (14,15), just around 4% of the Nigerian health budget is dedicated to mental health, with over 90% of that expenditure going to running the country's psychiatric hospitals. According to the WHO-AIMS report in 2006, the country's human rights review commission does not monitor the actions of mental health facilities anywhere(16). It was estimated that 51% of inpatients in psychiatric units in general hospitals/ secondary health care facilities and 64% of inpatients in the psychiatric institutions were involuntarily admitted. The report estimates the proportion of patients who have been restrained or secluded in the past year in both community and mental hospital settings to be 11-20%. It is not clear how these estimates were reached since there is no system for regular dissemination of patient and service data to the health ministry (16).

Nigeria is a signatory to many international human rights conventions including the African Charter on Human and Peoples' Rights and the UNCRPD (17,18). Although the federal government has approved a national mental health policy, it is poorly implemented (19). The Substance Use and Mental Health Bill 2019, which has gone through a public hearing, is expected to replace the previous colonial legislation and significantly enhance the rights of people with mental health and psychosocial disabilities in the country (20).

Coercive practices such as the use of chains, holding people with mental health problems hostage in cages, sheds, prayer camps and other forms of human rights violations have been documented in traditional healing centers and community settings in many low-and-middle-income countries (LMICs) including Nigeria (21–26), but there is little evidence on the use of coercion in psychiatric hospitals in these countries. There is a consensus on the need for more research on the subject matter in LMICs (27). Since contextual factors are known to influence the practice and perception of coercion (26,28), it is important to investigate the perception and experiences of coercion among service users in a family-centric, resource-limited setting (27,29). The study is the first qualitative investigation of service users' perceptions and experiences of coercive practices in Nigerian psychiatric hospitals. It's a critical first step toward further research on the subject in the country, as well as the development of interventions and policies to address the problem.

Methods

Focus group discussions were chosen as the appropriate method to obtain information about coercion among service users in the psychiatric hospital setting because focus groups are known to provide an opportunity for study participants to share difficult experiences within a potentially supportive environment and have been employed in previous studies regarding the same topic (30)(31)(32). The dynamics of power

between researchers and participants have been extensively studied. In their position as the seeker of information, researchers are usually considered to have more power. In many situations, such as when research is conducted among participants who have been diagnosed with a mental health condition, this power gradient may be exaggerated (33) and more so, when the participants are involuntarily admitted to a psychiatric institution. Not only do focus groups create multiple lines of communication among participants, but they also reduce the influence of the researcher, giving more dominance to participants and enabling them to share their ideas and opinions in the company of people who have similar experiences as them (34). Study participants, most of whom were involuntarily admitted, may have felt coerced in an interview situation and consequently, may have adjusted their communication.

Study setting

Two out of the eight major neuropsychiatric hospitals in the country, which cater to the mental health needs of about a quarter of the country's population, were conveniently selected for the study. Study participants were recruited during their hospitalization in both study sites. Information about the study was disseminated by attending nurses and interested service users who met the eligibility criteria were co-opted into the study. The eligibility criteria were being at least 18 years old, admitted to the inpatient departments, certified to be stable by a psychiatrist, and able to give informed consent. A diagnosis of dementia was an exclusion criterion. The study included a total of 30 service users distributed into four different focus groups, a pair with eight people each and the other pair with seven people each. Participants with different sociodemographic characteristics (age and gender) were selected, and their distribution into each focus group was done in such a way as to favor the richness and heterogeneity of the discussion.

Data collection

The focus groups were conducted between December 2021 and January 2022. Each discussion lasted between 45-60 minutes and was guided by a semi-structured discussion guide developed by the research team. The guide was not a rigid questionnaire, but rather served as a flexible framework for exploring study questions using open-ended questions to obtain unconditioned answers. The guide also served to homogenize the way the focus group discussions were conducted in each of the hospitals. The primary aim of the focus group discussions was to explore participants' perceptions and experiences of formal coercive measures including involuntary admission and the use of restraints. The secondary aim was to explore suggestions on strategies to reduce the use of coercion in mental health care, which will be the subject of another paper by the research team.

The focus groups took place outside the wards, in halls within the hospitals to facilitate an unstructured atmosphere without pressure. The purpose of the study was carefully explained to participants at the

beginning of the discussion, informed consent was obtained, and participants were given the option of leaving the discussion at any point when they felt distressed or unwilling to continue talking. They were assured that leaving the group or choosing not to participate would not affect their medical care in any way. To avoid the perception of a regulated environment, ground rules were made by consensus among participants and the moderators to facilitate the focus group discussion. Discussions were fluid and dynamic, with adequate interaction among participants. The focus group discussions were moderated by social workers in each hospital who had experience in qualitative research and underwent additional training for the study. They were responsible for facilitating and guiding participation and discourse elaboration, while the content of the discussion was recorded in audio format. No relationship existed between the study participants and the social workers in all the cases, and the expectations of both parties were clarified at the beginning of each discussion. Participants were debriefed at the end of each focus group discussion. Given the diversity of languages spoken in Nigeria, with English being the *lingua franca* and the language of teaching at all levels of education, the focus group discussions were conducted in English. The study sites were anonymized to protect the psychiatric hospitals from being singled out for punitive measures due to the politicized nature of the findings given here.

Data analysis

The audio recordings were transcribed verbatim and then analyzed thematically according to the recommendations of Braun and Clarke (35). Transcripts were carefully read and reread by the lead investigator, then segments of text were coded, synthesized, and integrated into categories based on similarities of meaning. A general inductive approach was employed to code the data and coding continued until no new concepts emerged from the data. Coding consistency was checked by one of the co-investigators to ensure trustworthiness, and theme confirmation was reached after discussion among the lead investigators and two co-investigators. Coding consistency was checked by one of the co-investigators to ensure trustworthiness, and theme confirmation was reached after discussion among the lead investigator and two co-investigators. To be reflexive, the three authors (two of whom are psychiatrists working in the study sites) involved with the analysis tried to be self-aware and transparent about how our roles, perspectives and experiences may have influenced the analysis and interpretations (35,36). The two authors who are psychiatrists in the study sites may have been able to relate more to the experiences of the study participants and more likely have different interpretations of some actions deemed coercive since their job entailed prescribing coercive practices in certain cases. Due to the dual capacities as practitioners and investigators, there may have been a greater emphasis on some aspects than others, leading to the possible oversight of crucial themes and directions for understanding coercion in that setting. The dual role was discussed and reflected upon throughout the study, individually and with the lead investigator who is neither

a mental health practitioner nor a service user. The analysis was performed with the aid of MAXQDA software(37). Themes were summarized and interpreted using a contextualist approach where the characteristics of the study setting were used to understand the experiences of the participants(38). Quotes were selected by the lead investigator to exemplify each theme. Ethical approval was obtained from the Research Ethics Committee of Nova Medical School, Nova University of Lisbon (100/2021/CEFCM) and the Ethics committee of each participating psychiatric hospital. Participants were required to sign a written informed consent before the Focus Group discussion and verbal consent was sought periodically until the end of the discussion.

Results

There was a total of 19 male and 11 female participants. The mean age of participants was 34.67 (SD = 9.54) while the mean length of hospitalization was 36.53±20.41 days. The most common diagnosis was schizophrenia and one-third of the participants (33.3%, n = 10) had a tertiary education while the rest were educated up to the secondary level. (Table IV-3.1)

Table 1V-3.1 : Participant socio-demographic characteristics (N =30)

Characteristics	Frequency (n)	Percentage (%)
Gender		
Male	19	63.3
Female	11	36.7
Education*		
Primary	0	0.0
Secondary	18	60.0
Tertiary	10	33.3
Marital Status*		
Single	23	76.7
Married	3	10.3
Separated/Divorced/Widowed	3	10.3
Diagnosis		
Schizophrenia	12	40.0
Schizoaffective disorder	2	6.7
Bipolar disorder	3	10.0
Depression	3	10.0
Mental and behavioral disorder due to psychoactive substance	10	33.3
Status of Admission		
Voluntary	13	43.3
Involuntary	17	56.7
Number of previous admissions		
0	20	60.7
1	6	20.0
2	1	3.3

3	2	6.7
>3	1	3.3

*2 participants did not indicate their educational level

*1 participant did not indicate their marital status

Perception of coercion

Coercion as a necessity

Many participants believed that coercion was a ‘necessary evil’ for patients who lacked insight, were stubborn, or severely ill. They, however, suggested that it should be left as a last resort after other options like negotiation and dialogue have been explored. Participants with a diagnosis of mental health and behavioural disorder due to psychoactive substance (MBDPS) were particularly indignant about being coerced and felt that they should not be subjected to coercive practices since they had insight

“...Coercion is something that is necessary. That is a must, based on the mental illness ... because at the point where the illness begins, ... the patient in question, may not necessarily understand,... and may not even want to come to dialogue. Because at that point in time..., there's restlessness at that point in time, there's apprehension... depending on the ailment. And so coercion is a must. it's a must that must be used.”(FGD1, male participant with Bipolar Disorder)

“There are some patients that truly need to be forced. They're mentally insane [sic], yes. Psychoses, real ones....the people that are diagnosed with drugs has a better understanding than those that are real psychoses.” (FGD2, male with MBDPS)

Coercion as a control tool

Most participants agreed that acquiescence to requests made by family and healthcare professionals precluded the use of coercion, while resistance and arguments led to the use of stiffer coercive measures.

“If you begin to, you know, argue with the people that brought you here or with the medical personnel that is attending to you, it would be difficult, they will coerce you, but if you agree if you obey, if you begin to bear all whatever they say, or even make some little argument before you give in, they will not coerce. The only coercion will be just that of persuasion with words, not by whipping or chaining you.”(FGD4, male participant with schizophrenia)

“When you willingly adhere to instructions. Like for instance, they tell you do this, you do it, you do that.... you're not giving them any reason to forcefully coerce you.” (FGD1, female participant with MBDPS)

Anti-therapeutic and traumatic

Many participants felt that coercion was not an effective way of managing people with mental health problems, but rather aggravated the distress that they felt in times of crisis. It made them feel worse about the diagnosis, and receiving care from the same people who subjected them to various coercive practices was traumatic.

“To me, is abnormal because it deals with mental health. Okay. Chaining, injections and all that, it affects psychologically. So, it's not proper.” (FGD1, male with MBDPS)

“Still being in that same environment, looking at the same people that did that thing, perhaps those ones may not be related to the person in the hospital but then, it can never go well, even in terms of...receiving health care from them, medications here and there, the person will never be the same, will never be happy because he has been...abused, bullied.”(FGD2, male with MBDPS)

Coercion as an extension of stigma towards people with mental problems

A few participants were able to link coercion with the discrimination they experienced because of their mental health condition. Coercion was a form of stigmatisation, and in other cases, a response to their protests against stigma and discrimination.

“So, it's an injustice that some people are being stigmatised and unwelcome in their very home because of what they believe in So, you decide because you have the upper hand in the family to take care of me, give me food three times a day, to call in security people from even this facility to come and take me away for admission.” (FGD3, male participant with depression)

“I have pains all over but my family is trying to cover up with something like I shut the doors, I didn't want to open the doors for anybody. Why I didn't want to open the doors for anybody is because of.... they said some parable;...if somebody call you somebody, you call that person somebody. If they don't call you person, don't call the person ‘person’. Who address you as a human, you also address that person as a human. That's why I shut the door because my family never addressed me as a normal human.” (FGD2, male participant with MBDPS)

Coercion as a vicious cycle

Some participants pointed out how coercion evoked aggressive behaviours and made service users want to abscond, and these behaviours, in turn, led to stiffer coercive measures, leading to an unending cycle of aggression and coercion.

“Because the way you approach someone that's how the person will retaliate to you. that's true. The way you approach someone is how that person will retaliate to you.” (FGD2, male participant with MBDPS)

“...when I notice coercion practises on me. I feel so aggressive [sic]. So, I feel so aggressive because...had it been they used peacefully, it will be better for me than to use coercive issue. (FGD3, female participant with schizophrenia)

Experiences of Involuntary Admission

Deceived and kept in the dark

Many participants narrated how they were tricked into going to the psychiatric hospitals and then admitted against their will. They complained about being taken unawares and, in some cases, it seemed to them like they were being kidnapped.

“You cannot just come into deceiving, you know. In my own case I was deceived. I was, they told me I'm going for my business work, but on seeing this sign board, I now notice that they have lied to me. So that's what I'm saying that the whole system is illegal. Because if they had told we are going to psychiatric hospital for evaluation, I will know and that's what I thought. They told me that I'm coming for work that they will pay me after my work, with that in mind, I started coming.” (FGD4, female participant with schizophrenia)

“Before I could say Jack or James, they took me. I was with my friends, And I was praying, this is what I have been hearing of. Assassins, they can kidnap someone and get to the expressway and just finish up the person but to me, I said well, I'm old enough, if I die, I die. No problem, but all I know is that I need somebody around the environment to know that I'm gone. Somehow, we started the journey and I was asking the gentleman beside me, where are you taking me to. He didn't mention and I became very scared.” (FGD2, male participant with MBDPS)

Admitted for the wrong reasons

Most participants felt their admission was unnecessary, and they were brought by their families for punitive reasons. The threshold of tolerance for misdemeanours seemed lower for people with mental health problems, as disagreements could lead to admissions.

“I have had experiences of being called from home by security men. you understand? and I've had experiences of involuntary admissions because someone believe that you are not in good terms with the person makes the person to feel like he's obliged because you're under his or her care to

drive you to this mental health care service so that they will deal with you. Because they themselves at home could not deal with you.”(FGD3, male participant with depression)

“The second time they brought me here, it was just a fight. It was just a fight with somebody, they did not even investigate the cause of the fight, they just brought me and bundled me back into this place.... so, if not that I have more understanding, I would have overreacted... How can someone beat me and molest me like this? And the next thing for you to do is to take me to the hospital, psychiatric hospital.”(FGD1, male participant with Bipolar disorder)

Maltreatment and suffering

For most participants, the process of being admitted was a harrowing experience. They felt dehumanised and manhandled in the process of being brought to the hospital to be admitted involuntarily. Several participants reported being injured by the ropes and chains used to restrict movement while being transported to the hospitals.

“.... My experience with them is that ... they were supposed to counsel us, ... they don't have conscience, they didn't us treat us like human. They did not treat me like as if I'm a human being, despite my complain in the office there. Cuz I was against coming here. And I'm coming here for the second time for no good reason, in short, I talked throughout that day, almost to the point of killing myself because there was weapon with me because I was frustrated to that extent.” (FGD1, female participant with schizophrenia)

“Like me I was being injured, tied with a rope and brought me here. Even my leg. You can see my leg. I have pain on my leg, even in my hands. I have pains all over.”(FGD2, male participant with MBDPS)

“Like me o, they tie me o, they tie me like Jesus Christ and sedated me [sic]. it's very very bad.” (FGD1, male participant with schizophrenia)

Ignored and dismissed

Most participants affirmed that they had opinions at the time of admission and expressed strong displeasure at not being listened to during the admission process. Everything they said was dismissed as gibberish or as a result of being under the influence of drugs for service users with a history of substance use. Others noted that nobody bothered to meet the basic needs of service users like hunger and thirst at the time of admission.

“So, I'm coming for the second time now for no good reason despite my complain, all my shouting, nobody listened to me, it was as if I was just like a fool that doesn't know what she is saying. At least they should have given me some listening ear, counsel me and see if I can be admitted or not.” (FGD1, female participant with schizophrenia)

“They cannot let us speak our mind, cuz we have something to say. Yes. (All participants agree in unison) That period, we have something to say but they don't allow us to speak our mind, they will bundle us, tie us. During the time you are forcing that person to chain him or in order to tie him or bring him down to this very place, you didn't know if he ate or not, You didn't know if he is sick, or whether he ate, or whether he have a problem, that kind of person, he can die.” (FGD1, male participant with schizophrenia)

Experience of Chemical Restraint

Undesirable effects

Many participants (43.3%, n = 13) complained that the chemical restraints had negative effects on them, from sleeping for prolonged periods, inability to walk because they were injected into their thighs, and dyskinesia. Many participants described the process of administering the chemical restraint as humiliating because their clothes were forcibly removed to administer the injections.

“E get some kind of injection, you give some patients here, the body will change automatic, some will start turning their eye, some will start shaking their body and I want the hospital look into... it.” (FGD3, male participant with MBDPS)

“I was injected with sleeping injection, so I slept off that night. When I woke up in the morning, they've injected my both laps. I can't even walk for like a week and some days.” (FGD3, male participant with MBDPS)

“So, I was held down, pinned down and my... covering was physically and manually pulled down off my waist and the syringe was inserted into my body and alongside I had some bruises on my fist. I think it's a very bad experience.” (FGD2, male participant with MBDPS)

“...and when they injected me, I slept immediately and those that were with me said that is for two consecutive days that I didn't wake up. So that's the effect of the drugs.” (FGD5, male participant with schizophrenia)

Safety concerns

Some participants were concerned about the safety of injections for chemical restraint, and felt injections should be used in severe cases only.

“You know injection pass through the vein now. So, injection should be given to somebody depending on the case of that person, not somebody have issue that ordinary tablets can cure, ...You carry injection and be giving to the person.” (FGD3, Female participant with schizophrenia)

Experience of ECT without consent

None of the study participants had been subjected to ECT without their consent. One participant however had seen a ward mate who had undergone ECT. It is unclear whether the patient's consent was sought before the procedure.

Experience of Mechanical Restraint

Chained like an animal

The use of chains for mechanical restraints was a reoccurring theme across all the questions addressed in the focus group discussions in both study sites (40%, n = 12). It was a practice affirmed to be wrong, dehumanizing, abnormal, humiliating and excruciatingly painful by the participants. It was mostly used in response to resistance to chemical restraint and to prevent absconding, however, the process was also identified as a punitive measure in some cases. They also discussed the deleterious effects of the chains ranging from physical injuries to bladder infection as a result of restriction of movement.

“My experiences are basically use of chain. The first day they admitted me at *Study site 1*, they forced me to pull off my shirt, I refused. They dragged me and they chained me. The pain was so excruciating. That's my own experience of physical abuse.”(FGD2, male participant with bipolar disorder)

“No, nobody supposed to be treated as an animal. For you to be forced to have a chemical, to be injected, or to be chained is not normal. I don't think it's normal.”(FGD2, male participant with MBDPs)

“Ok. I was chained in *Study site 1* for reason of leaving the hospital. In case I want to leave the hospital voluntarily. So, I cannot leave, so they had to chain my leg to the bed all night, I couldn't even use the washroom. That was a bad experience. I think I have bladder infection.” (FGD2, male participant with schizophrenia)

“and there was one other time..., they was chaining somebody. I was now trying to tell the guy please o, the chain is too tight on that guy. The person that was using the chain came and used the

chain to whip me, ...and restrict me to my bed... I felt very bad. Because I was telling him that the chain is too tight on that person's leg, he used the chain on me. So... they themselves, they abuse the process...those people that are using... both the chemicals and chains, they abuse the process and it's bad. I feel it's very bad.” (FGD1, male participant with bipolar disorder)

“I was trying to desist them from,... giving me injection and when they wanted to give me injection, I was trying to resist them, they...chained me and they keep me out there, at the pole there... that place where they're doing ward round.”(FGD4, male participant with schizophrenia)

Whipping

Some participants (16.6%, n = 5) in both study sites recounted experiences of physical abuse in the institutions, most of which occurred as a result of rejecting medications or disobedience to stipulated rules.

“That was the most craziest day of my admission, that was the day I tore my shirt to pieces because the way I was treated that day wasn't right at all. Cuz I was following all the rules and regulations they gave me but still yet, I was beaten that day, yes, I was beaten and clamped to the bed and chained...they chained my two legs and that day was the worst day of my admission ever.” (FGD2, male participant with MBDPS)

“What encourages coercion or chain is disobedience and refusing to be injected. That will make them to flog us or chain us.” (FGD 4, male participant with MDPS)”

“.... they will force you and some they will even flog you cane when they are giving you the injection.” (FGD3, male participant with MBDPS)

Discussion

The broad categories presented in the paper are based on the questions in the focus group discussion guide and the themes that emerged after an inductive analysis (39) of the data obtained. The focus group discussions appeared to be an avenue for the participants to vent out concerns and frustrations about the system in an unencumbered way.

Although the general feeling about the use of coercion was negative, it was viewed as indispensable by the majority of the participants. They identified two types of patients in the wards: those who deserved and would indeed ‘benefit’ from being coerced because they lacked insight and those like themselves who did not deserve to be coerced because they knew what they were doing. Participants in the study appeared to stigmatise those they thought had more serious mental health problems, which might explain why they

endorsed coercive practices for this group of patients but not for themselves. It was also generally agreed that other options like dialogue and negotiations were to be explored before the use of coercion as a last resort. The view that coercion is a necessary evil to prevent greater evil is in keeping with previous studies among service users and mental health care staff (40–42).

The procedure for involuntary admission in Nigeria differs from elsewhere, as there are no regulatory mechanisms to oversee the process of involuntary admissions. Like many LMICs, there is little or no social welfare service in the country (43,44). Family and friends are entirely responsible for the care and support of people with mental health problems. The decision on whether to admit a person to psychiatric institutions is wholly dependent on the family. It is also important to clarify that the cost of admission (which can be as high as five times the country's minimum wage) is borne by the family (45), and is a major determinant of the decision to seek help from formal health care facilities in the first instance. This implies that only people with mental health problems whose families can afford the cost of treatment can be admitted involuntarily. To avoid struggle, absconding, and the additional cost of involving the police, many families resort to deception to take patients to psychiatric facilities. Many participants had this experience and expressed their resentment at being lied to. One participant highlighted that an admission based on deception and patients' perceived lack of need for treatment significantly reduced the chances of benefiting from treatment during the admission. Theodoridou and colleagues showed in their study that perceived coercion among service users evokes negative feelings that hinder the development of positive therapeutic relationships with care providers (46). However, the long-term impact of these negative feelings on the therapeutic outcomes remains unclear. The fact that they were not listened to and that their opinions were dismissed was a significant issue highlighted by one of the participants, supported by every other participant in the focus group discussion. As they rightly pointed out, this could be dangerous circumstances since pre-existing conditions could be made worse by coercive measures. This disregard for what people with mental health problems have to say has been documented as a core experience among psychiatric patients (47) and might be a contributing factor to the large mortality gap among this group (48). The study participants felt dehumanized during admission, corroborating similar findings from previous studies conducted in Australia (31) and the United Kingdom (41). Dehumanization has been consistently linked to some of the worst interpersonal behaviors like negligence, aggression and support for torture (49–51). Dehumanization of people with mental health problems is closely associated with stigmatization and has been shown to be directly related to harsher responses to moral dilemmas involving patient care (52). Interventions that reduce stigmatization and dehumanization among mental health professionals could be potentially helpful in reducing coercive practices.

Regarding chemical restraints, the participants affirmed that they were used to calm them down, but did not like the prolonged effects. It is possible that the medications were administered to treat symptoms rather than as chemical restraints, with sedation as a convenient side effect. More participants in one of the study sites than the other complained of the prolonged effect of the chemical restraints, which made them sleep for days and unable to walk. On enquiry, it was explained that there was a shortage of orderlies to guard the hospital premises or chase patients who tried to escape, and so chemical restraints were used to immobilise the patients. Understaffing was linked to verbal abuse of patients in psychiatric institutions in a recent WHO QualityRights study carried out in four West African countries (53). The need to increase resources for mental health care in the country cannot be overemphasized.

The use of chains for mechanical restraints was a recurring theme across all questions addressed in the four focus group discussions held in this study. The use of chains was the most traumatic and dehumanising form of coercion for most participants. When they were not flogged with the chains, they were used in the process of being involuntarily admitted, usually preceding the use of chemical restraints, and for punitive purposes. Using coercive measures for punitive purposes was also reported in the recent QualityRights study (53). The use of chains for the restriction of movement in people with mental health problems is widely known to occur in homes, prayer houses, and traditional healing homes in the country (54). The study participants were right to be perplexed that chains were also used in psychiatric hospitals by mental health care professionals who were supposed to understand the psychological impact of using chains better than anyone else. There have been media campaigns on the need to end coercion in non-formal settings in Nigeria (54,55), but not in hospital settings. Apart from the physical and psychological trauma caused by chains, other unanticipated consequences, such as the deaths of several admitted patients who were unable to escape a fire outbreak because of the chains, have been reported in India (56). There is an urgent need to address these significant human rights violations at various levels, including legislation related to people with mental and psychosocial problems. This implies more investment in the mental health care system, development of community-based mental health services, routine training of mental health workers, regulatory mechanisms to check human rights abuses and the integration of mental health care in primary health care to make it more accessible and less stigmatising.

The relatively high prevalence of coercive practices in high-income countries with more resources for mental health care indicates that these resources do not always equate to high-quality services based on human rights (57), unless specific efforts are made to reduce coercion and promote the rights of service users. So investment of more resources in mental health care should go hand in hand with a human rights oriented service reform. Shared-decision making instead of paternalism is useful in managing the power dynamics between patients and clinicians (58). The recently launched WHO mental health report notes that

to prevent human rights violations in mental health services, a mix of strategies are needed including the scaling up of recovery oriented community based services, monitoring and evaluating mental health services and actively involving people with lived experience of mental health conditions in decision-making processes (59). The WHO QualityRights initiative which is based on the CRPD principles, seeks to improve psychiatric services and promote the rights of persons with mental health problems. The QualityRights toolkit was developed for use in low- and middle-income countries and provides practical knowledge and tools for assessing and enhancing quality and human rights standards in mental health and social care facilities (60). Finally, training of mental health professionals on human rights and alternative strategies to coercion is a key strategy that has been shown to be most effective in reducing coercion in mental health services (61).

Study limitations

Only two psychiatric hospitals were included in this study, and it is unclear if the practices are similar in other hospitals across the country. Verbal abuse and other informal coercive measures were not explored in this study and should be investigated in future research. As with all qualitative studies, the current study suffers from the limitation of extrapolation beyond the context of the study. However, the objective of the study was to explore and describe the experiences of the study participants, and not to generalize study findings (62). Although this study was done in standalone psychiatric hospitals in Nigeria, the results are probably comparable to psychiatric units in general hospitals. If there are any disparities, they may be related to the severity of cases seen in the two settings, with patients in standalone hospitals typically receiving patients with more severe mental health problems. The similarity points to the cultural undertone of Nigeria's use of coercion in mental health care. To fully comprehend this, additional research that include the general hospital and community settings are required. Other potential limitations include the exclusion of 'unstable patients' whose experiences may significantly differ from those of included patients and who are more likely to be victims of coercive practices. None of the study participants had been subjected to ECT without their consent. ECT is usually a last resort for resistant cases, and patients with severe conditions that may have necessitated the use of ECT were not selected for the study.

Conclusion

The use of coercion was viewed by the study's participants as a necessary evil for people with severe mental health problems who lacked insight. However, it was also highlighted as being inefficient in the long run. The experiences of coercion by participants in this study confirm that human rights violations occur in large psychiatric hospitals and underscore the need for inpatient service reform and the development of recovery oriented community-based mental health services in the country. The use of coercion in this context reflects

agelong underinvestment in the mental health care system in the country and obsolete mental health legislation that does not protect the rights of people with mental health problems. The study findings highlight an urgent need to address issues of human rights violations in psychiatric hospitals in the country.

Availability of data and materials

The data analyzed during the current study are available from the corresponding author on reasonable request.

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Contributions

DOA conceptualized the study, performed the design of the study, carried out the data analyses and drafted the manuscript. OA and JUO contributed to the study design, recruitment of participants, data collection, analyses, and manuscript draft. UG, BP, MD and GC made contributions to the manuscript draft. JMCA contributed to the conceptualization, study design and manuscript draft. All authors read and approved the final manuscript.

Ethics approval and consent to participate.

Ethical approval was obtained from the Research Ethics Committee of Nova Medical School, Nova University of Lisbon (100/2021/CEFCM) and the Ethics committee of each participating psychiatric hospital. We confirm that the study was carried out according to internationally approved guidelines for human research in the declaration of Helsinki.

Consent for publication

Informed consent was obtained prior to participation.

Competing interests

The authors declare that they have no competing interests.

References

1. Nelstrop L, Chandler-Oatts J, Bingley W, Bleetman T, Corr F, Cronin-Davis J, et al. A systematic review of the safety and effectiveness of restraint and seclusion as interventions for the short-term management of violence in adult psychiatric inpatient settings and emergency departments. *Worldviews Evid Based Nurs*. 2006 Mar;3(1):8–18.
2. Wilson C, Rouse L, Rae S, Kar Ray M. Mental health inpatients' and staff members' suggestions for reducing physical restraint: A qualitative study. *J Psychiatr Ment Health Nurs*. 2018 Apr 1;25(3):188–200.
3. Sailas EE, Fenton M, Group CS. Seclusion and restraint for people with serious mental illnesses. *Cochrane Database Syst Rev*. 2000 Jan 24;2000(1).
4. Szmukler G. Compulsion and “coercion” in mental health care. *World Psychiatry*. 2015 Oct 1;14(3):259.
5. Szmukler PG, Appelbaum PS. Treatment pressures, leverage, coercion, and compulsion in mental health care. 2009 Jun;17(3):233–44.
6. Gooding P, McSherry B, Roper C. Preventing and reducing ‘coercion’ in mental health services: an international scoping review of English-language studies. *Acta Psychiatr Scand*. 2020 Jul 1;142(1):27–39.
7. Norvoll R, Pedersen R. Exploring the views of people with mental health problems’ on the concept of coercion: Towards a broader socio-ethical perspective. *Soc Sci Med*. 2016 May 1; 156:204–11.
8. Kallert T. Coercion in psychiatry. *Curr Opin Psychiatry*. 2008 Sep;21(5):485–9.
9. Hem M, Gjerberg E, Husum T, Pedersen R. Ethical challenges when using coercion in mental healthcare: A systematic literature review. *Nurs Ethics*. 2018 Feb 1;25(1):92–110.
10. United Nations. Convention on the Rights of Persons with Disabilities and Optional Protocol. 2006.
11. Convention on the rights of persons with disabilities. Guidelines on article 14 of the convention on the rights of persons with disabilities, The right to liberty and security of persons with disabilities. (CRPD/C/12/2, Annex IV, 5 November 2014). 2014.
12. Esan O, Abdumalik J, Eaton J, Kola L, Fadahunsi W, Gureje O. Mental health care in Anglophone West Africa. *Psychiatr Serv*. 2014 Sep 1;65(9):1084–7.
13. Odejide AO, Morakinyo JJ, Oshiname FO, Omigbodun O, Ajuwon AJ, Kola L. Integrating mental health into primary health care in Nigeria: management of depression in a local government (district) area as a paradigm. *Seishin Shinkeigaku Zasshi*. 2002;104(10):802–9.
14. Gureje O, Abdulmalik J, Kola L, Musa E, Yasamy MT, Adebayo K. Integrating mental health into primary care in Nigeria: report of a demonstration project using the mental health gap action programme intervention guide. *BMC Health Serv Res*. 2015 Jun 21;15(1):1–8.
15. Eaton J, Gureje O, De Silva M, Sheikh TL, Ekpe EE, Abdulaziz M, et al. A structured approach to integrating mental health services into primary care: development of the Mental Health Scale Up Nigeria intervention (mhSUN). *Int J Ment Health Syst*. 2018 Mar 27;12(1):1–12.
16. World Health Organisations. WHO-AIMS Report on Mental Health System in Nigeria. Ministry of Health Nigeria. 2006.

17. African Charter on Human and Peoples' Rights | African Union. [cited 2021 Sep 4]. Available from: <https://au.int/en/treaties/african-charter-human-and-peoples-rights>
18. Nigeria Passes Disability Rights Law | Human Rights Watch [Internet]. [cited 2021 Sep 4]. Available from: <https://www.hrw.org/news/2019/01/25/nigeria-passes-disability-rights-law>
19. Abdulmalik J, Kola L, Gureje O. Mental health system governance in Nigeria: challenges, opportunities and strategies for improvement. *Global Mental Health*. 2016; 3:1–11.
20. The Silent Pandemic: Legislative Reforms to Protect Nigerian Minds During COVID-19 - Africa Policy Journal [Internet]. [cited 2022 Mar 1]. Available from: <https://apj.hkspublications.org/the-silent-pandemic-legislative-reforms-to-protect-nigerian-minds-during-covid-19/>
21. McSherry Bernadette, Weller Penny. *Rethinking Rights-Based Mental Health Laws*. Rethinking Rights-Based Mental Health Laws. Hart Publishing; 2010.
22. Suryani L, Lesmana C, Tiliopoulos N. Treating the untreated: applying a community-based, culturally sensitive psychiatric intervention to confined and physically restrained mentally ill individuals in Bali, Indonesia. *Eur Arch Psychiatry Clin Neurosci*. 2011 Nov;261 Suppl.
23. Asher L, Fekadu A, Teferra S, Silva M De, Pathare S, Hanlon C. "I cry every day and night, I have my son tied in chains": physical restraint of people with schizophrenia in community settings in Ethiopia. *Global Health*. 2017 Jul 11;13(1).
24. Minas H, Diatri H. Pasung: Physical restraint and confinement of the mentally ill in the community. *International Journal of Mental Health Systems* 2008 2:1. 2008 Jun 16;2(1):1–5.
25. Puteh I, Marthoenis M, Minas H. Aceh Free Pasung: Releasing the mentally ill from physical restraint. *Int J Ment Health Syst*. 2011 May 14;5(1):1–5.
26. Beames L, Onwumere J. Risk factors associated with use of coercive practices in adult mental health inpatients: A systematic review. *J Psychiatr Ment Health Nurs*. 2022 Apr;29(2):220-239.
27. Walker S, Mackay E, Barnett P, Sheridan Rains L, Leverton M, Dalton-Locke C, et al. Clinical and social factors associated with increased risk for involuntary psychiatric hospitalisation: a systematic review, meta-analysis, and narrative synthesis. *Lancet Psychiatry*. 2019; Dec;6(12):1039-1053.
28. García-Cabeza I, Calcedo A, Mendoza OM, Mundt A, Valentil E. Cultural Differences in the Use of Covert Coercion Among Mental Health Professionals of Latin Culture: A Focus Group Study. *Ethical Hum Psychol Psychiatry*. 2021 Sep 1;23(1):39–50.
29. Akther S, Molyneaux E, Stuart R, Johnson S, Simpson A, Oram S. Patients' experiences of assessment and detention under mental health legislation: systematic review and qualitative meta-synthesis. *BJPsych Open*. 2019 May;5(3).
30. Krueger RA. *Focus Groups: a practical guide to applied research*. Sage Publications, Inc. 1988
31. Brophy LM, Roper CE, Hamilton BE, Tellez JJ, McSherry BM. Consumers and Carer perspectives on poor practice and the use of seclusion and restraint in mental health settings: results from Australian focus groups. *Int J Ment Health Syst*. 2016 Feb 6;10(1):6.
32. Nytingnes O, Ruud T, Rugkåsa J. 'It's unbelievably humiliating'—Patients' expressions of negative effects of coercion in mental health care. *Int J Law Psychiatry*. 2016 Sep 1;49:147–53.
33. Karnieli-Miller O, Strier R, Pessach L. Power Relations in Qualitative Research. *Qual Health Res*. 2009 Feb;19(2):279-89.

34. Schulze B, Angermeyer MC. Subjective experiences of stigma. A focus group study of schizophrenic patients, their relatives and mental health professionals. *Soc Sci Med*. 2003 Jan;56(2):299–312.
35. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol*. 2006;3(2):77–101.
36. Braun V, Clarke V. Reflecting on reflexive thematic analysis. *Qual Res Sport Exerc Health*, 2019;11:4, 589-597.
37. Software V. MAXQDA 2022. Software. 2022.
38. National Coalition on CRPD and Convention on the Rights of Persons with Disabilities. CRPD Alternate Report for India Submitted to the Committee on the Rights of Persons with Disabilities In response to the Initial report submitted by the Government of India National CRPD Coalition-India, towards Parallel report. 2017.
39. Thomas DR. A General Inductive Approach for Analyzing Qualitative Evaluation Data: 2016 Jun 30;27(2):237–46.
40. Sibitz I, Scheutz A, Lakeman R, Schrank B, Schaffer M, Amering M. Impact of coercive measures on life stories: qualitative study. *Br J Psychiatry*. 2011 Sep;199(3):239-44.
41. Wilson C, Rouse L, Rae S, Kar Ray M. Is restraint a ‘necessary evil’ in mental health care? Mental health inpatients’ and staff members’ experience of physical restraint. *Int J Ment Health Nurs*. 2017 Oct 1;26(5):500–12.
42. Spinzy Y, Maree S, Segev A, Cohen-Rappaport G. Listening to the Patient Perspective: Psychiatric Inpatients’ Attitudes Towards Physical Restraint. *Psychiatr Q*. 2018 Feb 14;89(3):691–6.
43. Ogbonna BO. Social welfare scheme; a neglected component of public health care services in Nigeria. *MOJ Public Health*. 2017;5(3):101–104.
44. Asher L, Fekadu A, Teferra S, Silva M De, Pathare S, Hanlon C. “I cry every day and night, I have my son tied in chains”: physical restraint of people with schizophrenia in community settings in Ethiopia. *Global Health*. 2017 Jul 11;13(1).
45. Healing from depression, “demons” and deliverances: The cost of mental healthcare in Nigeria is prohibitively high - sahelien.com. [cited 2022 Mar 3]. Available from: <https://sahelien.com/en/healing-from-depression-demons-and-deliverances-the-cost-of-mental-healthcare-in-nigeria-is-prohibitively-high/>
46. Theodoridou A, Schlatter F, Ajdacic V, Rössler W, Jäger M. Therapeutic relationship in the context of perceived coercion in a psychiatric population. *Psychiatry Res*. 2012 Dec 30;200(2–3):939–44.
47. van den Hooff S, Goossensen A. How to increase quality of care during coercive admission? A review of literature. *Scand J Caring Sci*. 2014;28(3):425–34.
48. Liu NH, Daumit GL, Dua T, Aquila R, Charlson F, Cuijpers P, et al. Excess mortality in persons with severe mental disorders: a multilevel intervention framework and priorities for clinical practice, policy and research agendas. *World Psychiatry*. 2017 Feb 1;16(1):30.
49. Kelman HC. Violence without Moral Restraint: Reflections on the Dehumanization of Victims and Victimiziers. *The Criminology of War*. 2017 Jul 5;145–81.
50. Locke KD. Aggression, narcissism, self-esteem, and the attribution of desirable and humanizing traits to self-versus others. *J Res Pers*. 2009 Feb 1;43(1):99–102.
51. Osofsky MJ, Bandura A, Zimbardo PG. The Role of Moral Disengagement in the Execution Process. *Law and Human Behavior* 2005 29:4. 2005 Aug;29(4):371–93.

52. Fontesse S, Rimez X, Maurage P. Stigmatization, and dehumanization perceptions towards psychiatric patients among nurses: A path-analysis approach. *Arch Psychiatr Nurs*. 2021 Apr 1;35(2):153–61.
53. Moro MF, Kola L, Fadahunsi O, Jah EM, Kofie H, Samba D, et al. Quality of care and respect of human rights in mental health services in four West African countries: collaboration between the mental health leadership and advocacy programme and the World Health Organization QualityRights initiative. *BJPsych Open*. 2022 Jan;8(1).
54. Nigeria: People with Mental Health Conditions Chained, Abused | Human Rights Watch [Internet]. [cited 2022 Jan 30]. Available from: <https://www.hrw.org/news/2019/11/11/nigeria-people-mental-health-conditions-chained-abused>
55. Nigeria urged to ban chaining people with mental health issues | Mental Health News | Al Jazeera [Internet]. [cited 2022 Mar 3]. Available from: <https://www.aljazeera.com/news/2019/11/11/nigeria-urged-to-ban-chaining-people-with-mental-health-issues>
56. BBC News | SOUTH ASIA | Chaining ban after India asylum fire [Internet]. [cited 2022 Mar 3]. Available from: http://news.bbc.co.uk/2/hi/south_asia/1477816.stm
57. Sashidharan SP, Mezzina R, Puras D. Reducing coercion in mental healthcare. *Epidemiol Psychiatr Sci*. 2019;28(6):605.
58. Sandman L, Munthe C. Shared decision making, paternalism and patient choice. *Health Care Analysis*. 2010 Mar;18(1):60–84.
59. World Mental Health Report Transforming mental health for all. 2022 [cited 2022 Jul 6]. Available from: <https://www.who.int/teams/mental-health-and-substance-use/world-mental-health-report>
60. WHO QualityRights Tool Kit. [cited 2022 Jun 29]. Available from: <https://www.who.int/publications/i/item/9789241548410>
61. Barbui C, Purgato M, Abdulmalik J, Caldas-de-Almeida JM, Eaton J, Gureje O, et al. Efficacy of interventions to reduce coercive treatment in mental health services: umbrella review of randomised evidence. *B J Psychiatry*. 2021; Apr;218(4):185-195.
62. Creswell JW, Poth CN. *Qualitative Inquiry & Research Design: Choosing Among Five Approaches* 4th edition. Sage Publications Inc, Thousand Oaks. 2017;1–646.

4.4. Original research article 4

Use of coercion in mental healthcare services in Nigeria: Service providers' perspective.

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Use of coercion in mental healthcare services in Nigeria: Service providers' perspective

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Abstract

Background: There is increasing advocacy to reduce coercive practices in mental healthcare. Little research has been done on the topic in developing countries. **Aims:** To explore what mental health professionals in Nigeria think about coercion, why it is used, and what contextual factors influence its use in mental healthcare services.

Methods: Semi-structured interviews were carried out with 16 doctors and 14 nurses from two psychiatric hospitals in two regions of Nigeria. The audio-recorded interviews were analyzed thematically with the aid of MAXQDA software.

Results: Three broad categories relating to the perception of, reasons for, and barriers/facilitators to the use of coercion were derived. Coercion was viewed as being for the best interests of patients, a means to an end, and effective for achieving desired outcomes. Safety was both a reason to use a coercive measure and a deterrent to using specific coercive measures thought to be unsafe. The socio-cultural context, obsolete mental health legislation, staff shortages, and attitudes were factors influencing the use of coercion in mental healthcare.

Conclusion: Coercion was perceived to be ultimately beneficial in mental health practice. There is need for a new mental health legislation and more resources for mental health care in Nigeria to address the problem of coercion.

Keywords: Coercion; involuntary admission; restraint; Nigeria; perceptions; mental health professionals; barriers and facilitators

Introduction

Many voices, including service users, their relatives, and human rights organizations are calling for a reduction in the use of coercion in mental healthcare. The World Psychiatric Association has issued a statement on the need to protect the rights of people living with mental health problems and psychosocial disabilities and for concerted efforts to implement alternative interventions to coercion in mental healthcare (1). Coercive measures employed in mental healthcare include involuntary admissions, treatment without consent (or “compulsory treatment”), seclusion, and restraint, including the use of any mechanical devices that immobilize or reduces patient’s ability to move (mechanical restraint) or psychotropic drugs for the primary purpose of tranquilizing and controlling movement (“chemical restraint”) (2). The harmful effects of coercive practices on both service users and mental health professionals who administer or witness these practices are more apparent (3,4), while the evidence of their effectiveness and safety remains limited (5). Coercion in mental healthcare is usually justified by the ethical assumption that it is done in the patient’s best interest and for the interest of their relatives and society at large (6,7). Although the discussion about whether and when it is justified to use coercion in mental healthcare has been ongoing for a long time, the debate has become more heated in recent times following the United Nations Committee on the Rights of Persons with Disabilities' absolutist interpretation of the United Nation Convention on the Rights of Persons with Disabilities (UNCRPD) which suggests that involuntary treatment is not permitted in any circumstance(8).

Nigeria is Africa's most populous country, with an estimated population of over 206 million people. With fewer than 300 psychiatrists for its enormous population, significantly high levels of stigma, poor mental health literacy (9–11), and an outdated colonial mental health legislation, increasing access to mental healthcare has been the focus of most research and policy in Nigeria. Community mental healthcare is almost non-existent and over 90% of the mental health budget is earmarked for the country's standalone psychiatric hospitals (12). Issues regarding the quality of psychiatric care and coercion have not received much attention. Given the increasing global advocacy to promote the rights of people with mental health problems by implementing alternatives to coercion in healthcare settings, it is necessary to understand the problem in Nigeria’s context.

The existing body of evidence on the topic comes predominantly from high-income countries. Mental health professionals are recognized to be crucial in generating political will for favorable policies that can reduce coercion (1), and their practice culture and attitudes have been documented to be both facilitators and barriers to the use of coercion (2). In line with Ajzen’s theory of planned behavior, which links beliefs with behavior (13), it is first crucial to understand the perspectives of the mental health professionals toward coercion to develop or adapt any intervention that can change their behaviors to reduce the use of coercion

in the study setting. The purpose of this study was to find out how mental health professionals in Nigeria perceive coercion and what contextual factors influence their use.

Methods

Study design

The study employed a qualitative explorative design to allow in-depth discussion of this complex issue to inform further research on the topic in the study setting. A qualitative approach assumes that knowledge and reality are complex and influenced by sociocultural context, individual values, beliefs, and thoughts (14). Using semi-structured interviews enabled us to explore and understand the perceptions and experiences of healthcare providers who have the most contact with patients and encounter the phenomenon of coercion in the natural setting and context in which they occur (15).

Study Participants

Doctors and nurses who had practiced for at least a year in the selected psychiatric hospitals were eligible to participate in the study. Participant selection for the study was purposive. They were selected by key informants (the most senior mental health professionals served this purpose in both hospitals) who could identify professionals who met the eligibility criteria for the study. Since perception and experiences of coercion may be influenced by gender and years of professional experience (16,17), this was taken into account in sampling participants. Participants were recruited based on similarities or disparities from the professionals already interviewed in each selected hospital, and sampling continued until saturation was achieved (18). Because of the politicized nature of the findings presented here, the study sites were anonymized to protect the psychiatric hospitals from being singled out for punitive sanctions. Five respondents from *study site 1* refused to participate in the study because they were afraid of repercussions from the hospital management.

Study Setting

Two psychiatric hospitals catering to roughly three out of the six geo-political regions in the country were conveniently selected for the study. Face-to-face interviews were conducted in a quiet area outside the hospital wards. Only the interviewer and the professional were present during the interview.

Data collection

A semi-structured interview guide was formulated to guide the interview. The guide provided a flexible framework utilizing open-ended questions to obtain unconditioned replies. The questions were asked broadly about perception of the use of coercion, the most recent experience of any coercive measure and

the factors that encouraged or discouraged the use of coercive measures. Coercion in the study's context included involuntary admission, the use of mechanical and chemical restraints, seclusion and electroconvulsive therapy without the patient's consent. Mechanical restraints were performed with belts, bedsheets and chains in some cases, to immobilize patients in both study sites. The interview was audio-recorded. Each interview lasted an average of 22 minutes. The interviewers and lead investigator made memos all through the data collection and data analysis to reflect thoughts and ideas about the interview, interpretation of preliminary findings, and documentation of the research process (19).

Data analysis

According to the recommendations of Braun and Clarke (20), audio recordings were first transcribed verbatim, then the transcripts were read and reread carefully and then analyzed thematically. A combination of inductive and deductive coding sometimes referred to as a blended approach, was employed (21). The process was repeated until no new concepts arose. Line by line coding was done for the first five interviews. Longer portions were coded when assumptions about themes to be further investigated were reached. Codes were synthesized and integrated into categories based on similarities of meaning. One of the co-investigators double-checked the coding consistency to assure reliability, and theme confirmation was determined after a discussion among the lead investigator and two co-investigators. Quotes were selected to exemplify each theme and to support the study findings (22). All data was analyzed with MAXQDA(23).

Research team and Reflexivity

All the authors have an interest in mental health and human rights. In keeping with a reflexive thematic analysis (20,24), we have tried to be self-aware and transparent about how our roles, perspectives, and experiences may have influenced our work throughout all stages of the study (24). At the time of the data collection and initial steps of analysis, the second and third authors were practicing as psychiatrists at the study sites. They had prior experience in qualitative research and were additionally trained by the lead investigator before the study commenced. Their personal experiences may have made them more able to relate to the accounts of the professionals interviewed and perhaps made the professionals interviewed more comfortable discussing the topic. However, this dual role may have also caused some social desirability bias since the participants knew the interviewers. Also, it may have contributed to more focus on specific issues rather than others, and perhaps overlooking potential directions and themes that may be important for understanding coercion in that context. To manage the situation, the dual role was discussed and reflected upon throughout the study, individually and with the lead investigator who is neither a practitioner nor a service user.

Ethics

Ethical approval for the study and all documented procedures was granted by the Research Ethics Committee of Nova Medical School, Nova University of Lisbon (100/2021/CEFCM), and the Ethics committee of each participating psychiatric hospital. Before each interview, the participants gave their informed consent, and they were made aware of their right to refuse to answer any questions that made them uncomfortable and to leave the study at any time.

Results

The mental health professionals were comprised of 16 doctors (consultants and trainees) and 14 nurses. Trainee participants included all doctors who had been in training for more than a year (i.e., residency program), and not yet qualified to be specialist psychiatrists. Over half of the included professionals were females (56.7%). Their age ranged from 28-67 years, and they had between 3-37 years of experience. More than one-third (40%) of the professionals had a relative with a mental disorder, while nearly one-quarter (23.3%) of them had received training on mental health and human rights. Three broad themes with subthemes emerged from the interviews.

Perception of coercion

A central theme across all the interviews was the potential benefits of treatment for people with mental health problems, regardless of what methods are used to administer the treatment. Most mental health professionals felt all forms of coercion were beneficial to treatment and linked them to an ultimate goal of positive therapeutic outcomes in people with mental health problems. Although a few of them noted that coercion could have long-term negative impacts on the patients, they maintained the stance that it had a place in the treatment of people with mental health problems.

For the patient's best interest

All the forms of coercion explored in the current study were viewed to be in the best interest of the patient. Involuntary admissions were necessary because patients lacked insight and would not seek treatment if they were not coerced. Mechanical restraints were deemed necessary to prevent the patients from harming others or themselves, while chemical restraints had an added therapeutic benefit. The use of ECT without the patient's consent was also justified as being in the best interest of the patient with severe symptoms who lacked insight into their problem and the need for the therapy. (Table IV-4.1)

A means to an end

Some coercive practices were administered to facilitate specific actions. Physical and mechanical restraints in particular were often administered to enable the administration of medications, which in the opinion of some professionals, was the main reason for the admission. At other times, restraints could be applied pending the arrival of the doctor or to avoid agitating other patients and staff. (Table IV-4.1)

Effectiveness

Chemical restraint and ECT were particularly perceived to be effective and therapeutic, with faster outcomes compared to other forms of coercion. Chemical restraint was also generally preferred to other forms of coercive practices by most mental health professionals, and they felt it was preferred by patients too. Chemical restraint was reported to have positive outcomes and was less likely to cause injuries. (Table IV-4.1)

Table IV-4.1: Perception of Coercion

S/N	Subthemes	Selected Quotes
1.	For the patient's best interest	"Well, inasmuch as I will like to say that the consent of patient should be sorted before any form of treatment or therapy should be carried out on them. I also believe that. without application of this minimal aspect of coercion, most of the therapy will not go through." (Nurse) "For the involuntary admission, I think I'm all for it. Because I can understand the point where the family is coming from and at that acute phase, the patient would not, most of the time, don't want to be admitted. Very few will agree to admission, so in that instance, for the overall good in quote, for the betterment of the patient, so yes, I'm all for involuntary admission." (Doctor) "Well, I think it is indicated and I support it. Because the goal of everything is treating the patient and restoring the patient to his premorbid state as best as possible, in the shortest possible time. So, if electroconvulsive therapy is indicated, and then from what I know it is something that is highly effective, I think even though the patient is not in favor of it but I support that it should be done since it's going to be beneficial to the patient." (Doctor)
2	A means to an end	"(...) and the patient didn't come to the hospital to just occupy your bed. Since a hospital is not a hotel. You make sure that the line of treatment that has been planned has to be followed to the letter." (Nurse) "Chemical restraint, that one will even help us to calm the relation down. Calm the patient down. Calm we the nurses, and the caregivers down too. you understand? We the nurses, by the time, you give them sedation, when you sedate them, they will be sleeping, so everybody is [sic] calm." (Nurse) "When you talk about physical restraints, most times is very necessary because like in this facility, the doctors may not be around at every minute to prescribe for chemical restraints, so you just have to make do of the one that is at the spot, to hold down the patient before any other thing happens." (Nurse)

3.	Effectiveness	“For me, I think it's the best option. Because it calms the patient down and patient is being sedated, can spend hours sleeping under sedation. And by the time the patient wakes up, you find out that he's more settled and relaxed. For me, I think it's a better option.” (Nurse) “But what I think about the use of ECT without the patient's consent is that in my unit, it has worked. It has actually resulted in patients getting better and it has increased the recovery rates of our patients compared to if we had to wait for the patient to be mentally stable to give consent.” (Doctor)

Reasons for the use of coercion

Safety was a recurring theme here; it was both a reason to use coercion and a deterrent to the use of specific coercive measures thought to be unsafe. Mechanical restraints were commonly employed to manage aggression and to enable the administration of medications, but they were also reported to cause injuries. Concerns about side effects of chemical restraints and electroconvulsive therapy were discouraging factors for their use. Other reasons for employing coercive measures were to prevent absconding, to force medication on patients refusing treatment, and to manage the side effects of some antipsychotic medications.

Response to violence/aggression

Coercive practices were often employed after a violent incident or to prevent them from happening. Families usually request for their relatives to be admitted following a violent incident or threat of violence. In the hospital, restraints were usually employed to ‘manage’ aggressive patients. Mechanical restraints were most commonly endorsed as the coercive measure of choice to deal with aggression and violence. (Table IV-4.2)

Table IV-4.2: Reasons for the use of coercion

S/N	Subthemes	Selected Quotes
1.	Response to violence/aggression	“Yes, that was years back when I was working at the outpatient department, the patient that came in for regular check-up. The patient was rushed in by force men. He was verbally, physically aggressive. There was neglect of personal hygiene and he was dehydrated because he had been starving self. Because he was very...too talkative and all that. He was busy talking. And that patient happened to be a manic patient. So, I advised the relative that there is need for this patient to be admitted and immediately use a chemical restraint[sic].” (Nurse) “Okay...the patient was a male, he had been abusing cannabinoids for a very very long time, and nicotine for a very long time. He came with psychotic symptoms...so he was very very aggressive, irritable, violent, so we had to call some of the orderlies that were there. So, we had to hold him very tight to the ground, firmly, and we had to restrain him using four-point, we tied both hands and tie both legs to the bed. (Doctor)”
2.	Caution and side effects	“Um... (Pause) Chemical restraint is something that needs to be done carefully because different patients react to our parenteral medication in different ways. Um...we've had cases whereby we used chlorpromazine injection and that resulted in series of orthostatic hypotension, that led to patients having falls from being dizzy and all that...and having head injuries and all that, and even death. So, because of that we now moved to Haloperidol. So, patients react to the parenteral medications differently.” (Doctor)” “...then a patient that is also having some side effects to the medications like what we say... like what we call akathisia can also be given some coercive devices.” (Doctor) “But for physical restraint, I really, am not in favor of it. I dunno, if I'm to have my way, I will find a way to minimize physical restraint to the barest minimum because even though the patients are psychotic, they're still humans, and in some cases, when these patients want to be restrained, you can see that there is this group of persons holding, pinning the person down, then tying the person, at times the hands can be so tight and I think I have seen cases where the hands were swollen, the legs were swollen. So... it's just that sometimes we cannot avoid it, but I think maybe it's something we should look into and see if we can modify it. Let's still preserve the patient's dignity” (Doctor) “Okay. Well...um, doing electroconvulsive therapy without the patient's consent might bring about litigation in the future because during ECTs, anything can happen. Patients can pass on...” (Doctor)

3.	Antitherapeutic	“Okay. Well, I personally think that seclusion may not really be a good way of restraint. Because secluding a patient might lead to the patient being more of a harm to themselves. Because when they’re secluded, they don’t really know what goes on in the room, they’re just there alone to themselves. So, they can do, they can hurt themselves without anybody being aware.” (Doctor)

Caution and side effects

Some of the professionals interviewed were wary of specific coercive measures and emphasized the need to be careful as there were significant risks associated with employing them. Although chemical restraint was the most preferred form of restraint, many professionals said the possible side effects were a deterrent to their use. Mechanical restraints were used for patients who were experiencing the side effects of antipsychotic medications. Mechanical restraints were reported to lead to a lot of injuries in both patients and professionals administering them. The use of electroconvulsive therapy without the patient's consent was also deemed dangerous by a few professionals and likely to lead to litigations. Having the patient's families give consent made it more acceptable. (Table IV-4.2)

Antitherapeutic

Seclusion in particular was unacceptable for most professionals. They felt it did not support recovery and could worsen the mental health condition. It was viewed to be particularly harmful to depressed and suicidal patients. (Table IV-4.2)

Facilitators and barriers to the use of coercion

The prevailing culture and lack of resources for mental healthcare in the country were identified as contextual factors that influenced the use of coercion.

Socio-cultural factors: Stigma, deception, and respite care

Many professionals felt coercion was the result of deeply held beliefs and stigma towards mental health problems. Patients were usually in denial, and families were often reluctant to seek help on time to avoid the unending stigma that results from having a family member with a mental health problem. Thus, help seeking from psychiatric hospitals was delayed until much later when symptoms were most severe. At this point, the families would usually resort to deception to lead the person with a mental health problem to a hospital, since suggesting psychiatric help is viewed as offensive and insulting, more so to a patient who lacks insight. The combination of long-standing untreated mental health problems and the realization of being deceived into coming to a psychiatric hospital often aggravated aggressive behaviors, which are in turn managed with mechanical and chemical restraints in the hospitals. A few professionals also felt that the prevailing cultural beliefs about mental health problems influenced their perception of danger in their patients.

Due to the absence of social services and support for people with mental health problems in the country, the entire burden of caring for and supporting a person with mental health problem is borne by the family. This eventually takes a toll on the families leading them to request for their relatives to be involuntarily

admitted, to take a 'break' from the person with a mental health problem. The professionals admitted that in such cases, the admissions were not absolutely necessary but rather a form of respite care. Other professionals noted that coercion was a continuum that started at home from family and concerned community members with measures such as making decisions for them, threats, isolation, use of restraints (e.g., chaining), forcefully transporting them to the hospitals, and continued in the hospitals with mechanical and chemical restraints. (Table IV-4.3)

Table IV-4.3: Facilitators and barriers to the use of coercion

S/N	Subthemes	Selected Quotes
1.	Socio-cultural factors: Stigma, deception, and respite care	“It’s difficult to live in a society and divorce yourself from the norms of the society. Um...that stigma for mental health will always be there. I don't see it stopping soon, in fact, it is increasing, the more educated, in fact, we've seen...now we are even seeing very educated people you understand? who still have that notion that mental illness is a spiritual problem, it’s something that should be...any family that has one, that family should be avoided at all cost, you understand? No marriage, nobody should go and marry from that family, nobody should associate with them, and they should be locked up and so on and so forth. So, it will be...until that stigma is eliminated, I don't think it will.... Especially, and we are living in a society where we are used to be paranoid. We seem to attribute everything that happens to us to external forces. So, it's difficult to see somebody in our society accepting responsibility for whatever happens to him or her. So based on that, for as long as possible, coercion will still be there in mental healthcare.” (Doctor) “So, most of the time, they are told they are actually coming to the hospital for a test or they're coming to the hospital to see somebody else, some of them are told that they're going somewhere to go and withdraw an amount from the bank or something (...). So, it's just a way of getting the patient to the hospital.” (Doctor) The factors that encourage [sic] coercion in this our setting uhm, based on, geographical location. We are Africans. Our culture tells much more on our practice, OK? So, most patients experience this form of coercion, one form or the other in the course of their illness and management. And the reason being, first, this is our culture. We believe that any person termed mad or has this thing with mental case is a threat. so, number one is the culture. (Doctor)
2.		“Maybe the relative just wants some, some time to be with the family or friends and feels that...because maybe there's no help around and, I need to have some space and you know...just to... let this...just go to the hospital ...a rest, a break. To want some respite. so, they may package the patient for admission. Because sometimes you see the patient talking coherently with you...but from your own judgment, this guy, there's nothing wrong if you see him. Sometimes, I think the patients usually they're right, if you look at it happens. Usually, during the festive

		period, Christmas, or there's a burial or they have a function and they need time out. They just want.... they don't want friends or relations to notice that. Maybe they've been hiding that from friends.” (Nurse) “It starts from there; the patient is coerced right from home to get to the hospital. And once the patient gets to the hospital, the coercion continues with the patient being coerced to have chemical restraints. And if the patient still refuses, that now progresses to physical or mechanical restraint first, before chemical restraint is now used on the patient.” (Doctor)
2.	Legislation and human rights	“Okay, just like I said before about coercive [sic] devices, same goes to involuntary admissions, because the legislation that bounds medical practitioners in... working within psychiatry involves involuntary admissions, so it's still well much practiced, even though there tends to be some human rights issues, ethical issues surrounding it. But it's still being used.” (Doctor) “Oh yes, they should be. And the factors that discourage it, like in our country, is that we don't have enough laws backing us per se.... in that our laws were last reviewed many years back, and then some of them supports involuntary admission and other forms of coercion. So, because of that loopholes in our laws.” (Doctor) “Sometimes in our environment, we can use chains, we use hard belt and sometimes these patients are tied on four-point restraints and all that, upper limbs and lower limbs...so sometimes they're not... no going nowhere, it's like a barrack. So, I think you're also violating the human right of that patient, you're using a mechanical or physical restraint.” (Doctor)
3.	Staff-related factors: shortage and attitudes, practice culture, lack of alternatives	“...the purpose of coming into the psychiatric environment is to get the job done and whatever aspect, be employed to do the job since there have not been other, better alternatives. We applied that to do the job till when the institution or the scientists are able to provide with better alternative outside these coercive practices that have been employed.” (Nurse) “There are some, there are some staff, there are some staff in which they just look at a particular patient, this patient we need to, we just need to carry out coercive act on this patient. If not, he will start destroying things. But it also takes some other nurse- other caregiver to say Ahh...let's observe him and know the reason why this person is angry or why he is doing like this<okay> or if not, if he is angry, let's kind of talk him down, or let's de-escalate.” (Nurse). “The use of coercion in mental health generally is...right from origin of mental health, it has been in practice.” (Nurse)

		“It's not available because we have limited space, so we don't normally use it. We have limited space for such.” (Nurse) “We can have 3, 4 of such aggressive patients coming in at the same time and also if we do not quickly restrain, we can have other patients who are already settling down being disturbed and it might cause a chaos.” (Doctor) “On the part of the caregiver, sometimes, we must be honest, sometimes. time factor, maybe you have many clients you want to attend to and eh...reasoning with this client is not yielding any result and time is lapsing, so there may be no option than to quickly coerce the patient so that you can give attention to others.” (Nurse)

Legislation and human rights

While a few professionals said the use of coercion was supported by legislation, others mentioned the absence of concise mental health legislation as a reason for coercion. They argued that the existing legislation regarding involuntary admissions was obsolete, and the decision was usually left to the discretion of the healthcare provider at the request of the family. The few professionals who did not endorse the use of mechanical restraints felt it was an infringement on the fundamental human rights of liberty and dignity. (Table IV-4.3)

Staff-related factors: shortage and attitudes, practice culture, lack of alternatives

Nurses more often referred to practical reasons for using coercion, such as shortage of staff, lack of alternatives, history of aggression, and time constraints. Individual staff attitudes were also noted to influence the use of coercion. A large proportion of the professionals also felt that coercion was integral to the practice of psychiatry. Due to a lack of space, seclusion was not practiced. An insufficient number of staff on duty was noted to lead to the use of coercion, not necessarily as a last resort but to cope with having too many agitated patients at the same time. (Table IV-4.3)

Discussion

To our knowledge, this study is the first attempt to qualitatively investigate the perception of coercion among mental health professionals in Nigeria. The study reports their perspectives on the contextual factors that serve as facilitators and barriers to the use of coercion in mental healthcare. As no formal documentation and regulatory framework exist to track the use of coercion in the country's mental health services, the study findings provide insights into how coercion occurs in Nigerian psychiatric hospitals and the contextual factors that influence the use of coercion in Nigeria's resource limited setting.

The principle of beneficence and its relation to the use of coercion in mental healthcare has been subject to several debates over time. The mental health professionals interviewed were very concerned with the overall outcome of treatment and were comfortable with the use of coercion to achieve that. Perhaps the professionals were more concerned with treatment outcomes since the admissions were from out-of-pocket payments by patients' families and the need for faster outcomes and 'value' for money paid may be higher than elsewhere. The scarcity of mental health services may also increase the pressure for faster outcomes to facilitate faster discharge to free up bedspaces.

The use of mechanical restraints was perceived to be necessary by many professionals, especially in dangerous situations, however, there was concern about the use of chains which was viewed as cruel

and potentially dangerous leading to injuries. While the use of mechanical restraints with straps and belts is relatively common (25) and viewed as a necessary evil to be used as a last resort in many places around the world (26), using chains for restraint is considered inhumane and degrading (27) worse still when employed in clinical settings. Human Rights Watch has reported the use of chains in community settings in many countries including Nigeria (28) and not much has been done to address the issue. In addition to causing physical and psychological injuries for both patients and professionals, mechanical restraints also lead to diminished therapeutic alliance (29). The findings of this study also suggest that mechanical restraints were used without a prescription in certain cases, which may increase the risk of arbitrary use even when it is no longer 'necessary'. The healthcare professionals' high acceptance of restraints (chemical and mechanical) in the research settings may have been influenced in part by their background in the Nigerian outdated mental health legislation, which stresses custodial care. The use of ECT without the patient's consent was not viewed as coercive by the professionals since consent was usually given by the patient's family. This is a problematic practice (especially when administered in unmodified form) that has contradictory evidence of effectiveness (30,31). In communitarian societies, like those where the study was conducted, family decisions are valued more than individual decision (32) and so, substitute decision making is common in both psychiatric and non-psychiatric fields of medicine. Most of the professionals were against the use of seclusion. In the same vein, the Substance use and mental health bill 2019 expressly prohibits the use of seclusion in mental health services in the country but does not mention other coercive practices. This is an interesting finding and may have some cultural connotations. An international study that compared the prevalence of coercive practices found large variations in the use of seclusion between Dutch and British mental health services which was explained by cultural preferences (33).

The use of coercive practices to manage the side effects of antipsychotic medications is worrisome. This may suggest that side effects of medication are either being neglected or accepted by professionals as an inevitable part of the treatment. In either case, this appears to be resulting in "double coercion". The patient must not only contend with the side effects of a coercively administered medication, but also with the restraints that are employed to deal with them. This is an unproductive and harsh manner of dealing with side effects and may exacerbate patients' distrust and reluctance to seek treatment.

The lack of specific laws regarding mental healthcare and coercion in the country was another factor influencing the use of coercion. The existing legislation does not regulate the use of coercive practices, and neither does the new legislation. Misperceptions and stigma associated with mental

health problems were identified to be key factors initiating and perpetuating the use of coercion. As mental health problems are commonly viewed as spiritual problems in Nigeria (10), help seeking from formal healthcare facilities is usually delayed. Furthermore, the sparse availability of community mental healthcare and the lack of social services fostered the need for respite care since families bear the burden of caring for their relatives alone. This is in keeping with a study in India where psychiatrists perceived that coercion was due to a lack of resources (6). The attitudes of staff were mentioned by a few mental health professionals as a factor influencing the use of coercion. Staff attitude regarding coercion is known to be a factor that influences how aggression is managed, however, this is a complicated topic with mixed results (34–36). It is worth noting that more nurses cited practical reasons for using coercion, such as a lack of alternatives and having a full ward with an insufficient number of staff present. This is in keeping with a previous study among staff in Germany (34). This could be related to the fact that nurses are more frequently targeted for violent behavior than psychiatrists since they spend more time with the patients at the wards and are more personally involved in implementing coercive measures (37). Staff shortage is particularly relevant not only because of the current shortage of mental health professionals, but also because a recent survey has shown that about nine out of every ten doctors in Nigeria are seeking to leave the country (38). This has very grave implications in terms of the provision of quality mental healthcare.

Multiple initiatives to decrease coercion, have been developed and tested in high-income settings, such as safe wards (39), open door policies (40) and six core strategies (41), and there is increasing evidence of implementing effective alternatives to coercion in health settings across low-and-middle-income countries as well (1,42). The WHO Quality Rights initiative, which has been successful in resource-limited countries such as India and Ghana, is an example of an effective approach to reduce coercion and strengthen the rights of people with mental health problems (43,44). Staff training on de-escalation techniques has shown promising results in reducing coercion in mental health services (45).

Strengths and limitations

Although professionals from only two psychiatric hospitals in the country were interviewed, the study findings provide very much needed evidence on the practice of coercion in the country. It broadly explores the various types of coercive measures and provides a baseline for future studies on this topic in the region. Since the participants knew the interviewers, the researchers' dual function as staff may have generated some social desirability bias. It may also have contributed to a greater emphasis on specific issues rather than others, thereby disregarding potential directions and themes that may have been significant for comprehending coercion in that setting. The exclusion of employees with

less than a year of experience may have also been a potential bias, and future research might look into differences in the perception of coercion between newly employed and experienced staff. To provide a more complete picture of coercion in inpatient settings, further studies should be conducted to examine the perspectives of service users and their families. Understanding the problem in context will guide the development or adaptation of culturally relevant strategies that can effectively reduce the use of coercion in the setting.

Conclusion and policy implications

The interviewed mental health professionals felt coercion was ultimately beneficial in mental health practice and held safety as an important concern. Cultural beliefs, lack of support, obsolete mental health legislation, staff shortage, and lack of alternative measures were identified as contextual factors that influenced the use of coercion in Nigeria. The study findings present important policy implications. Firstly, the Mental health and Substance abuse Bill 2019 has to be swiftly approved to improve the rights of people with mental health problems. In line with the global efforts to reduce coercion in mental healthcare, there is a need for formal documentation of coercive practices in psychiatric hospitals to be able to monitor their prevalence, enable quantitative research on the topic and plan specific interventions to reduce them. The longstanding advocacy and appeal to integrate mental healthcare into primary healthcare needs to be addressed. Mental health literacy and stigma reduction campaigns have to be prioritized for any real change to occur as these misperceptions and beliefs about mental health problems are deeply rooted in the culture and not addressing them would hinder the success of any intervention to reduce coercion. The country's few mental health advocacy groups rightly focus on promoting mental health awareness and stigma reduction; however, they are not patient driven. Nevertheless, there is also a need for activism against human rights abuses and coercion in mental health care led by service-users. Broader strategies to address the drivers of brain drain (mainly security and economic challenges) in the country are fundamental to maintain the mental health workforce in the country. Incentives to attract more professionals to specialize in psychiatry may help address the shortages in human resources. Finally, there is a need for routine training on human rights-based approach and de-escalation techniques for mental health professionals.

References

1. Herrman H, Allan J, Galderisi S, Javed A, Rodrigues M. Alternatives to coercion in mental health care: WPA Position Statement and Call to Action. *World Psychiatry*. 2022 Feb 1;21(1):159–60.
2. Galderisi S, Allan J, Kanba S, Makhshvili N. Implementing alternatives to coercion in mental health care discussion: paper from the WPA taskforce: October 2020.

3. Nelstrop L, Chandler-Oatts J, Bingley W, Bleetman T, Corr F, Cronin-Davis J, et al. A systematic review of the safety and effectiveness of restraint and seclusion as interventions for the short-term management of violence in adult psychiatric inpatient settings and emergency departments. *Worldviews Evid Based Nurs*. 2006 Mar;3(1):8–18.
4. Wilson C, Rouse L, Rae S, Kar Ray M. Mental health inpatients' and staff members' suggestions for reducing physical restraint: A qualitative study. *J Psychiatr Ment Health Nurs*. 2018 Apr 1;25(3):188–200.
5. Sailas EE, Fenton M, Group CS. Seclusion and restraint for people with serious mental illnesses. *Cochrane Database Syst Rev*. 2000 Jan 24;2000(1).
6. Raveesh B, Pathare S, Noorthoorn E, Gowda G, Lepping P, Bunders-Aelen J. Staff and caregiver attitude to coercion in India. *Indian J Psychiatry*. 2016 Dec 1;58(6):221–9.
7. Szasz T. Coercion as cure: A critical history of psychiatry. *Coercion as Cure: A Critical History of Psychiatry*. 2007. Transaction Publishers.
8. Convention on the Rights of Persons with Disabilities. General Comment No. 1 on Article 12: Equal recognition before the law. CRPD/C/GC/1. UN; 2014 Nov.
9. Audu IA, Idris SH, Olisah VO, Sheikh TL. Stigmatization of people with mental illness among inhabitants of a rural community in northern Nigeria. *Int J Soc Psychiatry*. 2013 Feb;59(1):55–60.
10. Gureje O, Lasebikan VO, Ephraim-Oluwanuga O, Olley BO, Kola L. Community study of knowledge of and attitude to mental illness in Nigeria. *Br J Psychiatry*. 2005 May; 186:436–41
11. Aluh DO, Okonta MJ, Odili VU. Cross-sectional survey of mental health literacy among undergraduate students of the University of Nigeria. *BMJ Open*. 2019 Sep 1;9(9): e028913.
12. World Health Organization. WHO-AIMS Report on Mental Health System in Nigeria. 2006.
13. Ajzen I. The theory of planned behavior. *Organ. Behav. Hum. Decis*. 1991 Dec 1;50(2):179–211.
14. Pereira J, Ii F, Teresa R, Campos O. Narrativas: utilização na pesquisa qualitativa em saúde. *Revista de Saúde Pública*. 2008 Dec;42(6):1090–6.
15. Prieto Rodríguez MA, March Cerdá JC. Paso a paso en el diseño de un estudio mediante grupos focales. *Atención Primaria*. 2002 Jan 1;29(6):366–73.
16. Wynn R, Kvalvik AM, Hynnekleiv T. Attitudes to coercion at two Norwegian psychiatric units. 2011 Apr;65(2):133–7.
17. Pertega Andia Elvira. Health Professionals' Decision-Making Process About the Use of Physical Restraints in Inpatient Pediatric Psychiatric Units - ProQuest. Universidad Autónoma de Madrid; 2016.
18. Miles M, Michael H. Qualitative data analysis: An expanded sourcebook, 2nd ed. – PsycNET. 1994.
19. Tobin GA, Begley CM. Methodological rigour within a qualitative framework. *Journal of Advanced Nursing*. 2004 Nov 1;48(4):388–96.
20. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol*. 2006;3(2):77–101.

21. Graebner ME, Martin JA, Roundy PT. Qualitative data: Cooking without a recipe. 2012 Aug 3;10(3):276–84.
22. Eldh AC, Årestedt L, Berterö C. Quotations in Qualitative Studies: Reflections on Constituents, Custom, and Purpose. 2020 Nov 2;19.
23. Software V. MAXQDA 2022. Software. 2022.
24. Braun V, Clarke V. Reflecting on reflexive thematic analysis. 2019 Aug 8;11(4):589–97. <https://doi.org/101080/2159676X20191628806>.
25. Beghi M, Peroni F, Gabola P, Rossetti A, Cornaggia CM. Prevalence and risk factors for the use of restraint in psychiatry: a systematic review. *Rivista di Psichiatria*. 2013 Jan 1;48(1):10–22.
26. Bachmann L, Vatne S, Mundal IP. Safeguarding patients while implementing mechanical restraints: A qualitative study of nurses and ward staff's perceptions and assessment. *Journal of Clinical Nursing*. 2022; 00:1–14.
27. Minas H, Diatri H. Pasung: Physical restraint and confinement of the mentally ill in the community. *Int J Ment Health Syst*. 2008 Jun 16;2(1).
28. Nigeria urged to ban chaining people with mental health issues | Mental Health News | Al Jazeera. [cited 2022 Mar 3]. Available from: <https://www.aljazeera.com/news/2019/11/11/nigeria-urged-to-ban-chaining-people-with-mental-health-issues>
29. Chieze M, Hurst S, Kaiser S, Sentissi O. Effects of seclusion and restraint in adult psychiatry: A systematic review. *Front Psychiatry*. 2019; 10:491.
30. Chan CYW, Abdin E, Seow E, Subramaniam M, Liu J, Peh CX, et al. Clinical effectiveness and speed of response of electroconvulsive therapy in treatment-resistant schizophrenia. *Psychiatry Clin Neurosci*. 2019 Jul 1;73(7):416–22.
31. Read J, Irving K, McGrath Background L. Electroconvulsive therapy for depression: a review of the quality of ECT versus sham ECT trials and meta-analyses. *BJPsych Advances*. 2021 Sep;27(5):284–284.
32. Jegede AS, Adegoke OO. Advance Directive in End of Life Decision-Making among the Yoruba of South-Western Nigeria. *BEOnline*. 2016 Nov 21;3(3):41.
33. Steinert T, Lepping P, Bernhardsgrütter R, Conca A, Hatling T, Janssen W, et al. Incidence of seclusion and restraint in psychiatric hospitals: a literature review and survey of international trends. *Soc Psychiatry Psychiatr Epidemiol*. 2010 Sep;45(9):889-97.
34. Krieger E, Moritz S, Lincoln TM, Fischer R, Nagel M. Coercion in psychiatry: A cross-sectional study on staff views and emotions. *J Psychiatr Ment Health Nurs*. 2021 Apr;28(2):149-162.
35. Aasland OG, Husum TL, Førde R, Pedersen R. Between authoritarian and dialogical approaches: Attitudes and opinions on coercion among professionals in mental health and addiction care in Norway. *Int J Law Psychiatry*. 2018 Mar; 57:106–12.
36. Morandi S, Silva B, Mendez Rubio M, Bonsack C, Golay P. Mental health professionals' feelings and attitudes towards coercion. *Int J Law Psychiatry*. 2021 Jan; 74:101665.
37. Lickiewicz J, Husum TL, Ruud T, Siqveland J, Musiał Z, Makara-Studzińska M. Measuring Staff Attitudes to Coercion in Poland. *Front Psychiatry*. 2021 Nov; 12:1857.

38. Nigeria's medical brain drain: Healthcare woes as doctors flee | Health | Al Jazeera. [cited 2022 May 29]. Available from: <https://www.aljazeera.com/features/2019/4/8/nigerias-medical-brain-drain-healthcare-woes-as-doctors-flee>
39. Bowers L. Safewards: a new model of conflict and containment on psychiatric wards. *J Psychiatr Ment Health Nurs*. 2014;21(6):499–508.
40. Lang UE, Hartmann S, Schulz-Hartmann S, Gudlowski Y, Ricken R, Munk I, et al. Do locked doors in psychiatric hospitals prevent patients from absconding? *Eur J Psychiatry*. 2010;24(4):199–204.
41. NASMHPD Six Core Strategies for Reducing Seclusion and Restraint Use© A Snapshot of Six Core Strategies for the Reduction of S/R.
42. Gooding P, McSherry B, Roper C. Preventing and reducing 'coercion' in mental health services: an international scoping review of English-language studies. *Acta Psychiatr Scand*. 2020 Jul 1;142(1):27–39.
43. QualityRights Gujarat - Centre for Mental Health Law & Policy. [cited 2022 Oct 18]. Available from: <https://cmhlp.org/projects/quality-rights-gujarat/>
44. WHO QualityRights in Mental Health - Ghana Project. [cited 2022 Oct 18]. Available from: <https://www.qualityrights.com.gh/>
45. Barbui C, Purgato M, Abdulmalik J, Caldas-de-Almeida JM, Eaton J, Gureje O, et al. Efficacy of interventions to reduce coercive treatment in mental health services: umbrella review of randomised evidence. *Br J Psychiatry*. 2021 Apr;218(4):185-195.

4.5. Original research article 5

A qualitative integrative analysis of service users' and service providers' perspectives on ways to reduce coercion in mental health care.

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A qualitative integrative analysis of service users' and service providers' perspectives on ways to reduce coercion in mental health care

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Abstract

Purpose: The movement to develop and implement non-coercive alternatives in the provision of mental health care is gaining momentum globally. To strengthen the basis of potential interventions that will be contextually relevant, and to complement the body of literature, which is largely from high-income settings, the current study sought to explore the suggestions of service users and providers in Nigeria on how to reduce the use of coercive measures in mental health settings.

Methods: Semi-structured interviews with 30 mental health professionals and four focus group discussions among 30 service users from two psychiatric hospitals in Nigeria were conducted. The data were analyzed thematically with the aid of MAXQDA.

Results: The suggestions proposed by service users and mental health professionals were within the broad themes of communication, policies and legislation, and increased resources. Service users felt that improved communication, home consultations, non-legal advocates and clear rules and legislation would reduce the use of coercion, while service providers suggested increased public mental health literacy, better interpersonal relationships with patients, increased resources for mental health care, more research on the topic and regulation of coercive measures.

Conclusion: Many of the suggestions from this study reinforce strategies already in place to decrease coercion in other settings. However, additional recommendations that are relevant to the study setting, such as enhancing public mental health literacy, mental health legislation reform and increasing access to mental health services, deserve further consideration.

Keywords: Coercion, Interventions, Service users, Mental health professionals, Nigeria

Introduction

Coercion in mental health care has been described as forceful actions or threats undertaken in the process of providing treatment or addressing perceived harm that persons with mental health problems pose to themselves or others (1). Coercive practices employed in mental health care include involuntary admission, treatment without consent, seclusion, and restraint, including the use of mechanical devices, physical restraint, or psychotropic drugs for the primary purpose of controlling movement (“chemical restraint”) (1). Although coercion in mental health care is usually intended to benefit patients by keeping them from harm and improving their mental health, it poses significant ethical and clinical problems (2). While some schools of thought have suggested that all forms of coercion in mental health care must be completely abolished regardless of the circumstance, this view has been debated by several clinicians and scholars who argue that in specific situations, such as in emergencies where the risk of impairment or danger is high, actions deemed to be coercive may be justifiable (3–5). However, all dissenting parties agree on the necessity for alternative strategies to coercion in mental health treatment. The movement to develop and implement non-coercive alternatives in the provision of mental health care is gaining momentum globally (6,7). The importance of making significant investments in research advancing current understanding of the policies and interventions that are effective in reducing coercion, within an implementation science paradigm, was highlighted in the recently published World Health Organization (WHO) World Mental Health Report (8,9). In the same vein, the World Psychiatric Association has declared their intention to promote this cause globally in their recent position statement (1).

According to the Nigerian Survey of Mental Health Disorders, 12.1% of the country's estimated 206 million population have at least one DSM-IV disorder in their lifetime (10). Only 9.0% of people who had a DSM-IV condition within the previous 12 months had gotten any treatment, and less than 1% of these patients received specialized mental health care (11). Although this data is almost two decades old and no other nationally representative epidemiological surveys have been carried out ever since, estimates from the Global Burden of Disease (GBD) study suggest an increasing prevalence of mental disorders among Nigerians (12). It is estimated that Nigeria has a psychiatrist to population ratio of about 1:1,000,000, about 9.7 psychiatric nurses per 1,000,000 people (13) and predictably worse ratios for clinical psychologists, social workers and occupational therapists. The Mental Health Policy recognizes the country's limited number of mental health specialists and proposes integration of mental health into primary health care as a policy goal (14). In reality this goal is difficult to implement since the majority of the available Primary Health Centers are in deplorable states (15), and are not affordable since financing is from out-of-pocket payments by users.

The average cost of visiting a Primary Health care center is 3.20 USD for adult patients, and in some instances could also be as high as 8 USD, which is burdensome for the 45% of Nigerians who survive on less than 2 USD per day and 28% who survive on less than 1.25 USD per day according to World Development Indicators (16,17). Apart from the problems of scarce resources, other factors such as poor mental health literacy among the populace and negative attitudes towards mental illness also significantly impair help-seeking and receipt of care for mental health conditions in the country (18,19). There are eight Federal Neuro-Psychiatric Hospitals, roughly the same number of psychiatric departments in university teaching hospitals and recently, few sparsely distributed community mental health services (20). These services provide care for people with serious mental health conditions, but the decision to use mental health services is frequently influenced by the ability to pay for them. Like most developing countries, there are no social services, and the burden of care lies entirely on the family. Since there is no system for regular dissemination of patient and service data to the health ministry (21) and the obsolete mental health legislation in the country does not regulate coercive measures, it is difficult to estimate the prevalence of coercive practices in mental health services.

Although Nigeria has ratified numerous international human rights agreements, notably the UNCRPD and the African Charter on Human and Peoples' Rights (22,23), human rights for the general population in Nigeria have been steadily deteriorating, with crime and violence prevalent in virtually all areas of the country. Gender-based and sexual violence, child marriage, female genital mutilation (FGM), human trafficking, arbitrary harassment of journalists and citizens, persecution of LGBTI people, and indiscriminate violence against civilians are widespread and avenues for public discourse and free speech are curtailed as a result of restricted media freedom (24,25). Correspondingly, severe violations of the human rights of people with mental health conditions in the community, prayer camps and traditional healing centers in the country have been reported by human rights organizations (26). The majority of research in the country focuses on enhancing access to mental health care, with few studies looking into issues related to the quality of care provided. A recent survey of the experiences of coercion among service users in two Nigerian psychiatric hospitals revealed significant human rights violations including chaining of patients to avoid absconding and flogging of patients for refusing medications and punitively in some cases (27).

There is increasing recognition of the need to include service users' views in decisions that affect them. A few studies have qualitatively explored the suggestions of service users and mental health professionals on ways to reduce coercion in their setting (28,29) and one study conducted in the UK attempted to integrate the perspectives of service users and mental health staff (30). Given the significant differences in the context, experiences and severity of coercion in mental health care in

Nigeria (27), it seems reasonable to hypothesize that their suggestions on ways to reduce coercion would differ from those that have been proffered from high income settings. Therefore, there is justification for a qualitative exploration of the suggestions of service users and professionals in this context to complement existing literature that are predominantly from high-income settings and to strengthen the basis of potential interventions that will be relevant in the study setting and resource-limited settings.

Methods

Design

This was a qualitative design using focus group discussions and semi-structured interviews among service users and mental health professionals respectively, in two conveniently selected psychiatric facilities in Nigeria. The study was built on a realist epistemological paradigm, with participant responses presumed to represent reality (31). To acknowledge the differences between the service user's reality versus the staff reality, the themes were derived and presented separately for each group. At the end, the themes from both groups were integrated and commonalities were highlighted in a matrix table. The methods are reported according to the consolidated criteria for reporting qualitative studies (COREQ) (32).

Participants

A total of 30 service users who were on admission in the selected psychiatric hospitals participated in four focus group discussions while 30 service providers from the same psychiatric hospitals were interviewed. More socio-demographic details of the participants can be found in **Table IV-5.1**.

Table IV-5.1: Socio-demographic characteristics of service users and service providers

Characteristics	Frequency (n)	Percentage (%)
Service users		
Gender		
Male	19	63.3
Female	11	36.7
Education*		
Primary	0	0.0
Secondary	18	60.0

Tertiary	10	33.3
Marital Status*		
Single	23	76.7
Married	3	10.3
Separated/Divorced/Widowed	3	10.3
Diagnosis		
Schizophrenia	12	40.0
Schizoaffective disorder	2	6.7
Bipolar disorder	3	10.0
Depression	3	10.0
Mental and behavioral disorder due to psychoactive substance (MBD)	10	33.3
Status of Admission		
Voluntary	13	43.3
Involuntary	17	56.7
	Mean	SD
Length of hospitalisation (Days)	36.5	20.4
Age (Years)	34.7	9.5
Service providers		
Gender		
Females	17	43.3
Males	13	56.7
Profession		
Doctors	16	53.3
Nurses	14	46.7
Previous training on human rights/coercion (Yes)	7	23.3
	Mean	SD
Years of Experience	12.3	9.4
Age (Years)	40.6	9.2

*2 participants did not indicate their educational level, SD: Standard Deviation

*1 participant did not indicate their marital status

Recruitment and data collection

Service users were recruited through verbal information provided by nurses in different wards. Service users who met the inclusion criteria of being clinically stable (i.e., conscious, and able to understand and provide feedback in a coherent manner) were selected to be part of the focus group discussions. The focus group discussions took place in halls outside the wards and lasted an average of 55 minutes. Doctors and Nurses who had worked for at least one year in the psychiatric hospital were approached to participate in the study. The service providers were purposively recruited by key informants (the most senior professionals in each case). Each semi-structured interview lasted an average of 22 minutes. Focus group discussions and interviews were audio recorded and transcribed. During transcription, all potentially identifying information was replaced with pseudonyms. The focus group and interview guides were designed to encourage participants to share their experiences of coercion. They were also asked to provide suggestions that could reduce the use of these coercive measures. As this study was intended to be exploratory and serve as a baseline for future research on the subject in the country, it encompassed a variety of coercive measures, including involuntary admissions, mechanical restraint, chemical restraint, and electroconvulsive therapy without patients' consent.

Rigor and reflexivity

All study participants were informed that their participation would have no influence on their care or work, and that their responses would be kept confidential. To be neutral and less "intimidating" to the service users who were still on admission at the time of the study, social workers who had no past relationships with the service users were chosen to moderate the focus group talks. The research team attempted to be self-aware and open about how our roles, perspectives, and experiences may have influenced our work across all stages of the study, in accordance with reflective thematic analysis (33). The second and third authors are psychiatrists working at the study sites. They were involved with the data collection from service providers, but not service users. They may have been better able to relate to the service providers' accounts because of their own experiences, and conversely, the service providers may have felt more at ease talking about the subject with them. However, because the participants were familiar with the interviewers, this dual position could have also contributed to some social desirability bias. Additionally, it might have contributed to a greater focus on certain areas at the expense of others, as well as the possible neglect of certain themes that might be crucial for comprehending coercion and useful strategies to reduce it in the study setting. This dual role was discussed and reflected upon throughout the study, individually and collectively as a team.

Analysis

Interviews and focus group discussions were recorded, verbatim transcribed, read several times, and then analyzed. Text fragments were coded, synthesized, and integrated into categories according to similarity of meanings. Themes were created by analyzing patterns both inside and between categories, based on Braun and Clarke's suggestions, for thematic analysis (34). Following a series of discussions among the authors, themes were first selected and subsequently confirmed. The results are presented as a summary of main themes supported by exemplifying quotes. Themes from both groups of participants were presented in a matrix table to highlight similarities. The analyses were performed with the aid of MAXQDA.

Ethical Approval and Conduct

Ethical approval was obtained from the Research Ethics Committee of Nova Medical School, Nova University of Lisbon (100/2021/CEFCM), and the Ethics committee of each participating psychiatric hospital. Due to the sensitive nature of the study, participants were informed both verbally and in the informed consent forms that they were not required to answer any questions they did not desire to answer and that they could withdraw at any time if they felt uncomfortable.

Results

Suggestions proposed by Service users were organized in the following themes below, while exemplifying quotes are presented in **Table IV-5.2**.

Communication

Most service users believed that coercion could be avoided if mental health professionals and their families were patient enough to talk with them and persuade them of the importance of treatment. Many service users proposed open dialogue and negotiation as alternatives to using coercion. They emphasized the importance of listening to what a patient had to say and showing empathy during a crisis. Transparency and honesty were also highlighted to be crucial.

Post-coercion apology

Other participants felt that when coercion is unavoidable, an explanation and apology post-coercive incident would minimize the negative feelings they had and preserve trust and therapeutic relationships.

Home consultation and advocates

Some service users felt that offering home consultations would eliminate the need for coercive measures. Home consultations would also give mental health professionals a chance to confirm information about their behavior from sources other than their relatives, whom they often believed had ulterior motives for having them committed. Others suggested that having a neutral advocate to arbitrate problems between service providers and service users could curb the excessive use of coercion in mental health care.

Regulation and legislation

The service users felt that implementing national health laws and establishing clear guidelines for the use of coercion would prevent an abuse of the process and justify its use. These views were mostly held by service users with substance use problems who felt they had insight and did not deserve to be forced.

Table IV-5.2: Suggestions proposed by service users.

S/N	Themes	Selected Quotes
1.	Communication	“I think coming to the person's understanding, coming to the person's level, you have to understand. Try and reason with the person (...) there's someone in that other ward, he's like he's in Disneyland. He's drowning in his own thoughts. So, to reason with that person won't be easy and you have to drown with the person (...) you have to come to his level .” (Male service user with MBD) “You need to rub mind with them, let them feel welcomed first, show concern that you want to solve their problem for them. You don't need to be harsh to them.” (Female service user with Schizophrenia) “The things that actually should discourage the use of coercion is (...) dialogue in a situation. For instance (...) when they notice a change in the behaviour, of the individual in question, a proper dialogue should be engaged. (...) You see that person wants to talk to people. (...) He wants to understand himself. ” (Male service user with bipolar disorder) “I think the use of open communication can be...open communication between the patient and the relatives, and the doctors in charge should be used.” (Female service user with schizoaffective disorder)
2	Post-coercion apology	“If the person doesn't see reasons sooner, they should tell the person these are the reasons you were forced, and if it calls for apologies, then people that forced the person to these admissions should bring down their pride and apologize accordingly (...),” (Male service user with MBD) “(...) so, there should be an open apology and compensation, once that is done whether the patient accepts or not it is now left for God to take decisions on the final say.” (Male service user with Depression)

3.	Home consultation and advocates	“(…) what I think about coercion in mental health, it is better to invite a consultant to your house than coercion in mental health. You can invite a consultant, either a doctor or a psychologist, or a clinical psychologist than coercion.” (Male service user with Depression) “A strategy I think is… you know before I came here, I had friends and well-wishers So when I came here, I thought the hospital would trace me down to where I came from and ask maybe some of my friends the actual truth about my mental health.” (Male service user with Schizophrenia) “(…) there exist some kind of people (…) they may not be able to take a decision of their own. So, they need advocates to stand for them and make that decision but in that case, it’s not very common in African tradition. If it were to be in western world, well, they do. … a social worker (…) should see themselves [sic] as a second God to dispensation of justice.” (Male service user with MBD)
4.	Regulation and legislation	“Yes, I think the use of coercion can be eliminated in so many ways (…) if the rules are laid down and there are laws (…) if we really want to get them eliminated, then we should go straight to the Nigerian act, enactment bills whatever, get the laws that are associated to these health issues, bring them out and then they can now be stipulated on every item (…) that has to do with mental health or psychiatric hospital issues”. (Male service user with MBD) “They should not always see the patients as patients, and they should be able to always differentiate those patients that are being diagnosed by drugs and those that are real psychoses. (…) the doctors and the nurses should be able to differentiate these patients and there should be direct rules and regulations that should be guiding being forced in any ways.” (Male service user with MBD)

Suggestions proposed by service providers were organized in the following themes while exemplifying quotes can be found in **Table IV-5.3**.

Education: Population Mental Health Literacy, Patient and Family Psychoeducation and Staff Training

Almost all service providers agreed that improved mental health literacy and stigma reduction among the general population were required for true change to occur. Increased mental health awareness and attitudes would lead to earlier help-seeking in formal health care institutions, reducing the need for coercion. They also emphasized the importance of educating patients and families about mental disorders, the treatment process, and human rights in order to promote treatment adherence and prevent relapse. A few professionals suggested the need for staff to be trained. More nurses than doctors expressed the need for staff to be trained on de-escalation techniques.

Communication

The service providers stressed the importance of building strong relationships with patients in order to win their trust and form a therapeutic alliance. While they acknowledged that it took a lot of time

to talk to and convince service users of the necessity of treatment, they highlighted that it was helpful to be patient with them. Others suggested using the therapeutic options selected by the patients.

Research and innovation

Since the most common reason for non-adherence, subsequent relapse, and involuntary admissions was the disturbing side effects of the majority of antipsychotic drugs, some service providers proposed the development of more effective antipsychotic medications with minimal side effects. Others believed that additional research into the problem in the study setting would help to better understand the issue and find non-coercive alternatives.

Increased resources for mental health care

The importance of community mental health care, as well as integrating mental health treatment with primary care, was emphasized in order to make it more accessible and affordable to service users. Other service providers suggested the need for more human resources and better equipment for hospitals.

Legislation and policies

Some clinicians believed that having laws regulating the use of coercion would help to eliminate or limit its usage in mental health care. Others advocated for hospital policies and guidelines regarding the use of restraints.

Table IV-5.3: Suggestions proposed by Service providers.

S/N	Themes	Selected Quotes
1.	Education	“For the society, we hold this belief...that mentally ill people are people cursed by the gods or somebody has been cursed, so if we could get, maybe an awareness program(...) when a patient comes with symptoms early enough, to the facility, we'll be able to manage even with just drugs and they're fine. But most times, they come very very very late...and at the very dime minute and that time, we just have to use the ECT. So, I think with proper education and enlightenment, um...then good drug compliance and adherence to follow up.” (Junior resident) “Yes, I think (...) that patient knowing their rights about hospital care, about their care and management of their illness will also improve that. Even though that also comes with its own consequences.” (Consultant psychiatrist) “I think one major strategy would be more training for health personnel on how they can motivate clients to accept treatment without coercion.” (Senior Nurse) “The (...) staff of the hospital should be equipped with other skills that could make somebody to be calm. De-escalation can be one of them. They should be trained with it.” (Senior resident)

2	Communication	“Like I said before, in the aspect of these Staff, (sic) they should be patient enough. (...) Try to do more of talking (...) and then to build up that trust, because as a mental health personnel, if you build up trust in the patient, they tend to subject themselves to your treatment (...) when they don't trust you, (...) they're more suspicious of what you're giving to them”. (Senior Nurse) “By talking to the person now there is no other way. I mean the ones that are a bit insightful, you try. You talk to them. You try to persuade them. But that will take a lot of time to talk to them, but it's just by talking, (Junior Resident) “Other alternatives may be responding to the patients with the method they prefer for treatment. Accepting and using it for them may be another helpful alternative to coercion.” (Senior Nurse)
3.	Research & innovation	“...do as much as we can to eliminate at least the side-effects. Especially the extra-pyramidal side effect with the drugs.” (Junior resident) “And I also think that scientists should also do well to come up with another better alternative to the one we use now that will also help. (Senior Nurse) “... psychiatry is one of the most neglected aspect of Health in the world most especially in our country, Nigeria. I think research like this should be done and people should be encouraged to go into research like this. And when it is done, it should not just be done, it should be published and also the findings should be applied in the practice of psychiatry to improve the practice in psychiatry.” (Senior nurse)
4.	Increased resources	“.... If access to (...) mental health care, was (sic) actually affordable, it will help to eliminate the use of coercion, because over here, we find out that it's easier to access care from a church, a faith-based healer, from delivering houses and pharmacies rather than a government hospital. So, if we can institute (...) practises in Primary Health care centres, so that it is closer to the home of our patient, you won't need to use so much coercion. It's easier for that patient to continue to access care, thereby not staying long and falling ill, hence causing a relapse (...) leading to aggressiveness, or dangerousness” (Consultant psychiatrist) “...Maybe if we increase the staff-patient ratio, so you have more staff. That one will be one strategy to reduce it.” (Consultant psychiatrist) “The strategies or methods to reduce this is just to employ more hands.....and maybe proper hospital practice like providing all those things we need to work with in the hospital. I think with that it will be eliminated.” (Senior Nurse)
5.	Legislation & Policies	“... also making some legislation with it, I think it will go a long way in eliminating coercive devices.” (Consultant Psychiatrist) “There should be a working hospital policy on the use of restraints. Then anyone on restraints should be monitored exclusively by the most senior doctor. And the person may need to be on daily review because some of them tend to die from being abandoned with that kind of use of restraint.” (Junior resident)

		“Okay what must be in place for it to be eliminated is mostly for the bill of right to be implemented. Okay...when you implement the bills of right (...) for the patient, it might really rule out this coercive practice on the patient.” (Senior nurse)

Table IV-5.4. Key themes identified from the suggestions proposed by service users and mental health professionals.

	Communication	Legislation/Policies	Resources
Services users			
Communication	x		
Post-coercion apology	x		
Home consultation and advocates			x
Regulation and legislation		x	
Service Providers			
Education	x		x
Interpersonal relationships	x		
Research and innovation			x
Increased resources			x
Legislation and policies		x	

* Grey cells indicate common themes among both groups of participants

Discussion

This study sought to explore suggestions from service users and service providers on ways to reduce coercive practices in mental health care, including involuntary admissions, chemical and mechanical restraints, and the use of electroconvulsive therapy without patients’ consent. Engaging stakeholders in the formulation of strategies to address a problem is known to optimize the choice, customization, and effectiveness of interventions (35). Simply implementing interventions developed in other contexts without considering the unique characteristics of each setting may jeopardize their success.

Our hypothesis was not fully supported as most suggestions were similar to those posited by service users and professionals from high-income settings. However, the study findings have identified important areas of focus for future interventions in this study setting.

The study participants gave numerous suggestions, the majority of which fell under the key theme of communication. The use of coercion, in the opinion of service users, would be avoided by open communication between them, their families, and mental health professionals. They acknowledged that facilitating this interaction required a lot of patience, particularly during times of crisis when they were typically challenging to deal with. The desire for honesty and transparency from service users is especially important in this setting, where deception is commonly used to facilitate the involuntary admission of people with mental health problems (27). The service providers agreed that improved communication with patients is essential for building trusting relationships and therapeutic alliances. Improving communication was also a key suggestion from a similar study that sought the suggestions of service users and service providers in the United Kingdom, Canada and Finland (28,30,36), and is addressed by a number of existing interventions to reduce restraints and seclusion in psychiatric wards (37,38). The "Safewards" model, for instance, encourages communication by including the "get-to-know folder," which aims to inform staff on what they need to know about each service user, a service user/service provider derived standard of behaviour, and specific 'soft words' to be used for de-escalation in times of crises. High-quality relationship was highlighted to be one of the key factors impacting the experiences of care in a systematic review of literature on inpatient experiences that included 72 studies from 16 countries (39). Some service users felt that a post-incidence apology would ease the negative effects of being coerced. Service users from high-income settings have also voiced a need for post-incidence reviews (28)(40). In a randomized controlled trial, post-coercion review was shown to reduce the burden of PTSD symptoms in patients with psychotic disorders who have undergone coercive interventions in acute settings and is recommended to be a measure of trauma-informed care (31).

The need to improve public mental health literacy was highlighted as crucial to make any progress in addressing the problem of coercion in mental health care in the study setting. Coercion was described as the outcome of misperceptions, lack of awareness, and stigma toward mental health problems. People would seek help sooner and be more inclined to accept treatment freely if they were better informed about mental health issues and perceived them as treatable medical conditions rather than spiritual problems. Stigma towards mental health problems and coercion in mental health care appear to have a bidirectional relationship where stigma increases endorsement of coercive measures and coercion increases stigma. Previous studies found that coercion increased stigma, eroded the quality

of life, and led to lower self-esteem (41), while stigmatization of mental health problems among the general population predicted the approval of coercive measures (42). Thus, reducing stigma and misconceptions about the dangers of people with mental health problems appears to be vital and necessary tasks in order to reduce coercive measures in the treatment of people with mental health problems (42). In addition to educating the general public, service providers stressed the importance of psychoeducation for patients and their families to prevent relapse and readmission. A few staff also acknowledged the need to be trained in de-escalation techniques to better deal with violence and aggression from service users. Indeed, the efficacy of staff training to reduce the use of restraint was supported by the most robust evidence in an umbrella review of interventions to reduce coercive treatment (43).

While service providers emphasized the value of community mental health teams and the integration of mental health treatment into primary care, some service users anticipated that home consultations would eliminate the need for involuntary hospitalizations. It is interesting that the service users in this study had this opinion since home treatments are generally not available in Nigeria. However, it is consistent with the views of service users from England that receiving care from home treatment teams was preferable to being hospitalized involuntarily (44). Crises resolution teams are examples of strategies developed to avoid involuntary admissions by providing intensive home treatment. A randomized controlled trial of the effectiveness of these crisis resolution teams compared to standard care received from inpatient care and community mental health teams increased patients' satisfaction with care and reduced the number of admissions but did not significantly reduce compulsory admissions (45). Another strategy that offers crisis support and resolution in people's homes and communities is the Open Dialogue Model from Finland, although empirical data of its impact on coercive measures is still lacking (46). A few service users suggested the use of an advocate to mediate the affairs of service users with the health care providers. The desire for advocates was also expressed by Finnish service users in a previous study (28). Using non-legal advocacy to avoid coercion is recognized to be a CRPD-compliant approach that may be effective in reducing coercion (47). The Personal Ombudsmen system in Sweden (48) is an example of using non-legal advocacy to avoid coercion, championed by the Swedish authorities as a way of minimizing coercive practice in psychiatric institutions. In Kenya, peer support has been proposed as a culturally relevant method of support and has been shown to be successful in reducing coercion in hospitals and community settings (49). Increased mental health resources, including a higher staff-to-patient ratio, were mentioned as a strategy to reduce coercion by the mental health professionals in this study, corroborating findings from an Ethiopian study in which service users, caregivers, and community health workers all agreed that increased access to mental health care would reduce the use of coercion

(50). Service users and providers from high income countries have also suggested that increased resources for mental health care will reduce the use of coercive measures (30,36). The relatively high prevalence of coercive practices in high-income countries with greater resources for mental health care suggests that increased resources do not always guarantee services devoid of coercion (51). While the need for more mental health resources in the region cannot be overstated, it is important to remember that these resources must be judiciously invested in service reform for true change to occur. Continued investment of resources in large stand-alone psychiatric hospitals will probably encourage the human rights abuses known to occur there (27,52,53).

Both service users and providers noted the possibility of mental health legislation and clear guidelines for the use of coercive measures to reduce coercion. This recommendation is particularly relevant in the context since the country has none at the moment. The outdated mental health laws in Nigeria are largely concerned with custodial care, and while the latest mental health bill attempts to protect the human rights of those with mental health problems, it does not fully regulate the use of coercive measures(54). Although legislation alone is rarely sufficient to have a direct effect on coercion (55), the Italian “Law 180” established in 1978 prior to deinstitutionalization, is credited for the eradication of mechanical restraints in the country's health system (56). Government policies to end coercion have proven effective in other cases. For example, China’s program known as “686”, designed to improve access to evidence-based care and to promote human rights for people with severe mental disorders, led to a 92% success rate in preventing shackling in community settings (57). Both groups of participants believed that having clear rules and protocols in place for the use of specific coercive measures would reduce their overuse. A review of literature found conflicting results on whether strict or flexible environments are the best way of managing psychiatric wards, but the need for clear communication, rule clarity, and consistency remained evident (58).

With the exception of the recommendations related to increasing mental health literacy and having clear laws regulating coercion, most of the recommendations given by the study participants are similar to those from prior studies conducted in high-income settings. The opinions expressed by the service users and service providers in this study are comparable to the underpinnings of many existing interventions developed elsewhere to reduce coercion, suggesting that these interventions may be acceptable if they are adapted for use in the study setting. The fact that these recommendations were made by service users and professionals, the majority of whom had no prior training or knowledge of human rights-based approaches to care or interventions to reduce coercion, indicates that the need for alternatives to coercion is the same regardless of the setting. Improving the quality of psychiatric care by increasing the rights of service users should be integral to the movement to increase access to

mental health care in the country. The WHO QualityRights Initiative, which was designed for use in resource-limited settings as well as high-income settings focuses on the reduction of coercion across multiple standards and criteria by identifying the use of particular forms of coercion and possible alternatives. The Tool kit offers comprehensive instructions for organizing and carrying out an assessment and highlights a number of possible applications for assessment findings, such as guiding policy, and legal reform; understanding human rights violations; bringing them to the attention of authorities and other stakeholders; advocating for change; supporting quality-improving initiatives; and enhancing human rights capacity through training and education (59,60). The formation of consortiums of researchers and practitioners investigating the problem of coercion in diverse jurisdictions might boost efforts to minimize coercion in the country and the African region as a whole. FOSTREN (Fostering and Strengthening Approaches to Reducing Coercion in European Mental Health Services) is one of such initiatives which was established to facilitate the exchange of research and experience among European Union member states to advance understanding of effective interventions that reduce coercion and to develop an integrated framework for the transformation of mental health care in the region (61).

Strength and limitations

This is one of the first studies exploring the theme of coercion in mental health care in Nigeria and contributes to the evidence on service users' opinions of ways to reduce coercion which mainly comes from high-income countries. The strength of the study also lies in the inclusion of views of both service users and service providers who have experienced or witnessed the use of coercion in the study setting. However, only participants from two psychiatric hospitals were selected for this study, and psychiatric departments in general hospitals were not included. Geriatric and adolescent patients were not included. It is also important to note that those who are subjected to formal coercive measures in the country are those who can afford to pay for psychiatric care and only make up a small portion of the population of people with mental health problems; as a result, their opinions may differ from those of the greater population who cannot afford to receive such care.

Implications for practice

Service users and providers alike agree that improving communication is a key strategy for reducing the use of coercion in mental health care. To facilitate this communication, underlying problems related to mental health care in the study's context must be addressed, such as increasing resources for mental health and service reform, reforming the mental health legislation, and increasing mental health literacy of the population.

Conclusion

The study findings contribute to the sparse literature on this topic from resource-limited settings. The key suggestions were related to the need for improved communication among stakeholders, the need for more resources for mental health care, and the formulation of legislation and clear policies regarding the use of coercion. Many existing interventions developed to reduce coercion incorporate most of the suggestions from this study. However, other context-specific suggestions such as improving public mental health literacy and increasing access to mental health care deserve further consideration.

Conflicts of interest

The authors declare no conflicts of interest.

References

1. Herrman H, Allan J, Galderisi S, Javed A, Rodrigues M. Alternatives to coercion in mental health care: WPA Position Statement and Call to Action. *World Psychiatry*. 2022 Feb 1;21(1):159–60.
2. Chieze M, Hurst S, Kaiser S, Sentissi O. Effects of seclusion and restraint in adult psychiatry: A systematic review. *Front Psychiatry*. 2019;10(JULY):491.
3. Convention on the Rights of Persons with Disabilities. General Comment No. 1 on Article 12: Equal recognition before the law. CRPD/C/GC/1. UN;; 2014 Nov.
4. Freeman MC, Kolappa K, de Almeida JMC, Kleinman A, Makhshvili N, Phakathi S, et al. Reversing hard won victories in the name of human rights: a critique of the General Comment on Article 12 of the UN Convention on the Rights of Persons with Disabilities. *Lancet Psychiatry*. 2015 Sep 1;2(9):844–50.
5. Martin W, Gurbai S. Surveying the Geneva impasse: Coercive care and human rights. *Int J Law Psychiatry*. 2019 May 1;64:117–28.
6. Tyano S, Appelbaum P, Stewart D, Gaviria S, Ndeti D, Galderisi S, et al. Implementing Alternatives to Coercion in Mental Health Care WPA Taskforce on Implementing Alternatives to Coercion in Mental Health Care Reference group WPA Standing Committee on Ethics and Review 2020.
7. Maria Rodrigues, Helen Herrman, Silvana Galderisi, John Allan. WPA Position Statement and Call to Action: Implementing Alternatives to Coercion: A Key Component of Improving Mental Health Care. 2020.
8. WHO. Transforming mental health for all. *World Mental Health Report*. 2022.
9. Saraceno B, Caldas de Almeida JM. An outstanding message of hope: the WHO World Mental Health Report 2022. *Epidemiol Psychiatr Sci* .2022 Jul 14;31: e53.
10. Gureje O, Lasebikan VO, Kola L, Makanjuola VA. Lifetime and 12-month prevalence of mental disorders in the Nigerian Survey of Mental Health and Well-Being. *Br J Psychiatry*. 2006;(158):465–71.

11. Gureje O, Lasebikan VO. Use of mental health services in a developing country Results from the Nigerian survey of mental health and well-being. *Br J Psychiatry*. 2006;44–9.
12. VizHub - GBD Results [Internet]. [cited 2022 Nov 18]. Available from: <https://vizhub.healthdata.org/gbd-results/>
13. Esan O, Abdumalik J, Eaton J, Kola L, Fadahunsi W, Gureje O. Mental health care in Anglophone West Africa. *Psychiatr Serv*. 2014 Sep 1;65(9):1084–7.
14. Gureje O. Revisiting the national mental health policy for Nigeria. *Arch. Ib. Med*. 2003; 4(1):2-4.
15. Aregbeshola BS, Khan SM. Primary Health Care in Nigeria: 24 Years after Olikoye Ransome-Kuti's Leadership. *Front Public Health*. 2017 Mar 13; 5:48.
16. Kress DH, Su Y, Wang H. Assessment of Primary Health Care System Performance in Nigeria: Using the Primary Health Care Performance Indicator Conceptual Framework. *Health Syst Reform*. 2016;2(4):302–18.
17. World Development Indicators | Data Catalog [Internet]. [cited 2022 Nov 18]. Available from: <https://datacatalog.worldbank.org/search/dataset/0037712>
18. Gureje O, Lasebikan VO, Ephraim-Oluwanuga O, Olley BO, Kola L. Community study of knowledge of and attitude to mental illness in Nigeria. *Br J Psychiatry* 2005; 186:436–41.
19. Aluh DO, Okonta MJ, Odili VU. Cross-sectional survey of mental health literacy among undergraduate students of the University of Nigeria. *BMJ Open*. 2019 Sep 1;9(9): e028913.
20. Eaton J, Nwefoh E, Okafor G, Onyeonoro U, Nwaubani K, Henderson C. Interventions to increase use of services, mental health awareness in Nigeria. *Int J Ment Health Syst*. 2017 Oct 24; 11:66.
21. World Health Organization. WHO-AIMS Report on Mental Health System in Nigeria. 2006.
22. African Charter on Human and Peoples' Rights | African Union. [cited 2021 Sep 4]. Available from: <https://au.int/en/treaties/african-charter-human-and-peoples-rights>
23. Nigeria Passes Disability Rights Law | Human Rights Watch. [cited 2021 Sep 4]. Available from: <https://www.hrw.org/news/2019/01/25/nigeria-passes-disability-rights-law>
24. Nigeria: EU Annual Report on Human Rights and Democracy in the world 2021 Country Updates | EEAS Website. [cited 2022 Nov 18]. Available from: https://www.eeas.europa.eu/delegations/nigeria/nigeria-eu-annual-report-human-rights-and-democracy-world-2021-country-updates_en?s=114
25. World Report 2022: Nigeria | Human Rights Watch. [cited 2022 Nov 18]. Available from: <https://www.hrw.org/world-report/2022/country-chapters/nigeria>
26. Nigeria: People with Mental Health Conditions Chained, Abused | Human Rights Watch. [cited 2022 Nov 20]. Available from: <https://www.hrw.org/news/2019/11/11/nigeria-people-mental-health-conditions-chained-abused>
27. Aluh DO, Ayilara O, Onu JU, Grigaitė U, Pedrosa B, Santos-Dias M, et al. Experiences and perceptions of coercive practices in mental health care among service users in Nigeria: a qualitative study. *Int J Ment Health Syst*. 2022 Nov;16(1):1–11.

28. Brophy LM, Roper CE, Hamilton BE, Tellez JJ, McSherry BM. Consumers' and their supporters' perspectives on barriers and strategies to reducing seclusion and restraint in mental health settings. *Aust Health Rev.* 2016 Jan;40(6):599-604.
29. Kontio R, Joffe G, Putkonen H, Kuosmanen L, Hane K, Holli M, et al. Seclusion and restraint in psychiatry: patients' experiences and practical suggestions on how to improve practices and use alternatives. *Perspect Psychiatr Care.* 2012 Jan;48(1):16–24.
30. Wilson C, Rouse L, Rae S, Kar Ray M. Mental health inpatients' and staff members' suggestions for reducing physical restraint: A qualitative study. *J Psychiatr Ment Health Nurs.* 2018 Apr;25(3):188-200.
31. Wulschleger A, Vandamme A, Mielau J, Renner L, Bermpohl F, Heinz A, et al. Effect of standardized post-coercion review session on symptoms of PTSD: results from a randomized controlled trial. *Eur Arch Psychiatry Clin Neurosci.* 2021 Sep;271(6):1077-1087.
32. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care.* 2007 Dec;19(6):349-57.
33. Braun V, Clarke V. Reflecting on reflexive thematic analysis. *Qual Res Sport Exerc Health.* 2019;11:4, 589-597..
34. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol.* 2006;3(2):77–101.
35. Majid U, Kim C, Cako A, Gagliardi AR. Engaging stakeholders in the co-development of programs or interventions using Intervention Mapping: A scoping review. *PLoS ONE.* 2018 Dec 1;13(12).
36. Gagnon MP, Desmartis M, Dipankui MT, Gagnon J, St-Pierre M. Alternatives to seclusion and restraint in psychiatry and in long-term care facilities for the elderly: Perspectives of service users and family members. *Patient.* 2013 Dec 16;6(4):269–80.
37. Bowers L. Safewards: a new model of conflict and containment on psychiatric wards. *J Psychiatr Ment Health Nurs.* 2014;21(6):499–508.
38. NASMHPD Six Core Strategies for Reducing Seclusion and Restraint Use© A Snapshot of Six Core Strategies for the Reduction of S/R.
39. Staniszewska S, Mockford C, Chadburn G, Fenton SJ, Bhui K, Larkin M, et al. Experiences of in-patient mental health services: systematic review. *Br J Psychiatry.* 2019 Jun 1;214(6):329–38.
40. Mayers P, Keet N, Winkler G, Flisher AJ. Mental health service users' perceptions and experiences of sedation, seclusion and restraint. *Int J Soc Psychiatry.* 2010 Jan;56(1):60–73.
41. Link B, Castille DM, Stuber J. Stigma and coercion in the context of outpatient treatment for people with mental illnesses. *Soc Sci Med.* 2008 Aug;67(3):409-19.
42. Steiger S, Moeller J, Sowislo JF, Lieb R, Lang UE, Huber CG. Approval of Coercion in Psychiatry in Public Perception and the Role of Stigmatization. *Front Psychiatry.* 2022 Jan 7; 12:2513.
43. Barbui C, Purgato M, Abdulmalik J, Caldas-de-Almeida JM, Eaton J, Gureje O, et al. Efficacy of interventions to reduce coercive treatment in mental health services: umbrella review of randomised evidence. *Br J Psychiatry.* 2021 Apr;218(4):185-195.

44. Katsakou C, Rose D, Amos T, Bowers L, McCabe R, Oliver D, et al. Psychiatric patients' views on why their involuntary hospitalisation was right or wrong: a qualitative study. *Soc Psychiatry Psychiatr Epidemiol*. 2012 Jul;47(7):1169-79.
45. Johnson MH, Griffin R, Csibra G, Halit H, Farroni T, De Haan M, et al. Randomised controlled trial of acute mental health care by a crisis resolution team: the north Islington crisis study. *BMJ*. 2005 Sep 15;331(7517):599.
46. Buus N, Bikic A, Jacobsen EK, Müller-Nielsen K, Aagaard J, Rossen CB. Adapting and Implementing Open Dialogue in the Scandinavian Countries: A Scoping Review. *Issues Ment Health Nurs*. 2017 May;38(5):391-401.
47. Gooding P, McSherry B, Roper C. Preventing and reducing 'coercion' in mental health services: an international scoping review of English-language studies. *Acta Psychiatr Scand*. 2020 Jul 1;142(1):27-39.
48. A New Profession is Born-Personligt ombud, PO. 2008. <https://www.personligtombud.se/publikationer/pdf/A%20New%20Profession%20is%20Born.pdf>
49. The Role of Peer Support in Exercising Legal Capacity. Users and Survivors of Psychiatry-Kenya.
50. Asher L, Fekadu A, Teferra S, De Silva M, Pathare S, Hanlon C. "I cry every day and night, I have my son tied in chains": physical restraint of people with schizophrenia in community settings in Ethiopia. *Global Health*. 2017 Jul 11;13(1).
51. Sashidharan SP, Mezzina R, Puras D. Reducing coercion in mental healthcare. *Epidemiol Psychiatr Sci*. 2019;28(6):605.
52. Caldas De Almeida JM, Killaspy H. Long-term Mental Health Care for People with Severe Mental Disorders. Brussels: European Union, 2011.
53. Sashidharan SP, Saraceno B. Is psychiatry becoming more coercive? *BMJ*. 2017 Jun 22;357.
54. Aluh DO, Onu JU, Caldas-de-Almeida JM. Nigeria's mental health and substance abuse bill 2019: Analysis of its compliance with the United Nations convention on the rights of persons with disabilities. *Int J Law Psychiatry*. 2022 Jul 1; 83:101817.
55. Keski-Valkama A, Sailas E, Eronen M, Koivisto AM, Lönnqvist J, Kaltiala-Heino R. A 15-year national follow-up: legislation is not enough to reduce the use of seclusion and restraint. *Soc Psychiatry Psychiatr Epidemiol*. 2007 Sep;42(9):747-52.
56. Mezzina R. Forty years of Law 180: the aspirations of a great reform, its successes and continuing need. *Epidemiol Psychiatr Sci*. 2018 Aug 1;27(4):336-45.
57. Guan L, Liu J, Wu XM, Chen D, Wang X, Ma N, et al. Unlocking Patients with Mental Disorders Who Were in Restraints at Home: A National Follow-Up Study of China's New Public Mental Health Initiatives. *PLoS ONE*. 2015 Apr 7;10(4).
58. Alexander J, Bowers L. Acute psychiatric ward rules: a review of the literature. *J Psychiatr Ment Health Nurs*. 2004 Oct;11(5):623-31.
59. Funk M, Bold ND. WHO's QualityRights Initiative: Transforming Services and Promoting Rights in Mental Health. *Health Hum Rights*. 2020 Jun;22(1):69-75.
60. WHO QualityRights Tool Kit. [cited 2022 Jul 16]. Available from: <https://www.who.int/publications/i/item/9789241548410>

61. Home - FOSTREN [Internet]. [cited 2022 Aug 8]. Available from: <https://fostren.eu/>

4.6. Commentary

A new era for mental health care in Nigeria.

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Keywords: Mental health Legislation; Nigeria; human rights

Nigeria's National Mental Health Act 2021 was finally signed into law on January 5, 2023, after two decades of struggle to repeal the outdated colonial mental health legislation. With this remarkable achievement, Nigeria joins the few African countries that have revised or enacted a new Mental Health legislation in line with World Health Organization's call for member countries to use legal reforms to end human rights violations against persons with mental health conditions.(1) This development comes at a critical time when the recognition and promotion of the rights of people with mental health conditions are at an all-time high.

A closer look at the journey of this legislation shows a curvy path to success. Nigeria's first mental health legislation, the Lunacy Ordinance, was enacted in 1916 and was revised in 1958 to authorize medical practitioners and magistrates to detain People with Mental Health Conditions (PMHC). The law was enacted primarily to provide custodial care, as evidence-based treatment approaches were still lacking in the country at the time. Despite subsequent advancements in mental health care, the law governed mental healthcare delivery in Nigeria for over six decades. Thus, the previous legislation predated the era of therapeutic advances in mental health and lagged behind the historical development of mental healthcare services in the country, namely, traditional (pre-colonial), transitional (1903-1954), and therapeutic phases (1954 - date). Although it was an arduous journey towards mental health law reform, the recent approval of the Mental Health law has renewed the optimism of stakeholders in Nigerian mental healthcare.

The approved law is human rights oriented and outlines in very clear terms the rights of PMHC. It builds on the limitations of previously proposed mental health bills from 2003, 2013 and 2019 by clearly prohibiting the discrimination against PMHC in the exercise of all their fundamental human rights and regulating the use of coercive measures. Unfortunately, the commendable provision of the proposed bill of 2019 to include a service user in the mental health review committee(2) was

eliminated in the approved mental health act 2021. The approved act however has other laudable provisions such as the engagement of people with lived experience as peer workers, development of community mental health services, developing self-help with digital technologies and the integration of mental health into disease-specific programs like HIV programs. It also supports collaboration between the Ministry of health and community mental health services run by Non-Governmental Organizations and faith-based organizations.

Inadequate financing is recognized to be the biggest challenge to mental health system governance in most Low-and-Middle-Income Countries (LMICs).(3) The law recognizes this significant problem and proposes a solution by creating a Mental Health Fund to provide financial resources for its objectives. The fund is expected to be financed through money approved by the National assembly and the Ministry of Health, and from donations. In May 2022, Nigeria also passed a law establishing the National Health Insurance Authority, making health insurance mandatory and creating a dedicated fund for vulnerable people including PMHCs. Considering the significant barrier posed by out-of-pocket spending for mental health care in the country, these funding schemes inspire some hope for the successful implementation of the mental health law. However, it is unclear to what extent the vulnerable fund would adequately care for the intended population given that the number of Nigerians who can afford health insurance is steadily declining as the proportion of the population living in poverty increases. (4)

Undoubtedly, a new mental health law is an essential first step in Nigeria's effort to reform mental health care; however, without a clear implementation strategy that addresses systemic issues, the country risks making the same mistakes as many LMICs that have reviewed and developed progressive Mental Health laws but have struggled to make significant progress in implementation. Treatment gap for mental health conditions in Nigeria, like most other LMICs is very high and task-shifting to less specialized health care workers through the integration of mental health care in primary health care is evidently a feasible way to close this gap.(5) Although this integration is a policy goal, the deplorable state of primary health care centers in most regions of the country (6) will pose a limitation. Thus, there is a need for the revitalization of Primary health care in all parts of the country. Given the significant shortage of mental health professionals and other health care professionals in Nigeria, it is critical to boost the workforce of trained non-specialists and non-medical services.(7) The law does not refer to mechanisms to train and foster collaboration between Traditional healers and formal health care services despite evidence of feasibility and cost-effectiveness.(8) General problems related to security and economic problems in the country must be tackled to reverse the ongoing mass emigration of health care professionals (9) from the country. A

nationwide training and orientation program for relevant stakeholders on the human-rights approach to mental health care is required and formal inter-sectoral mechanisms to facilitate engagement from national to community level should be established.(3) Perhaps the biggest barrier to the effective implementation of the new law would be the widely held misperceptions and stigma towards PMHCs. (10)

Declaration of Interests

We declare no competing interests. DOA is a PhD student receiving the support of a PhD fellowship from” la Caixa” Foundation (LCF/BQ/DI20/11780013). The funding source had no role in the commentary.

References

1. New WHO guidance seeks to put an end to human rights violations in mental health care. [cited 2023 Jan 23]. Available from: <https://www.who.int/news/item/10-06-2021-new-who-guidance-seeks-to-put-an-end-to-human-rights-violations-in-mental-health-care>
2. Aluh DO, Onu JU, Caldas-de-Almeida JM. Nigeria’s mental health and substance abuse bill 2019: Analysis of its compliance with the United Nations convention on the rights of persons with disabilities. *Int J Law Psychiatry*. 2022 Jul 1; 83:101817.
3. Petersen I, Marais D, Abdulmalik J, Ahuja S, Alem A, Chisholm D, et al. Strengthening mental health system governance in six low- and middle-income countries in Africa and South Asia: challenges, needs and potential strategies. *Health policy and planning*. 2017 Jun 1;32(5):699–709.
4. Nigeria Multidimensional Poverty Index (2022).
5. Gureje O, Abdulmalik J, Kola L, Musa E, Yasamy MT, Adebayo K. Integrating mental health into primary care in Nigeria: report of a demonstration project using the mental health gap action programme intervention guide. *BMC Health Serv Res*. 2015 Jun 21;15(1).
6. Aregbeshola BS, Khan SM. Primary Health Care in Nigeria: 24 Years after Olikoye Ransome-Kuti’s Leadership. *Front Public Health*. 2017 Mar 13;5(MAR):48.
7. Gureje O, Nortje G, Makanjuola V, Oladeji B, Seedat S, Jenkins R. The role of global traditional and complementary systems of medicine in treating mental health problems. *Lancet Psychiatry*. 2015 Feb 1;2(2):168–77.
8. Gureje O, Appiah-Poku J, Bello T, Kola L, Araya R, Chisholm D, et al. Effect of collaborative care between traditional and faith healers and primary health-care workers on psychosis outcomes in Nigeria and Ghana (COSIMPO): a cluster randomised controlled trial. *The Lancet*. 2020 Aug 29;396(10251):612–22.
9. Lawal L, Lawal AO, Amosu OP, Muhammad-Olodo AO, Abdulrasheed N, Abdullah K ur R, et al. The COVID-19 pandemic and health workforce brain drain in Nigeria. *International Journal for Equity in Health*. 2022 Dec 1;21(1):1–6.
10. Gureje O, Lasebikan VO, Ephraim-Oluwanuga O, Olley BO, Kola L. Community study of knowledge of and attitude to mental illness in Nigeria. *Br J Psychiatry*. 2005 May; 186:436–41.

4.7. Original research article 6

Contextual factors influencing the use of coercive measures in Portuguese mental health care.

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Contextual factors influencing the use of coercive measures in Portuguese mental health care

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Abstract

The use of coercive measures in mental health care is an important indicator of the quality of care being provided, and non-patient-related factors are increasingly recognized to contribute to their use. The study aimed to explore the perspectives of mental health care professionals who have first-hand experience with the use of coercion on the contextual factors that influence the use of coercion in the Portuguese mental health care. Five focus group discussions were conducted among 23 doctors and 17 nurses from five psychiatric departments in urban and rural regions of Portugal. Discussions were audio recorded, transcribed, and analyzed with the aid of MAXQDA. Four broad themes related to insufficient resources, staff-related factors, inefficient services, and socio-legal factors were derived. Participants highlighted how inadequate structures, staff shortages, staff attitudes, a lack of training, restrictive ward rules, an inefficient organization of services, the mental health legislation, and public attitudes contributed to the use of coercive measures. The COVID-19 pandemic complicated existing shortfalls in the system and increased the use of coercive measures. The study confirms that the use of coercive measures in mental health care is influenced by factors that are independent of patient characteristics. Addressing existing systemic problems is crucial for the successful implementation of interventions to reduce coercion in mental health care.

Keywords: Coercion, Contextual factor, Involuntary admission, Restraint, Portugal

INTRODUCTION

Coercion has been defined as “the act or practice of using force or threat to persuade a person to do something”(1) . In mental health care, the concept encompasses a wide range of activities, spanning from subtle persuasion to overt compulsion, which may involve the use of restrictive devices (2,3). A country's mental health legislation usually regulates formal coercive measures like involuntary treatment. The United Nations human rights system is divided on the question of whether coercive psychiatric care, can ever comply with human rights standards. Some believe that coercive care can be justified in life-threatening situations if certain criteria are met and legal safeguards are in place, while others believe that it is never justified (4). This disagreement led to the “Geneva impasse”. Despite these debates, the use of coercion in mental health care is apparently on the rise (5), and there is a consensus to reverse this trend.

Portugal is a southwestern European country with a total resident population of about 10.5 million. Efforts developed since the 1970s led to the creation of mental health centres in the community and greater articulation of specialized mental health care with primary care. In 1992, the integration of community-based services in general hospitals and the strengthening of psychiatric hospitals led to a step backward in the process of modernizing mental health services. However, since 1995, a new mental health law has been passed and a mental health policy has been in place, with the goals of advocacy, promotion, prevention, treatment, and rehabilitation, as well as a strategy to ensure the transition to community-based mental health care. Although Portugal's National Mental Health Plan (2007-2016) enabled important advances in the restructuring of mental health care from hospitals to outpatient community-based services, hospital care continued to consume most of the resources allocated for mental health and is still the mainstay of the Portuguese mental health system (6,7). The economic crises of 2008 had significant impacts on the implementation of the mental health plan, with consequent insufficient funding for community-based services. This weakness is particularly worrisome given that Portugal has one of the highest prevalence rates of mental disorders in Europe (7) . The mental health law of 1998 (Law 36/98) defines the principles governing the compulsory detention of people with mental disorders and their rights (8). The criteria for compulsory detention and treatment are that the person has a serious mental disorder by which they pose a risk to themselves or others, refuses to consent to the required medical care, lacks the mental capacity to understand the meaning and implications of consent, and that the absence of treatment could cause their condition to significantly worsen.

Data on the use of coercive measures in Portugal are scarce, and not many studies have explored the prevalence and risk factors for coercion in mental health care in Portugal. The available study on the

risk factors for involuntary admissions in Portugal identified having a psychotic disorder, being male, and having secondary and higher education as variables that increased the risk of being admitted involuntarily (9). The study found a variation among psychiatric services, implying that factors other than those related to patients may have influenced the rate of involuntary hospitalizations (9). For coercive practices to be minimized, it is important to identify the factors that increase the likelihood of their use in the care of patients in the specific context in which they occur. Although patients' socio-demographic characteristics and clinical characteristics are well-documented risk factors for the use of coercion (10,11), non-patient-related factors such as service-related characteristics and characteristics of the mental health care providers seem to be implicated in the problem (12–14). It is crucial to recognize these contextual factors because they are more modifiable and could guide the development and implementation of interventions to reduce coercion in the setting. The accounts of mental health professionals who have first-hand experience with the use of coercion could significantly contribute to our understanding of the problem in the Portuguese context. The current study aimed to qualitatively explore the perspectives of Portuguese mental health care professionals on the contextual factors that influence the use of coercion in mental health services.

METHODS

Study design

The study employed a qualitative design to allow in-depth exploration of the problem in the study setting. The assumption underlying a qualitative approach is that knowledge and reality are complex and impacted by the sociocultural setting as well as personal values, beliefs, and opinions (15). Focus groups were chosen as the appropriate method for exploring the opinions of mental health professionals since they encounter the phenomenon of coercion in the natural setting and context in which it occurs (16). Focus groups open up many channels of communication, allowing members to express their thoughts and opinions in the presence of others who have had similar experiences (17). A synergistic effect of the group setting is that it stimulates thoughts and verbal contributions. Reporting of the methods follows the recommendations of the consolidated criteria for reporting qualitative studies (COREQ) (18).

Recruitment of Study Participants

Doctors and nurses who had worked for at least six months in the selected psychiatric departments were eligible to participate in the study. Participant recruitment for the study was purposive taking into account gender and years of professional experience. The participants were selected by key

contacts (a mental health professional co-opted into the research team in each hospital) in such a way as to favor the richness and heterogeneity of the discussion. (See Table IV-7.1)

Study Setting

Five psychiatric departments serving different catchment areas of three regions of Portugal were purposively selected to reflect different mental health service organizations serving different populations. One of the psychiatric departments was from the rural region of Alentejo, while the other four were from the urban metropolitan regions of Lisbon and Porto. All the psychiatric departments are part of general hospitals and have a varying range of community mental health teams.

Data collection

The focus group discussions were conducted between February 2022 and February 2023. Each discussion lasted between 45 and 60 minutes and was facilitated by a semi-structured guide that functioned as a flexible framework for exploring study questions using open-ended questions to elicit unconditioned responses. The guide also helped each focus group discussion to be conducted uniformly. The focus groups took place in halls within the hospitals outside the wards. The focus group discussions were facilitated by a trained research assistant and were audio-recorded. The conversations were characterized by fluidity and dynamism, with sufficient interaction among the participants. The questions focused on what factors, other than the patients' characteristics, contributed to the use of coercion. Coercion in the study's context included involuntary admission, and the use of mechanical and chemical restraints. Seclusions were not routinely practiced in the services included. Memos were made throughout the data collection and data analysis to reflect thoughts and ideas about the discussions, interpretation of preliminary findings, and documentation of the research process (19).

Data analysis

Thematic analysis was employed. Audio-recordings of the focus group discussions were transcribed and translated from Portuguese to English language. A thorough reading and rereading of the transcripts was followed by the coding, synthesizing, and integration of text fragments into categories based on similarity of meaning. The data were coded using a standard inductive approach, and the coding process was continued until no new concepts could be derived from the data. Similar codes were grouped together, and themes were identified. After discussion between two authors, the theme was confirmed, and coding consistency was checked to verify trustworthiness. The themes were also checked by some focus group participants to ensure that no information was misrepresented. Quotes

were selected to exemplify each theme and to support the study findings (20). All data were analyzed with the aid of MAXQDA (21).

Research team and Reflexivity

The research team is comprised of both clinician researchers and non-clinician researchers, and most of the authors have a keen interest in mental health and human rights. In keeping with a reflexive thematic analysis (22,23), we have made a conscious effort to maintain self-awareness and transparency regarding how our roles, perspectives, and experiences may have impacted our work (22). Data was collected and analyzed by non-clinician researchers.

Ethical approval and conduct

The Research Ethics Committee of Nova Medical School, Nova University of Lisbon (100/2021/CEFCM), and the Ethics committee of each participating hospital gave their approval for the study and all documented procedures. Before the discussion started, each study participant provided written informed consent.

Results

The study participants ranged in age from 64-24 years old and had practiced for between six months and 38 years. More details about the study participants can be found in **Table IV-7.1**.

Table IV-7.1: Socio-demographic characteristics of Focus Group participants

S/N	Variable	Frequency	Percentage
1	Gender		
	Male	18	45.0
	Female	22	55.0
2.	Profession		
	Doctor	23	57.5
	Nurse	17	42.5
3	Friend/Relative with Mental Health Condition		
	Yes	24	60.0
	No	16	40.0
4	Involved with a coercive measure in the past 6 months		

	Yes	33	82.5
	No	7	17.5
5	Received any training on reducing coercion		
	Yes	7	17.5
	No	33	82.5
		Mean	SD
6	Age	36.69	9.52
7	Years of Experience	10.98	9.21

Four broad themes were derived from the focus group discussions: inadequate resources, staff-related factors, inefficient services, and socio-legal factors. Quotes were selected to exemplify each theme.

Inadequate resources

Most professionals felt that inadequate resources to respond to the demands of service users was a significant contextual factor that led to the employment of coercive measures in mental health care.

Structural resources

A central theme across all the services was how inadequate infrastructure contributed to the use of coercion. The participants felt that the physical spaces and architecture within the mental health services were not ideal for psychiatric admissions. Patient anxiety and feelings of being trapped were exacerbated by a lack of outdoor space and opportunities for activities. Lack of space in the wards also meant that patients had to share rooms with reduced privacy and increased possibilities of conflict, resulting in the use of coercive measures.

“...the infrastructure of the service is not the most adequate nor was it designed for a psychiatric, mental health service (...) the term they use the most. "I feel trapped here and this is worse than a prison." In a prison they have exits to the yard.” (FGD 1, Nurse)

“When these patients have criteria for admission, (...), they can't get admitted (sic) because there are no vacancies. So, the patients stay in the emergency room throughout the days. It also increases the likelihood of more coercive practices, doesn't it?” (FGD 5, Doctor)

Human resources

Low staff-to-patient ratios resulted in less time being invested in verbal de-escalation. They noted that there were few nurses with specialization in mental health, and other mental health professionals like occupational therapists, psychologists, and social workers. Sometimes, nurses had to undertake the duties that belonged to these auxiliary professionals, which left them with less time to build interpersonal relationships with their patients. Heavy task loads could result in treatment delays and, consequently, increased agitation, leading to the use of coercive measures. Some professionals also mentioned how poor remuneration decreased motivation and job satisfaction.

“...even the lack of staff I think influences a lot because having 6 doctors and a nurse in an emergency room with 15 patients doesn't make much sense (...) and maybe due to staff turnover in recent years, right? But maybe it's all connected” (FGD 3, Doctor)

“I think that where we work there is clearly a shortage of professionals who deal with the occupational activity part (...) that's a factor, in my opinion, that contributes a lot, yes.” (FGD 2, Doctor)

“..... and the professional also has to be remunerated in a way that he feels values his work. If the professional doesn't feel well, in any area, you will be badly served...” (FGD 4, Doctor)

Staff-related factors

It was acknowledged that factors related to the mental health professionals themselves were relevant to the problem. In all the focus group discussions, a lack of training on dealing with aggression and alternative strategies to coercion was reiterated as a factor contributing to the use of coercion.

Lack of training

All the professionals unanimously reported a lack of training on strategies to reduce the use of coercive measures. They affirmed that being trained in dealing with aggression could avert the use of coercive measures and increase confidence in maintaining safety during aggressive episodes. They emphasized the need for training and support, especially for new staff, the police, and general health care staff, who may be the first to have contact with patients with psychiatric emergencies.

“...professionals sometimes, due to lack of training, end up, instead of starting a negotiation, starting this type of measure right away.” (FGD 4, Nurse)

“...on the technical level, the policemen come, some are sensible, some are not, because they are not trained.” (FGD 1, Nurse)

“I don't think anybody received training in this sense (...) we know that there are techniques that work and techniques that don't work, decrease the tension and decrease the amount of coercion...I don't think any of us have received training” (FGD 2, Doctor)

Attitudes & subjectivity

The participants noted that staff experience, personality, and emotions can all have an impact on how coercion is used. Staff may be more vigilant and prone to using coercive measures as a result of previous violent incidents. A lack of objective criteria to use coercive measures meant that using them was left to the discretion of the staff. Some professionals noted that stigma among staff could play a role in the use of coercive measures.

“For example, I don't know, I've had situations throughout my professional experience where personal emotion was affected by the work... Two people came in in the same week, more or less the same story, this one would be compulsive, this one isn't.” (FGD 3, Nurse)

“The clinician may (...), having knowledge that the patient has already needed a compulsory admission, has already needed coercive measures, may be something that awakens in us the need to act more in this sense.” (FGD 3, Nurse)

“...plus, the health professionals' own stigma, we are people with our limitations, prejudices stigma (...) and this is sometimes reflected in the way we approach patients” (FGD 4, Doctor)

Inefficient Services

The use of coercive measures was also impacted by the organization of mental health services, the emergency room setting, and restrictive ward rules that created conflicts and raised the likelihood of using coercive measures to preserve safety.

Mental health system organization

The organization of mental health services and poor integration with social services were implicated in the employment of coercive measures. Having just one central psychiatric emergency room as the key unit in the pathway to all admissions was notably a factor in a particular region of the country. Professionals also observed that the mental health system's bureaucratic procedures constituted major barriers to early help-seeking, and that inadequate service integration and poor involvement of primary health care meant that entry into mental health care was frequently through emergencies. Disruptions in treatment for discharged patients due to the inadequately developed community mental

health services, lack of housing, and employment opportunities were also highlighted as significant factors that increased the likelihood of relapse and subsequent involuntary admissions.

“So I think that this aspect, this organization of the Emergency Department in a single place, I have always been very critical about this It's one thing to have a patient get to know you, and receive him on admission, and he gets to know us, and this facilitates some decisions.” (FGD 3, Doctor)

“I mean, so, our role in the community is fundamental and I think there is a failure -uh failure? (...) The Mental Health Nurse in the community is extremely important.” (FGD3, Nurse)

“...there are few resources in society for the occupation and even for the professional training of our patients often leads them to spend their days unoccupied, literally speaking. (...) the re-admissions were more and more and in a shorter period of time. Why? Because they spent 24 hours without any kind of occupation, without any kind of responsibility, which also ends up promoting (...) destructive behaviors.” (FGD 1, Nurse)

Emergency room environment

Coercion was most widespread in emergency settings, where acute cases arrived first. Patients typically met non-specialist healthcare professionals who had little to no experience handling psychiatric emergencies and often resorted to coercion because the psychiatric emergency area was typically located in the general emergency area. The fact that many of those brought to the emergency room had no prior contact with services or professionals contributed to increased agitation and aggression, which is typically managed with coercive measures, especially when there are several patients presenting at the same time. Lack of space in the emergency area also meant that many patients with differing severity of symptoms had to be kept in the same open area. Particularly for services in urban areas, patients in need of admission had to wait for some days in the emergency room until a bed was available in the ward.

“Regarding the emergency services.... the environment has a great influence on the management of the acute illness of the psychiatric patient. When we don't have places prepared to go with tranquility, without being involved in the "confusion" of an emergency service, it becomes more and more difficult to act within this area. And yes, we often use these coercive attitudes just to guarantee security and to ensure, many times, that the patient is observed.” (FGD 5, Nurse)

“In truth, the conditions, at least here in the North (...) are very complicated (...) the physical space does not allow it, in our emergency room ... On our part, we also have pressure to observe patients, because we have several patients waiting, ..., it's difficult to verbally restrain them, which is the first

line of action. And often, this attempt, due to... the reduced space and the team, puts the patient at risk or puts others at risk. So, naturally, it ends up being the strategy that is used because, unfortunately, we have no other available.” (FGD 3, Doctor)

“.... factors that perpetuate that patients stay in the emergency room, which is often the lack of social resources that allow for quick discharge from the hospitalization and that make the emergency room more overcrowded and more difficult after admitting the patient without delays.” (FGD 1, Doctor)

Restrictive ward rules

Professionals from all five services agreed that stringent rules in the ward led to conflicts, agitation and aggression which contributed to the use of coercive measures. Restricted access to phones, limited visitations from family and friends, and the hospital policy of wearing pajamas in the wards all contributed to feelings of dehumanization and frustration in the patients.

“Communication with the family, it's just one hour (...) the depersonalization of people, hospital uniforms, often in poor conditions, or sometimes they are cold, the conditions are not the best.” (FGD 5, Doctor)

“...the importance of simple things like a coffee, the various trips to smoke, increase a little bit the phone time, things that obviously not only produce comfort but also confidence...”. (FGD 4, Doctor)

“Psychiatric internment is sometimes very restrictive in terms of measures, the patient can't have a telephone, patients can't have a bed, they are denied a series of things, they can't have their own clothes, they can't, they can't, they can't, they can't, it's a whole series of things that they can't do....” (FGD 2, Doctor)

Socio-legal factors

This theme reflects how mental health laws, public attitudes, and the pandemic contribute to the use of coercion in mental health care.

Mental health legislation

Many professionals felt that the existing laws related to compulsory admission and treatment were not specific enough and gave room for subjectivity in interpretations, while other professionals felt that the laws justified the use of coercive measures to ensure safety.

“This happened with the current Law (...) one thing is written, and a judge from there understood one thing, a doctor from there understood the opposite.” (FGD 4, Doctor) _

“I think that the application of the Mental Health Act in the internment... diverges a little bit between professionals due to the subjectivity that is inherent to the Mental Health Act itself. I have felt this ambiguity in the application of compulsory internment.” (FGD3, Doctor)

“I must emphasize that the coercive measures are to protect the person, third parties of course, but the person, essentially... and they have to exist, however much it pains us to introduce them sometimes, but they have to exist and are part of a work that was developed in 1998 with the Mental Health Law to protect these people.” (FGD 2, Doctor)

The Pandemic effect.

The COVID pandemic had a significant impact on the delivery of mental health care by reducing available human resources and increasing restrictions for patients already on admission. At the point of admission, patients were forced to isolate to reduce the risk of infecting others in the wards.

“There has been an unfavorable evolution, especially when it comes to human resources and the emergency service. Regarding the fact that there are fewer people to do shifts.” (FGD 1, Doctor)

“One factor to the hospitalization that I think has been a facilitator to coercive measures has been the 5- and 7-day isolations that are forced on the users that come in and it has been a great difficulty for the teams to deal with that... the absence of meetings with relatives or reference persons of the patient has also made this very difficult.” (FGD 2, Nurse)

Following the pandemic, there were long term patients with chronic psychoses who were lost in the middle of the pandemic, their appointments were cancelled, etc... many of them spent several months without taking medication, without even being seen by a relative, let alone a health professional.... the pandemic increased the use of compulsory internment here. (FGD 4, Doctor)

Public attitudes and stigma

The stigma and negative attitudes toward psychiatric care were identified as barriers to early help-seeking. Conversely, increased awareness of mental health problems could have contributed to greater demand for mental health services without a corresponding increase in resources. The stigma associated with psychiatric admissions was noted to be reinforced by the way police officers transported patients to the emergency room, prompting them to become more aggressive and increasing the risk of deploying coercive measures.

“...many times, the idea of having to stay in a psychiatric hospital leads the person and the family to refuse, forcing them to take a coercive measure, due to their own perception of what it means to be hospitalized in psychiatry.” (FGD 2, Doctor)

“There's more and more awareness and there's more talk about mental health. People know that even if the person doesn't want to go, they can ask the doctor and the doctor informs them, i.e., activates the means for the person to be seen in the emergency room.” (FGD 5, Doctor)

“...and the fact that the police come to the door of the person, uniformed, with some apparatus, many times <noticeable> to the neighbors and to the people that live near the patient, also makes this a very intense experience, quite unpleasant, quite stigmatizing, and also promoting some agitation (...) that has to end in a physical and chemical restraint, (...), upon arrival at the emergency room.” (FGD 1, Doctor)

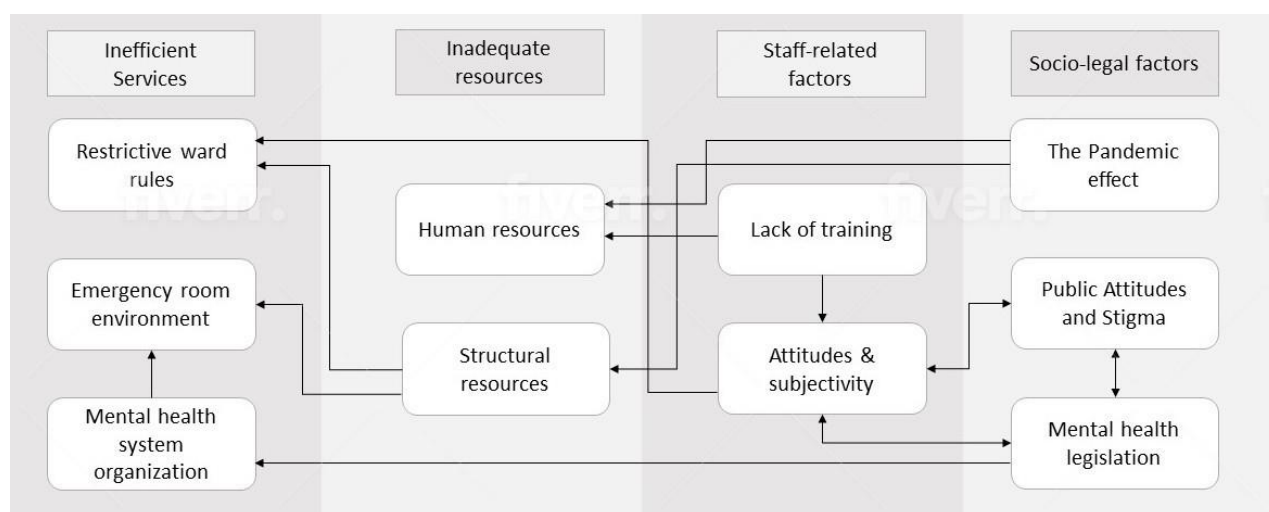


Fig 1V-7.1: A diagram of contextual factors at play in the use of coercion in Portuguese mental health care

Discussion

The relevance of context in understanding the phenomenon of coercion in mental health care has been highlighted by previous studies (12,24,25) A contextualized analysis of this issue in Portugal is important to identify the specific range of influencing factors that contribute to the use of coercion in mental health care in the country as well as the precise ways to reduce it. This study explored the

views of mental health professionals on which contextual factors contributed to the use of coercive measures in Portuguese mental health care.

Insufficient resources were highlighted as significantly contributing to the use of coercive measures in the study setting. In addition to having a relatively low GDP per capita in comparison to other European countries, Portugal was greatly affected by the Great Economic Recession and adopted several austerity measures, including a tighter public health budget. However, the significant increases in psychiatric service utilization, use of psychotropic medications (26), and involuntary admissions (9) during this recession suggest that demand for services exceeded the supply of resources. The relationship between adverse economic conditions and coercive measures is well documented (27,28). Some participants in this study cited inadequate compensation as a factor influencing the use of coercive measures, which is consistent with the suggestion that inadequate payment mechanisms of Portuguese mental health care providers may be a significant barrier to best practices and the full realization of proposed mental health plans (29). The structural deficiencies, such as the lack of outdoor spaces, could be because some of the psychiatric departments were not designed for psychiatric care but rather adapted for use when the country integrated mental health facilities into general hospitals. While this action is laudable and in keeping with international recommendations, more work needs to be done to make the environment more appropriate for psychiatric care. Low staff-to-patient ratios were notably influential to the use of coercive measures. Although a Japanese study (30) found that in reality both seclusion and mechanical restraint were used more frequently in wards with more nurses, mental health professionals from studies conducted globally consistently feel that coercive measures are associated with low staffing levels (31–33). Staffing levels are related to perceived concerns with the causes and responses to conflict and aggression (33). Additionally, low staff-to-patient ratios lead to limited opportunities for establishing a therapeutic alliance and engaging in collaborative decision-making, resulting in patients feeling more coerced (34,35). Patients themselves have highlighted that effective communication with mental health professionals can help prevent the need for coercion (36,37). The two opposing trends of funding cutbacks with subsequent staff shortages and increasing pressure to reduce the use of coercive measures despite these insufficiencies have been brought to light in previous studies(33,38).

Theoretically, the country's mental health plan outlines an efficient pathway to care through referrals from primary health care and a network of community mental health teams. In reality, most psychiatric admissions are through emergency settings, bypassing primary care, community mental health care and the outpatient clinics in each psychiatric service (39). The emergency care pathway is not optimal because a lack of familiarization between patients and staff causes heightened agitation

on the part of patients and hypervigilance on the part of professionals who want to maintain safety. Resolving this problem could significantly reduce the need for coercive measures. Stringent ward rules were also identified as a contributing factor. This may have a cultural undertone reflecting the remnants of the country's fascist era, which was characterized by strict rules for the entire population; however, in the context of limited human and structural resources, as well as a lack of training, staff are understandably more likely to enact restrictive rules as a safety net to protect themselves and other patients. Restrictive ward rules have been documented to lead to increased use of restraints within wards and a negative ward milieu (40). Restrictive rules without clarity are known to increase feelings of being incarcerated, trapped, dehumanized, and stigmatized among patients (40). An Italian study found that patients and staff members' perceptions of safety were affected by ward rules, in particular the number of visiting hours and possibility of having a smartphone (41). Although the study did not seek to compare the views of doctors and nurses, it was interesting to find that more doctors (who typically spend less time in the wards with patients) than nurses felt that the ward rules were restrictive and contributed to the use of coercive measures.

The study participants acknowledged the role of attitudes of mental health professionals in the problem. Staff attitudes regarding coercion and personality traits are known to influence how aggression is managed, however, this is a complicated topic with mixed results (42–45). Lack of training on alternative strategies to coercion was echoed by all the professionals as a significant factor in the problem. Although staff training offers the strongest evidence of effectiveness in minimizing the use of coercion in mental health treatment, it is challenging to execute these alternative strategies in the context of limited human resources, as highlighted by a previous study conducted in England (33). Participants emphasized the importance of providing training to all key stakeholders, including police officers and non-medical workers involved in mental health care. A previous study in Portugal reported that police officers had negative perceptions of those with mental health conditions but acknowledged the need for specialized training in handling those in mental health crises (46). Public attitudes and stigma were also mentioned as influencing factors in the use of coercive measures. Stigma is known to be a significant barrier to early help-seeking, precluding the need for coercive measures (47,48). Stigma has also been linked to the endorsement of coercive measures in mental health care (49,50). Thus, stigma reduction must be integral to the movement towards reducing coercive measures in mental health care.

More doctors cited the country's legislation as an influencing factor. This is not surprising since the country's current legislation regulates involuntary admissions, but not other coercive measures commonly used by nurses, but which must be approved by the doctors, such as the use of restraints

and seclusion. The view on subjective interpretations of the law points out the need for more explicit policies and guidelines on the use of coercive measures in the country. A previous study among Portuguese nurses reported low levels of knowledge of the indications, implementation, and legal framework of the use of physical restraint and chemical restraint on patients (51) buttressing the need for guidelines and training on the use of coercive measures for both doctors and nurses. Currently, a new legislation is underway that regulates the use of restraints and includes mechanisms such as advanced care planning and shared decision-making. This is a commendable move with compelling evidence on reducing coercion (52), but without a parallel increase in mental health care human resources, this could mean additional administrative work for already overburdened mental health care practitioners, which could have a boomerang effect.

The findings of this study are notable for demonstrating how interwoven the contextual factors that contribute to the use of coercion in mental health care are (Fig. 1). Insufficient resources are reflected in the inadequate space available for patients, low staff-to-patient ratios, and the lack of training of staff. The inadequacy of resources was compounded by the COVID-19 pandemic, and probably by earlier economic recessions in the country. Lack of training of staff is reflected in restrictive ward rules, mostly made to promote safety in wards but ironically promotes conflicts that need to be resolved by coercive measures. Lack of staff training is also evident in the different attitudes and subjectivity of staff when confronted with similar aggressive episodes. The mental health legislation is closely related with how the services are organized and was particularly noted to be inefficient in one of the northern regions of the country. The mental health legislation also justified the use of coercive measures for some staff and has been reported to influence the endorsement of coercive measures in studies conducted in the United States (53,54).

The study findings present important policy implications. To avoid emergency admissions being the first route of entry for mental health care, primary health care collaboration in mental health care should be strengthened. Specific measures, such as assertive community treatment and improved collaboration with social services and local sociocultural organizations, should be implemented to encourage continuity of care, earlier detection, and referral of patients. This approach aligns with the patients' desire for alternative crisis intervention methods that avoid hospitalization. A recent meta-aggregation of qualitative studies on patient experiences of coercion revealed that patients appreciate the ability to stay in their familiar environment, surrounded by their relatives, when dealing with crisis situations(55). These will require more human resources for mental health care, especially nurses with a specialization in mental health, psychologists, and occupational therapists. Routine training of all professionals including the police and other non-medical staff involved in mental health care on

communication skills, alternative strategies to coercion and the human rights approach should be implemented. Staff training will boost confidence and hopefully be reflected in more flexible ward rules that prevent conflicts and promote a better ward milieu. There is an urgent need for information systems to document coercive measures for regular monitoring and surveillance of coercive measures in Portuguese mental health services. Despite growing awareness of problems related to mental health, stigma towards more severe mental health conditions persists, emphasizing the need for the country to strengthen stigma reduction programs.

The strength of the present study lies in the inclusion of views of doctors and nurses from different regions of the country. Some limitations are acknowledged in the study. Although efforts were made to capture professionals from different services in urban and rural areas, it is possible that the study findings may not reflect the reality of all mental health services in the country. Informal coercive measures such as negotiations and leverage were not explored in this study.

Conclusion

The study demonstrates how the use of coercive measures in mental health care can be influenced by factors that are independent of patient characteristics. It highlights how insufficient resources, staff-related factors, including a lack of training, inefficient services, and socio-legal factors all contribute to the use of different coercive measures in mental health care. The COVID-19 pandemic exacerbated the underlying weaknesses of the mental health system, increasing the necessity for the use of coercive measures. Systemic problems in the mental health care system must be addressed for the effective delivery of high-quality mental health care and the successful implementation of strategies to reduce coercion.

References

1. Szmukler G. Compulsion and “coercion” in mental health care. *World Psychiatry*. 2015;14(3):259.
2. Gooding P, McSherry B, Roper C. Preventing and reducing ‘coercion’ in mental health services: an international scoping review of English-language studies. *Acta Psychiatr Scand*. 2020;142(1):27–39.
3. Szmukler G, Appelbaum PS. Treatment pressures, leverage, coercion, and compulsion in mental health care. 2009;17(3):233–44.
4. Martin W, Gurbai S. Surveying the Geneva impasse: Coercive care and human rights. *Int J Law Psychiatry*. 2019 May 1; 64:117–28.
5. Sashidharan SP, Saraceno B. Is psychiatry becoming more coercive? *BMJ*. 2017 Jun 22;357.
6. Brown JB. Mapping and understanding exclusion: institutional, coercive and community-based services and practices across Europe. 2018. Available from: www.mhe-sme.orgwww.mhe-sme.org
7. Caldas-de-Almeida JM. Towards community-based and socially inclusive mental health care. A situation analysis and recommendations for action. 2015.
8. Almeida T, Molodynski A. Compulsory admission and involuntary treatment in Portugal. *BJPsych Int*. 2016 Feb;13(1):17.
9. Silva M, Antunes A, Azeredo-Lopes S, Loureiro A, Saraceno B, Caldas-de-Almeida JM, et al. Factors associated with involuntary psychiatric hospitalization in Portugal. *Int J Ment Health Syst*. 2021 Apr 20;15(1):37.
10. Walker S, Mackay E, Barnett P, Sheridan Rains L, Leverton M, Dalton-Locke C, et al. Clinical and social factors associated with increased risk for involuntary psychiatric hospitalisation: a systematic review, meta-analysis, and narrative synthesis. *Lancet Psychiatry*. 2019; Dec;6(12):1039-1053.
11. Beames L, Onwumere J. Risk factors associated with use of coercive practices in adult mental health inpatients: A systematic review. *J Psychiatr Ment Health Nurs*. 2022 Apr;29(2):220-239.
12. Mann K, Gröschel S, Singer S, Breitmaier J, Claus S, Fani M, et al. Evaluation of coercive measures in different psychiatric hospitals: the impact of institutional characteristics. *BMC Psychiatry*. 2021 Dec 1;21(1):1–11.
13. Wierdsma AI, Mulder CL. Does mental health service integration affect compulsory admissions? *Int J Integr Care*. 2009 Sep 9;9(3).
14. Dahan S, Levi G, Behrbalk P, Bronstein I, Hirschmann S, Lev-Ran S. The Impact of “Being There”: Psychiatric Staff Attitudes on the Use of Restraint. *Psychiatr Q*. 2018 Mar 1;89(1):191–9.
15. Pereira J, li F, Teresa R, Campos O. Narrativas: utilização na pesquisa qualitativa em saúde. *Rev Saude Publica*. 2008 Dec;42(6):1090–6.
16. Prieto Rodríguez MA, March Cerdá JC. Paso a paso en el diseño de un estudio mediante grupos focales. *Aten Primaria*. 2002 Jan 1;29(6):366–73.

17. Schulze B, Angermeyer MC. Subjective experiences of stigma. A focus group study of schizophrenic patients, their relatives and mental health professionals. *Soc Sci Med*. 2003 Jan;56(2):299–312.
18. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care*. 2007 Dec;19(6):349–57.
19. Tobin GA, Begley CM. Methodological rigour within a qualitative framework. *J Adv Nurs*. 2004 Nov 1;48(4):388–96.
20. Eldh AC, Årestedt L, Berterö C. Quotations in Qualitative Studies: Reflections on Constituents, Custom, and Purpose. 2020 Nov 2;19.
21. Software V. MAXQDA 2022. Software. 2022.
22. Braun V, Clarke V. Reflecting on reflexive thematic analysis. 2019 Aug 8;11(4):589–97.
23. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol*. 2006;3(2):77–101.
24. Boumans CE, Egger JIM, Souren PM, Mann-Poll PS, Hutschemaekers GJM. Nurses' decision on seclusion: patient characteristics, contextual factors and reflexivity in teams. *J Psychiatr Ment Health Nurs*. 2012 Apr;19(3):264–70.
25. Hachul H, Andersen ML, Bittencourt LRA, Santos-Silva R, Conway SG, Tufik S. Does the reproductive cycle influence sleep patterns in women with sleep complaints? *Climacteric*. 2010; Dec;13(6):594–603.
26. Silva M, Antunes A, Azeredo-Lopes S, Cardoso G, Xavier M, Saraceno B, et al. How did the use of psychotropic drugs change during the Great Recession in Portugal? A follow-up to the National Mental Health Survey. *BMC Psychiatry*. 2020;20(1):1–9. 20-1
27. McFarland BH, Collins JC. Medicaid cutbacks and state psychiatric hospitalization of patients with schizophrenia. *Psychiatric Services*. 2011 Aug 1;62(8):871–7.
28. Smith S, Gate R, Ariyo K, Saunders R, Taylor C, Bhui K, et al. Reasons behind the rising rate of involuntary admissions under the Mental Health Act (1983): Service use and cost impact. *Int J Law Psychiatry*. 2020 Jan 1; 68:101506.
29. Perelman J, Chaves P, de Almeida JMC, Matias MA. Reforming the Portuguese mental health system: an incentive-based approach *Int J Ment Health Syst*. 2018 May 30; 12:25.
30. Fukasawa M, Miyake M, Suzuki Y, Fukuda Y, Yamanouchi Y. Relationship between the use of seclusion and mechanical restraint and the nurse-bed ratio in psychiatric wards in Japan. *Int J Law Psychiatry*. 2018 Sep 1; 60:57–63.
31. Aluh DO, Ayilara O, Onu JU, Pedrosa B, Silva M, Grigaitė U, et al. Use of coercion in mental healthcare services in Nigeria: Service providers' perspective. *J Ment Health*. 2023 Feb 27:1-9.
32. Krieger E, Moritz S, Lincoln TM, Fischer R, Nagel M. Coercion in psychiatry: A cross-sectional study on staff views and emotions. *J Psychiatr Ment Health Nurs*. 2021 Apr 1;28(2):149–62.

33. McKeown M, Thomson G, Scholes A, Jones F, Baker J, Downe S, et al. "Catching your tail and firefighting": The impact of staffing levels on restraint minimization efforts. *J Psychiatr Ment Health Nurs*. 2019;26(5–6):131–41.
34. Prebble K, Thom K, Hudson E. Service Users' Experiences of Voluntary Admission to Mental Hospital: A Review of Research Literature. *Psychiatry Psychol. Law*. 2014 May 4;22(3):327–36.
35. Sheehan KA, Burns T. Perceived coercion, and the therapeutic relationship: a neglected association? *Psychiatr Serv*. 2011;62(5):471–6.
36. Olofsson B, Jacobsson L. A plea for respect: involuntarily hospitalized psychiatric patients' narratives about being subjected to coercion. *J Psychiatr Ment Health Nurs*. 2001 Aug 1;8(4):357–66.
37. Stylianidis S, Peppou LE, Drakonakis N, Iatropoulou G, Nikolaidi S, Tsikou K, et al. Patients' views and experiences of involuntary hospitalization in Greece: a focus group study. *Int. J. Cult. Ment. Health*. 2017 Oct 2;11(4):425–36.
38. McKeown M, Wright K, Mercer D. Care planning: a neoliberal three card trick. *J Psychiatr Ment Health Nurs*. 2017;24(6):451–60.
39. Ramos J, Santos J, Jorge S, Maia T, Cardoso G. Pathways to care for first psychiatric admissions in Lisbon. *Psychiatr Serv*. 2015 Aug 1;66(8):888–91.
40. Alexander J, Bowers L. Acute psychiatric ward rules: a review of the literature. *J Psychiatr Ment Health Nurs*. 2004 Oct;11(5):623–31.
41. Corbetta M, Corso B, Camuccio CA. Rules and ward climate in acute psychiatric setting: Comparison of staff and patient perceptions. *Int J Ment Health Nurs*. 2022 Jun 1;31(3):611.
42. Aasland OG, Husum TL, Førde R, Pedersen R. Between authoritarian and dialogical approaches: Attitudes and opinions on coercion among professionals in mental health and addiction care in Norway. *Int J Law Psychiatry*. 2018 Mar 1; 57:106–12.
43. Krieger E, Moritz S, Lincoln TM, Fischer R, Nagel M. Coercion in psychiatry: A cross-sectional study on staff views and emotions. *J Psychiatr Ment Health Nurs*. 2021 Apr 1;28(2):149–62.
44. Morandi S, Silva B, Mendez Rubio M, Bonsack C, Golay P. Mental health professionals' feelings and attitudes towards coercion. *Int J Law Psychiatry*. 2021 Jan 1; 74:101665.
45. Rose D, Evans J, Laker C, Wykes T. Life in acute mental health settings: experiences and perceptions of service users and nurses. *Epidemiol Psychiatr Sci*. 2015 Feb 26;24(1):90.
46. Soares R, Da Costa MP. Experiences and perceptions of police officers concerning their interactions with people with serious mental disorders for compulsory treatment. *Front Psychiatry*. 2019 Apr 18; 10:187.
47. Antunes A, Silva M, Azeredo-Lopes S, Cardoso G, Caldas-de-Almeida JM. Perceived stigma, and discrimination among persons with mood and anxiety disorders: Results from the WHO World Mental Health Survey Portugal. *Eur J Psychiatry*. 2022 Oct 1;36(4):280–7.

48. Silva M, Antunes A, Azeredo-Lopes S, Cardoso G, Xavier M, Saraceno B, et al. Barriers to mental health services utilisation in Portugal-results from the National Mental Health Survey. *J Ment Health*. 2022 Aug;31(4):453-461.
49. Lauber C, Nordt C, Falcato L, Rössler W. Public attitude to compulsory admission of mentally ill people. *Acta Psychiatr Scand*. 2002 May 1;105(5):385–9.
50. Steiger S, Moeller J, Sowislo JF, Lieb R, Lang UE, Huber CG. Approval of Coercion in Psychiatry in Public Perception and the Role of Stigmatization. *Front Psychiatry*. 2022 Jan 7; 12:2513.
51. Cunha M, André S, Bica I, Ribeiro O, Dias A, Andrade A. Chemical and Physical Restraint of Patients. *Procedia Soc Behav Sci*. 2016 Feb 5; 217:389–99.
52. De Jong MH, Kamperman AM, Oorschot M, Priebe S, Bramer W, Van De Sande R, et al. Interventions to Reduce Compulsory Psychiatric Admissions: A Systematic Review and Meta-analysis. *JAMA Psychiatry*. 2016 Jul 1;73(7):657–64.
53. Brooks RA. U.S. Psychiatrists' beliefs and wants about involuntary civil commitment grounds. *Int J Law Psychiatry*. 2006 Jan 1;29(1):13–21.
54. Brooks RA. Psychiatrists' Opinions About Involuntary Civil Commitment: Results of a National Survey. *J Am Acad Psychiatry Law*. 2007;35(2).
55. Silva B, Bachelard M, Amoussou JR, Martinez D, Bonalumi C, Bonsack C, et al. Feeling coerced during voluntary and involuntary psychiatric hospitalisation: A review and meta-aggregation of qualitative studies. *Heliyon*. 2023 Feb 1;9(2): e13420.

4.8. Original research article 7

A Portuguese study of Staff Attitudes towards Coercion in Mental health care.

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A Portuguese study of Staff Attitudes towards Coercion in Mental health care

Abstract

Introduction: The use of coercion in mental health care may be influenced by the attitudes of staff.

Aim: This study aimed to investigate the psychometric properties of the Portuguese version of Staff Attitudes towards Coercion Scale (SACS) and to explore the attitudes of mental health professionals in Portugal towards coercion.

Method: Data was collected from mental health professionals working in both urban and rural regions of Portugal and subjected to descriptive, inferential, and psychometric analyses.

Results: About half of them were nurses (52.75%, $n = 48$), and a third were psychiatrists (36.26%, $n = 33$). A new three-factor structure was confirmed and showed the best fit when compared to previously proposed models with a cumulative explained variance of 59%. The staff showed the highest scores on the SACS “Coercion as Care and Security subscale (20.60 ± 3.37). Age and years of work experience were negatively associated with critical attitudes towards coercion ($p < 0.05$).

Discussion: The study advances the evidence on the cross-cultural validity of the SACS for measuring attitudes towards coercion. No differences in attitudes were found based on professions.

Implication for practice: The observed variations in attitudes towards coercion between younger and older professionals indicate the necessity for tailored interventions.

Keywords: Staff Attitude towards Coercion Scale (SACS), Psychometric properties, Coercive measures, Validation, Portugues

Accessible summary

What is known on the subject?

- The attitude of mental health professionals towards the use of coercion in mental health care can influence their use.
- These attitudes may be influenced by various factors such as the socio-demographic characteristics or personality traits of the mental health professionals.
- The SACS is a valid instrument for evaluating staff attitudes towards coercion in mental health care.

What paper adds to existing knowledge?

- Portuguese mental health professionals mostly view coercion in mental health as necessary for security and safety.
- Older and more experienced mental health professionals in Portugal less commonly viewed coercion in mental health care as offensive.
- The Portuguese version of the SACS is valid for assessing the attitudes towards coercion in mental health care among Portuguese speaking populations.

What are the implications for practice?

- Interventions to reduce coercion in mental health care must modify the attitudes of mental health professionals first.
- It is important to tailor interventions according to professional experiences.

Introduction

The use of coercive measures to treat people with mental health conditions has come under intense scrutiny and debate in recent times due to the considerable violations of human rights they entail. Several international organizations, including the World Health Organization and the World Psychiatric Association, have strongly advocated for alternatives to coercion in mental health settings (1,2). However, to effectively implement these recommendations, it is crucial to gain a thorough understanding of the factors that promote the use of coercive measures in mental healthcare.

Systematic reviews of the literature have shown that factors such as age, diagnosis, severity of symptoms, race, and ethnicity can impact the likelihood of being subjected to different forms of coercive measures (3,4). Organizational factors, such as ward characteristics and the ratio of staff to patients, can also influence the risk of coercion (5,6). The characteristics of mental health professionals themselves are increasingly recognized as influential in the use of coercion. Several studies have shown links between the gender (5,7–9), age (10,11), qualifications (5,8,12) of mental health professionals, and their propensity to use coercive measures. More critical analyses of the clinical decision-making process show that an important, yet frequently overlooked factor implicated in the use of coercive measures is the attitude of the staff towards coercion and how this attitude can be influenced by personality traits, emotions, and previous experiences (13–17). Attitudes have been defined as ‘learned predispositions to think, feel, and behave in a specific manner toward a certain object’ with three main components: affective, behavioral, and cognitive aspects(18). The emotional component of attitudes is described by the affective aspect, while sensory responses and persuasions are encompassed by the cognitive component. Actions that align with the attitude are described by

the behavioral element (19,20). According to Fishbein and Ajzen (1975), an individual's attitude toward an object mediates every response, and each response can be categorized into one of the three attitude components (18). However, Azjen's Theory of Planned Behavior recognizes the intricacy of the attitude-behavior relationship (21) as social interactions and experiences can shape and alter attitudes over time.

Studies conducted over time show that nurses' perception of coercion has undergone a paradigm shift over time, with a shift from viewing it as therapeutic to perceiving it as a safety measure (10,22,23). In the safety paradigm, coercive measures are considered a last resort, and there is a preference for the least intrusive intervention. This has resulted in a dilemma for nurses, as they believe that coercion is necessary, but its use can evoke negative emotions. In the United States, psychiatrists were more likely to support involuntary hospitalization if they believed in meeting basic needs and less likely if they believed in respecting the right to refuse treatment or the unpredictability of the future (24). In Switzerland, although a significant proportion of mental health professionals viewed coercion as a violation of basic human rights, they believed that coercion was necessary and beneficial for psychiatric patients (25). Before we can effectively modify the attitudes of mental health professionals towards the use of coercion, it is crucial to gain a comprehensive understanding of those attitudes. This understanding and modification serve as a critical component in interventions aimed at reducing coercion in mental health care.

A psychometrically sound instrument is needed for evaluating the attitudes of mental health professionals toward coercion. The present study sought to evaluate the Staff Attitude toward Coercion Scale (SACS) as such an instrument. The SACS is a 15-item self-reported instrument developed by Husum et al., in 2008 among a Norwegian sample of mental health professionals (26). It is comprised of three subdomains: a critical attitude toward coercion, a pragmatic attitude toward coercion, and a positive attitude toward coercion. The SACS has become one of the most widely and internationally used instruments for evaluating staff attitudes towards coercion, having been translated into several languages, including Arabic (27), Chinese (28), German (29), Japanese (30), Italian (31) and Polish (32), and administered more than 5,000 times. Portuguese is the sixth most natively spoken language, across eleven countries and three continents in the world. Not many studies have assessed the attitudes of mental health professionals towards coercion among Portuguese-speaking populations, and the SACS has never been used or validated in a Portuguese context. The subject of staff attitudes towards coercion has not received attention in Portugal, nor in other Portuguese-speaking countries, and it seems logical to expect that validating a Portuguese version of the SACS could steer attention to this area of research among Portuguese-speaking countries. In

addition, the psychometric literature on SACS has highlighted some doubts about the factor structure and cross-cultural validity of the SACS. The present study aimed to explore the psychometric properties, in terms of validity and reliability, of the SACS Portuguese version and compare the results with those reported in previous validation studies presented in the literature. The study also aimed to explore the attitudes of mental health professionals in Portugal towards coercion, and associated factors.

Materials and Methods

Study design and participants

A cross-sectional design was utilized in this study, which was conducted among mental health professionals (including doctors, nurses, psychologists, occupational therapists, and social workers) working in five conveniently selected public psychiatric departments located in the metropolitan and rural regions of Portugal.

Study procedure

The questionnaire was administered to staff members who had worked for a minimum of six months in each of the mental health services between February 2022 and February 2023. The study's procedures followed the ethical standards outlined by the relevant national and institutional committees for human experimentation, including the 2008 revised Helsinki Declaration of 1975. The study was approved by the Research Ethics Committee of the university, as well as the ethics committees of all participating hospitals. Written informed consent was obtained from all the study participants.

Study instrument

The study instrument comprised two parts, a short demographic form and the SACS. The SACS is a 15-item questionnaire (SACS) that assesses professionals' feelings and attitudes towards coercion on a 5-point Likert scale from strongly disagree (scored 1) to strongly agree (scored 5) with three dimensions namely, Coercion as offending (critical attitude)—the view of coercion as offensive towards patients; Coercion as care and security (pragmatic attitude)—the view of coercion as needed for care and security. The use of coercion is deemed necessary for safety and security reasons in this position, despite not being regarded as a positive or desirable approach. The third dimension is Coercion as treatment (positive attitude)—the view of coercion as a treatment intervention, comprising items that hold a favorable perspective towards employing coercion. When utilizing the

15 items as a complete scale, the items within the first subscale (critical attitude) are reversed to indicate a higher score, indicating a more favorable attitude towards the implementation of coercion.

The original questionnaire was validated among a sample of Norwegian mental health professionals and was reported to have acceptable psychometric properties (26). The English version of the SACS was translated to Portuguese by one of the authors, who is a native Portuguese speaker, and additionally reviewed by two co-authors who are native Portuguese speakers. The Portuguese version of the SACS was then back translated to English by an independent translator to confirm that the meaning had been retained.

Data Analysis

The software used was R (Version 4.1.3)(33) for data processing and statistical analyses by implementing the packages: dplyr (Version 1.1.0), psych (Version 2.2.3), semTools (Version 0.5.6), semPlot (Version 1.1.5) and ggplot2 (Version 3.4.1).

Descriptive statistics of the sample were first conducted to obtain the actual number of valid responses for further analysis and their characteristics for posterior comparative analysis. Next, univariate, and multivariate descriptive statistics were performed on each item of the instrument to assess and select the optimal correlation matrix for the following analysis. Items that expressed negative opinions about coercion were conversely recoded to maintain their coherence with the rest of the instrument. An exploratory factor analysis (EFA) was then conducted. Before this, the Kaiser-Meyer-Olkin (KMO) test of sample adequacy and Bartlett's test of sphericity and determinant of the matrix were conducted. To select the most reliable and parsimonious factorial structure, optimal coordinates, parallel analysis, and Kaiser criterion methods were used to calculate the number of factors to be extracted. Subsequently, the factor solution obtained was tested in confirmatory factor analysis (CFA). The fit measures applied were the χ^2 statistic, degrees of freedom, and p-value of χ^2 , the comparative fit index (CFI), the Tucker-Lewis index (TLI), the Non-Normed Fit Index (NNFI) and the root mean square error of approximation (RMSEA). Cut-off criteria were as follows: ≤ 3 for the χ^2/df ratio; ≥ 0.90 for the CFI and TLI; and ≤ 0.08 for the RMSEA (34). Internal consistency analyses were then performed through ordinal alpha, Guttman split-half, McDonald's omega, and the correlations between each item and the total score of the scale. Percent attenuation of Cronbach's alpha was conducted for the full scale and each subscale (35). To explore the associations between staff characteristics and their attitudes towards coercion, the total score and every subscale score were compared with participant characteristics by using the Pearson correlation coefficient, Mann-Whitney-Wilcoxon test, or Kruskal-Wallis test, with Bonferroni correction for pairwise comparisons, as required.

Results

Characteristics of the Sample

A total of 119 mental health professionals from different hospitals agreed to complete the survey, of whom 14 did not complete any of the items of the SCAS, and 14 did not provide their professional or socio-demographic data. Thus, the final study sample comprised 91 participants, of whom 62.64% were female and 37.36% were male, with an age range of 24 to 69 years ($M = 39.33$; $SD = 11.09$). More than half of the participants were nurses (52.75%, $n = 48$), and a third were psychiatrists (36.26%, $n = 33$). More than three-quarters (82.42%, $n = 75$) had applied a coercive intervention within the preceding six months, and less than half (42.86%, $n = 39$) had received any training on the use of coercion (Table IV-8.1).

Table IV-8.1: Socio-demographic characteristics of the sample

Variable	N (%)
Gender	
Male	34 (37.36)
Female	57 (62.64)
Age group	
20–29	18 (19.78)
30–39	37 (40.66)
40–49	18 (19.78)
50–59	12 (13.19)
60 or more	6 (6.59)
Profession	
Psychiatrist	33 (36.26)
Nurse	48 (52.75)
Occupational Therapist	4 (4.4)
Social Worker	3 (3.3)
Other	3 (3.3)
Place of principal activity	
General hospital	72 (79.12)
Psychiatric hospitals	12 (13.19)

Community mental health team	7 (7.69)
Years of experience	
less 5 years	16 (17.58)
5-9 years	17 (18.68)
10-14 years	19 (20.88)
15-19 years	17 (18.68)
20 or more	22 (24.18)
Type of setting	
Urban	78 (85.71)
Rural	13 (14.29)
Involvement in coercion in preceding six months	
Yes	75 (82.42)
No	16 (17.58)
Specialized training on coercion	
Yes	39 (42.86)
No	52 (57.14)
Relative with a mental health condition	
Yes	48 (52.75)
No	43 (47.25)

Descriptive Analysis of SACS items

Table 2 shows the means, standard deviations, minimum and maximum score, skewness, and kurtosis of the 15-items scale. Although the items showed a skew in the range of -2 and +2, the kurtosis value exceeded the limit for items 1,5 and 9, indicating they cannot be considered univariate normally distributed. Furthermore, the tests of multivariate skewness ($\chi^2(680) = 1192.810$, $p < .001$) and multivariate kurtosis ($z = 6.555$, $p < .001$) were both statistically significant, indicating that the data did not follow a multivariate normal distribution and that the Polychoric correlation matrix was the most suitable for factorial analysis and reliability calculation. The highest mean score was in the pragmatic attitude domain (Coercion as Care and security). (Table IV-8.2)

Table IV-8.2: Descriptive statistics of the SACS items and domains

Item		Mean	SD	Range (Min-Max)	Skew	Kurtosis
1	Use of coercion is necessary as protection in dangerous situations	4.297	0.850	1-5	-1.455	2.361
2	For security reasons coercion must sometimes be used	4.154	0.842	1-5	-1.173	1.720
3*	Use of coercion can harm the therapeutic Relationship	2.000	1.022	1-5	-0.927	0.244
4*	Use of coercion is a declaration of failure on the part of the mental health services	3.791	1.006	1-5	0.488	-0.58
5	Coercion may represent care and Protection	4.000	0.894	1-5	-1.474	2.769
6	More coercion should be used in Treatment	2.253	1.039	1-5	0.782	0.248
7	Coercion may prevent the development of a dangerous situation	4.000	0.931	1-5	-0.981	0.599
8*	Coercion violates the patient's integrity	3.187	1.115	1-5	0.272	-0.800
9	For severely ill patients, coercion may represent safety	4.154	0.868	1-5	-1.505	2.946
10	Patients without insight require use of Coercion	2.451	1.014	1-5	0.291	-0.829
11	Use of coercion is necessary toward dangerous and aggressive patients	3.670	1.023	1-5	-0.428	-0.722
12	Regressive patients require use of coercion	2.538	0.821	1-5	0.057	-0.003
13*	Too much coercion is used in treatment	3.187	1.173	1-5	0.320	-0.886
14*	Scarce resources lead to more use of Coercion	2.385	1.123	1-5	-0.518	-0.560
15*	Coercion could have been much reduced, giving more time and personal contact	2.143	1.081	1-5	-0.711	-0.396
Mean scores of subscales						
Scale	Score	Mean	SD	Min	Max	Mean normalization from 1 to 10

Total	Global	48.20879	8.614608	23	65	6.40188357
Care and security	F1	20.6044	3.372698	10	25	7.36264
Offending (Reverse)	F2 Reverse	16.69231	4.699154	8	26	5.346155
Offending	F2	19.30769	4.699154	10	28	5.653845
Treatment	F3	10.91209	3.017167	4	20	4.88805063

* These items were conversely recoded.

Evidence of Validity Based on the Internal Structure

The results of the Kaiser-Meyer-Olkin test ($KMO = 0.77$), Bartlett's sphericity test ($\chi^2(105) = 820.633$; $p < 0.001$) and the correlation matrix determinant (< 0.001) showed that the responses to the scale could be considered adequate for a dimension reduction.

Exploratory Factor Analysis (EFA)

An EFA was conducted using the Diagonally Weighted Least Squares (DWLS) extraction method on the polychoric correlation. Regarding the number of factors, the three methods applied (optimal coordinates, parallel analysis, and Kaiser criterion methods) supported the extraction of three factors. An oblique rotation (Promax method) was selected. The three-dimension structure had a cumulative explained variance of 59% (Factor 1 = 22%; Factor 2 = 21%; Factor 3 = 16%). Table 3 shows the factor loadings of each item after eliminating those below 0.40. Regarding the communalities of the items, all values exceeded .30 with the lowest being item 11 with 0.35 ("Use of coercion is necessary toward dangerous and aggressive patients"). (Table IV-8.3)

Table IV-8.3: Standardized loadings (pattern matrix) on the polychoric matrix using Diagonally Weighted Least Squares

Item*	F1	F2	F3	h2	u2
1	0.80			0.77	0.23
2	0.85			0.70	0.30
3		0.67		0.46	0.54
4		0.48		0.37	0.63
5	0.77			0.63	0.37
6			0.52	0.60	0.40
7	0.67			0.51	0.49
8		0.61		0.44	0.56
9	0.90			0.69	0.31
10			0.90	0.78	0.22
11			0.54	0.35	0.65
12			0.87	0.79	0.21
13		0.79		0.57	0.43
14		0.85		0.64	0.36
15		0.63		0.60	0.40

*F = Number of the factors; h2 = communality of the item; u2= uniqueness of the item; Weights lower than 0.40 are removed.

A Confirmatory Factor Analysis was thus needed due to the differences between the solution obtained and the models from previous studies.

Confirmatory Factor Analysis (CFA)

To evaluate the suitability of four models using DWLS, a set of CFAs were conducted. The German version's one-factor model (29) did not demonstrate a satisfactory fit, while the original English version's three-factor model and the Japanese four-factor model (26,30) exhibited acceptable fits based on most of the indices but not regarding the RMSEA. On the other hand, the current study's three-factor structure (Figure 1) demonstrated the best fit. More details can be found in Table IV-8.4.

Table IV-8.4: Fit indexes for models tested.

Model*		χ^2	Df	<i>p-value</i>	CFI	TLI	NNFI	RMSEA
Three-Factors		134.727	87	0.001	0.983	0.979	0.979	0.078
Original Factors	Three-	155.915	87	< 0.001	0.975	0.970	0.970	0.094
One-Factor		433.154	90	< 0.001	0.874	0.853	0.853	0.206
Four-Factor		161.397	84	< 0.001	0.972	0.965	0.965	0.101

* χ^2 = Chi-Square statistic; df = degrees of freedom; CFI = Comparative Fit Index; TLI = Tucker Lewis Index; NNFI = Non-Normed Fit Index; RMSEA = Root Mean Square Error of Approximation

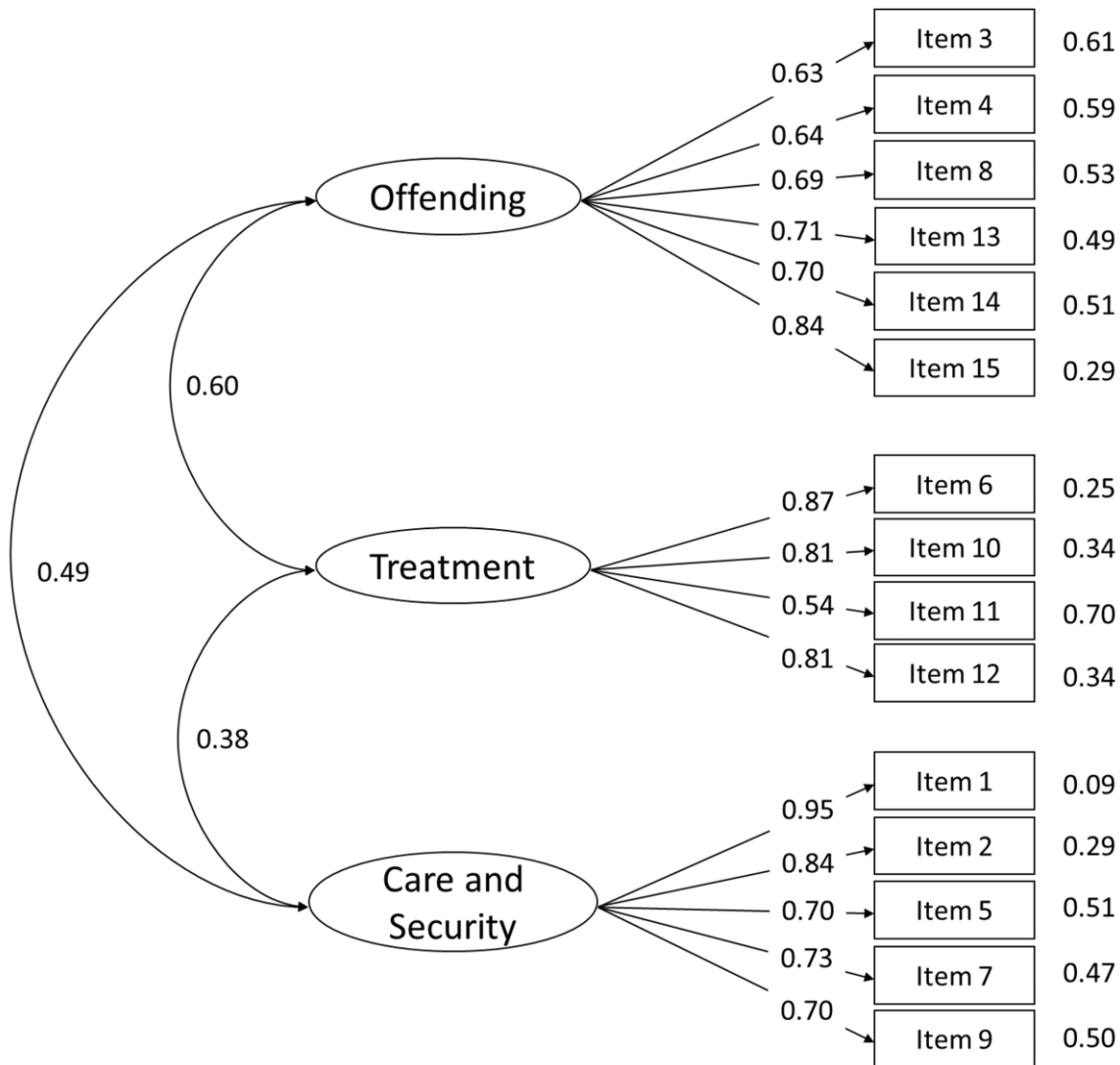


Figure IV-8.1: Path diagram of the three-factor structure obtained showing the estimated three-factor model with the factor loadings of each item and their residuals. After the negative wording items were conversely recoded, the correlation among factors changed from 0.38 to 0.60.

Reliability Based on Internal Consistency Measures

All items have corrected Item-Total correlations ranging from 0.45 (“11. Use of coercion is necessary toward dangerous and aggressive patients”) to 0.77 (“1. Use of coercion is necessary as protection in dangerous situations”).

The 15-item scale showed an ordinal alpha of 0.89 (95% CI: 0.78 - 0.95). Cronbach’s alpha for the same items was 0.86, indicating an attenuation effect of -3.19%. In the case of the first factor, the ordinal alpha is 0.88 (95% CI: 0.57 - 0.99), for the second factor is 0.85 (95% CI: 0.52 - 0.98), and

for the third factor is 0.83 (95% CI: 0.15 - 0.99), while the Cronbach's alphas are 0.83, 0.81 and 0.77, respectively (attenuation effect of -6.52%, -3.7% and -7.25%). In the case of the third factor, eliminating item 11 would improve the alpha value by 0.03, but maintain similar 95% CI. Nevertheless, eliminating any item for the full scale and the other sub-scales did not improve their alphas.

Regarding the McDonald's omega, the full scale showed a value of 0.88 while the first, second and third factors were 0.84, 0.83 and 0.81, respectively.

Finally, the Guttman Coefficient obtained from the split half test showed a value on average of 0.89, with a minimum of 0.67 and a maximum of 0.96, for the full scale. In reference to the sub-scales, the first factor showed a 0.86 (min: 0.82; max: 0.88), the second a 0.85 (min: 0.79; max: 0.92), and the third 0.83 (min: 0.82, max: 0.85).

Bivariate Scale Score Comparisons

No significant differences were observed among socio-demographic characteristics of the staff when the full scale was considered, significant differences were only observed in the case of the first and second factors. For the Coercion as care and security dimension, significant differences were found ($W = 408, p = 0.044$) between professionals who had applied coercive measures within the preceding six months (Median = 21) and those who had not (Median = 20). For the Coercion as treatment dimension, some differences were found regarding the location of the services ($W = 328.5, p = 0.042$), staff of services in urban areas had higher scores in this domain (Median = 21) compared to the staff working in the service located in the rural area (Median = 20). For the coercion as offending dimension, there was a significant negative correlation with age ($r = -0.230, p = 0.028$) and years of experience ($r = -0.229, p = 0.029$), respectively.

Discussion

Significant changes in the attitudes of mental health staff are necessary for the successful implementation of strategies to reduce coercion in mental health care (36). Understanding the attitudes of staff towards coercion is recognized as a key step in formulating interventions that can reduce coercion in each setting. To the best of our knowledge, this is the first study to develop and structurally validate the Portuguese version of the SACS. Perhaps more importantly, this is the first attempt to assess the fit of previously proposed models. A notable strength of this psychometric validation is that a polychoric correlation matrix was rationally chosen for factorial analysis and reliability calculation because a prior normality test showed that the items did not follow a univariate or multivariate normal distribution. Previous studies that validated the SACS did not mention the

matrix used, mostly because Pearson product-moment correlation is assumed by most software. Since the SACS employs a Likert scale to assess responses and generates ordinal data, utilizing polychoric correlations to obtain solutions offers a more precise replication of the measurement model employed to produce such data (37). The results from our study support a new three-factor model for SACS, slightly different from the one obtained from the original version. Differences in the pragmatic and critical attitudes dimensions were observed for socio-demographic characteristics such as age, years of experience, location of service, and application of coercive measures in the preceding six months.

To show that the data collected over time is stable and consistent, it is necessary to use standardized questionnaires. The use of reliable instruments ensures that results can be replicated when the same population is surveyed at different times, and even when individuals from diverse cultural backgrounds are surveyed (38). Although the Chi-square test was significant, it is important to consider the results of the other indicators as well, as this indicator can be influenced by sample size (39,40). The three-factor solution obtained in the present study showed the best fit and good internal consistency from three different methods. The attenuation effect was small for all the cases, and removing any of the items did not show a significant increase in reliability. Item 11 (Use of coercion is necessary toward dangerous and aggressive patients) loaded on the positive attitude dimension in our model rather than the pragmatic attitude dimension as proposed in the original validation study. However, both the original study and the Japanese study reported that this item loaded on two dimensions (pragmatic and positive attitude dimensions) (26,30). Although it is typical for empirical data to exhibit cross-loadings (41), it could also indicate that the safety paradigm conveyed by pragmatic attitudes towards coercion is not entirely distinct from the therapeutic paradigm conveyed by positive attitudes towards coercion.

The instrument also showed good reliability based on its internal consistency indices (Ordinal Alpha, McDonald's Omega, and split-half Guttman coefficients). Adequate reliability scores for the whole scale and the three different subscales were obtained, implying that it is a reliable measure for use among Portuguese mental health professionals. This is consistent with previous studies among German, Japanese and Norwegian professionals (26,29,30). Improved alpha values following the removal of an item may suggest that certain items are not well-suited for the instrument. In the case of the third factor, eliminating item 11 (use of coercion is necessary toward dangerous and aggressive patients) slightly improved the alpha value. Despite the increase, the coefficient value remained within the reliability estimate's 95% CI. As a result, the psychometric indicators were not significantly impacted, which may have resulted in a less accurate representation of the item's contents.

In the current study, the mental health professionals in Portugal showed the highest scores on the SACS “Coercion as Care and Security subscale,” consistent with the finding among Norwegian mental health professionals (26,42) but differing from German mental health professionals who scored highest in the “Coercion as Offending subscale” (16). Differences in attitudes towards coercion have been observed based on gender (13,43,44), years of experience(13,45,46), and occupational groups (16,47). In this study, no significant differences were observed for different socio-demographic characteristics when the entire scale was considered, however, some differences were observed for subscales. Mental health professionals who had applied coercive interventions in the previous six months had significantly higher scores in the pragmatic attitude subscale compared to those who had not. In addition, some differences were found regarding the location of the services. The staff of services located in urban areas had a more positive attitude towards coercion (“Coercion as treatment subscale”) than the staff working in the service located in the rural area. This could be because of the higher demand and pressure on mental health services in urban areas, and the higher chances of meeting service users with different cultural backgrounds. The literature on the association between years of experience and attitudes toward coercion is not consistent. Some studies have indicated that individuals with fewer years of work experience tend to exhibit more positive attitudes towards coercion (13,45,46), whereas others have reported the opposite trend (36,42). A significant negative association was observed between the critical attitude dimension (“Coercion as offending subscale”) and age and years of experience, meaning that the older the professionals were and the longer they worked in a service, the less critical attitude they had toward coercion. The diversity in attitudes suggests that a generic intervention for all staff to alter their attitudes towards coercion might not be effective. Instead, specific interventions should be implemented to target different socio-demographic and professional profiles.

Strengths and limitations

This is the first study conducted to investigate the factor structure of staff attitudes towards coercion in mental health care in a Portuguese-speaking population. It is also the first to assess the fit of the model, comparing it with previously reported models from previous studies. Unfortunately, due to its cross-sectional design, this study could not explore the psychometric properties of the SACS over time, thus being unable to assess the test-retest reliability. Additionally, the small sample size did not allow us to perform an invariance structure analysis, which can be part of further studies. Finally, only one measure of staff attitude towards coercion was used in this study (i.e., SACS), which prevents us from evaluating concurrent validity and structural validation across other instruments. As the decision-making process is influenced by factors beyond those captured by the SACS, including

emotions and personality traits (48,49), future studies could enhance current understanding by utilizing the SACS in combination with other instruments to capture a more comprehensive range of variables involved in deciding to resort to coercion.

Conclusions

To decrease the use of coercion in mental health care, it is crucial to understand staff attitudes toward it. The Portuguese SACS showed adequate psychometric properties and a new three-factor structure, which showed the best fit when compared to previously proposed models. The results suggest that the Portuguese version of SACS can be used effectively to evaluate the attitudes of staff towards coercion. It may identify variations in staff attitudes based on their sociodemographic and professional characteristics, enabling targeted interventions for staff. The research outcome will enhance the precise evaluation of attitudes regarding coercion and promote the instrument's cross-cultural applicability.

References

1. Maria Rodrigues, Helen Herrman, Silvana Galderisi, John Allan. WPA Position Statement and Call to Action: Implementing Alternatives to Coercion: A Key Component of Improving Mental Health Care. 2020 [cited 2022 Jul 14]. Available from: https://www.wpanet.org/_files/ugd/e172f3_635a89af889c471683c29fcd981db0aa.pdf
2. WHO. Transforming mental health for all. World Mental Health Report. 2022 [cited 2022 Jul 27]; Available from: <https://www.who.int/publications/i/item/9789240049338>
3. Beames L, Onwumere J. Risk factors associated with use of coercive practices in adult mental health inpatients: A systematic review. *J Psychiatr Ment Health Nurs*. 2022 Apr;29(2):220-239.
4. Walker S, Mackay E, Barnett P, Sheridan Rains L, Leverton M, Dalton-Locke C, et al. Clinical and social factors associated with increased risk for involuntary psychiatric hospitalisation: a systematic review, meta-analysis, and narrative synthesis. *Lancet Psychiatry*. 2019 Dec;6(12):1039-1053.
5. Bowers L, Van Der Merwe M, Nijman H, Hamilton B, Noorthorn E, Stewart D, et al. The practice of seclusion and time-out on English acute psychiatric wards: the city-128 Study. *Arch Psychiatr Nurs*. 2010 Aug;24(4):275–86.
6. Gowda GS, Lepping P, Noorthorn EO, Ali SF, Kumar CN, Raveesh BN, et al. Restraint prevalence and perceived coercion among psychiatric inpatients from South India: A prospective study. *Asian J Psychiatry*. 2018 Aug 1; 36:10–6.
7. Janssen W, Noorthorn E, Linge R van, Lendemeijer B. The influence of staffing levels on the use of seclusion. *Int J Law Psychiatry*. 2007 Mar;30(2):118–26.
8. Khalil AI, Al Ghamdi MAM, Al Malki S. Nurses' knowledge, attitudes, and practices toward physical restraint and seclusion in an inpatients' psychiatric ward. *Int. J. Cult. Ment. Health*. 2017;10(4):447–67.

9. Kodal JS, Kjær JN, Larsen ER. Mechanical restraint and characteristics of patient, staff and shifts in a psychiatric ward. *Nord J Psychiatry*. 2018 Feb;72(2):103–8.
10. Doedens P, Vermeulen J, Boyette L Lou, Latour C, de Haan L. Influence of nursing staff attitudes and characteristics on the use of coercive measures in acute mental health services—A systematic review. *J Psychiatr Ment Health Nurs*. 2020 Aug;27(4):446–59.
11. Wynn R. Psychiatric inpatients' experiences with restraint. *J Forens Psychiatry Psychol*. 2004; 15:1, 124-144
12. Eytan A, Chatton A, Safran E, Khazaal Y. Impact of psychiatrists' qualifications on the rate of compulsory admissions. *Psychiatr Q*. 2013 Mar;84(1):73–80.
13. Bregar B, Skela-Savič B, Kores Plesničar B. Cross-sectional study on nurses' attitudes regarding coercive measures: The importance of socio-demographic characteristics, job satisfaction, and strategies for coping with stress. *BMC Psychiatry*. 2018;18(1):1–10.
14. Husum TL, Bjørngaard JH, Finset A, Ruud T. A cross-sectional prospective study of seclusion, restraint and involuntary medication in acute psychiatric wards: Patient, staff and ward characteristics. *BMC Health Serv Res*. 2010 Apr 6;10:89.
15. Jalil R, Huber JW, Sixsmith J, Dickens GL. Mental health nurses' emotions, exposure to patient aggression, attitudes to and use of coercive measures: Cross sectional questionnaire survey. *Int J Nurs Stud*. 2017 Oct 1;75:130–8.
16. Krieger E, Moritz S, Lincoln TM, Fischer R, Nagel M. Coercion in psychiatry: A cross-sectional study on staff views and emotions. *J Psychiatr Ment Health Nurs*. 2021 Apr 1;28(2):149–62.
17. Laukkanen E, Kuosmanen L, Louheranta O, Vehviläinen-Julkunen K. Psychiatric nursing managers' attitudes towards containment methods in psychiatric inpatient care. *J Nurs Manag*. 2020;28(3).
18. Fishbein MA, Ajzen Icek. Belief, attitude, intention and behaviour: An introduction to theory and research. Reading, MA: Addison-Wesley; 1975.
19. Erwin P. Attitudes and Persuasion. *Attitudes and Persuasion*. New York: Psychology Press; 2001
20. Harry Charalambos Triandis. Attitude and attitude change. Published in **1971** in New York NY) by Wiley. 1971;479–523
21. Ajzen I. The theory of planned behavior. *Organ Behav Hum Decis Process*. 1991 Dec 1;50(2):179–211.
22. Laukkanen E, Vehviläinen-Julkunen K, Louheranta O, Kuosmanen L. Psychiatric nursing staffs' attitudes towards the use of containment methods in psychiatric inpatient care: An integrative review. *Int J Ment Health Nurs*. 2019 Apr;28(2):390–406.
23. Riahi S, Thomson G, Duxbury J. An integrative review exploring decision-making factors influencing mental health nurses in the use of restraint. *J Psychiatr Ment Health Nurs*. 2016 Mar 1;23(2):116–28.
24. Luchins DJ, Cooper AE, Hanrahan P, Rasinski K. Psychiatrists' attitudes toward involuntary hospitalization. *Psychiatr Serv*. 2004;55(9):1058–60.

25. Morandi S, Silva B, Mendez Rubio M, Bonsack C, Golay P. Mental health professionals' feelings and attitudes towards coercion. *Int J Law Psychiatry*. 2021 Jan 1;74.
26. Husum TL, Finset A, Ruud T. The Staff Attitude to Coercion Scale (SACS): reliability, validity and feasibility. *Int J Law Psychiatry*. 2008 Oct;31(5):417–22.
27. Arab M, Gray S, Hamouzadeh P, habibi farhad. Validation of the “staff attitude toward coercion use in treatment of mentally ill patients” questionnaire in selected public psychiatric hospitals of Tehran in 2015. *J. Hospital*. 2017 Nov 10;16(3):31–42.
28. Wu HC, Tang IC, Lin WI, Chang LH. Professional values and attitude of psychiatric social workers toward involuntary hospitalization of psychiatric patients. *J Soc Work*. 2012 Feb 7;13(4):419–34.
29. Efkenmann SA, Scholten M, Bottlender R, Juckel G, Gather J. A German Version of the Staff Attitude to Coercion Scale. Development and Empirical Validation. *Front Psychiatry*. 2021 Jan 18; 11:1458.
30. Fukasawa M, Miyake M, Kikkawa T, Sueyasu T. Development of the Japanese version of Staff Attitude to Coercion Scale. *Front Psychiatry*. 2022 Oct 17; 13:2387.
31. Venturini P, Bassi G, Salcuni S, Kotzalidis GD, Telesforo CL, Salustri E, et al. Psychometric properties of the Italian version of the staff attitude to coercion scale: an exploratory factor analysis. *Front Psychiatry*. 2023 May 24; 14:1172803.
32. Kiejna A, Jakubczyk MH, Gondek TM, Rajba B. Kwestionariusz Postaw Personelu Wobec Przymusu (SACS) – Polska adaptacja. *Psychiatr Pol*. 2020 Feb 29;54(1):113–24.
33. R Core Team. R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. 2018.
34. Hu L, Bentler PM. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Struct Equ Modeling*. 1999 Jan;6(1):1–55.
35. Gadermann AM, Guhn M, Zumbo BD. Estimating ordinal reliability for likert-type and ordinal item response data: A conceptual, empirical, and practical guide. *Pract. Assess. Res. Evaluation*. 2012;17(3):1–13.
36. Van Doeselaar M, Slegers P, Hutschemaekers G. Professionals' attitudes toward reducing restraint: the case of seclusion in the Netherlands. *Psychiatr Q*. 2008 Jun;79(2):97–109.
37. Holgado -Tello FP, Chacón -Moscoso S, Barbero -García I, Vila -Abad E, Holgado-Tello FP, Barbero-García I, et al. Polychoric versus Pearson correlations in exploratory and confirmatory factor analysis of ordinal variables. *Qual Quant*. 2010; 44:153–66.
38. Gliner JA, Morgan GA George A. Research methods in applied settings: an integrated approach to design and analysis. Routledge. 2000;465.
39. Alavi M, Visentin DC, Thapa DK, Hunt GE, Watson R, Cleary M. Chi-square for model fit in confirmatory factor analysis. *J Adv Nurs*. 2020;76(9):2209–11.
40. Cheung GW, Rensvold RB. Evaluating Goodness-of-Fit Indexes for Testing Measurement Invariance. *Struct Equ Modeling*. 2002 Apr;9(2):233–55.
41. Li Y, Wen Z, Hau KT, Yuan KH, Peng Y. Effects of Cross-loadings on Determining the Number of Factors to Retain. 2020;27(6):841–63.

42. Molewijk B, Kok A, Husum T, Pedersen R, Aasland O. Staff's normative attitudes towards coercion: The role of moral doubt and professional context - A cross-sectional survey study. *BMC Med Ethics*. 2017 May 25;18(1).
43. Laiho T, Lindberg N, Joffe G, Putkonen H, Hottinen A, Kontio R, et al. Psychiatric staff on the wards does not share attitudes on aggression. *Int J Ment Health Syst*. 2014 Apr 22;8(1):1–7.
44. Lind M, Kaltiala-Heino R, Suominen T, Leino-Kilpi H, Välimäki M. Nurses' ethical perceptions about coercion. *J Psychiatr Ment Health Nurs*. 2004;11(4):379–85.
45. Hemamalini SM, Mendonsa R, Karkal R, Kakunje A, Mohan Chandran V V, Professor A, et al. Attitudes of psychiatrists towards coercive measures in psychiatry: A case vignette study. *IJBAMR*. 2017;(6):298–304.
46. Korkeila H, Koivisto AM, Paavilainen E, Kylmä J. Psychiatric Nurses' Emotional and Ethical Experiences Regarding Seclusion and Restraint. *Issues Ment Health Nurs*. 2016 Jul 2;37(7):464–75.
47. Husum TL, Bjørngaard JH, Finset A, Ruud T. Staff attitudes and thoughts about the use of coercion in acute psychiatric wards. *Soc Psychiatry Psychiatr Epidemiol*. 2011 Sep;46(9):893–901.
48. Efkenmann SA, Scholten M, Bottlender R, Juckel G, Gather J. Influence of mental health professionals' attitudes and personality traits on decision-making around coercion: Results from an experimental quantitative survey using case vignettes. *Acta Psychiatr Scand*. 2022 Aug 1;146(2):151–64.
49. Lerner JS, Li Y, Valdesolo P, Kassam KS. Emotion and Decision Making. 2015 Jan 5; 66:799–823.

4.9. Original research article 8

Revisiting the psychometric properties of the McArthur Admission Experience Survey (AES): Validating the Portuguese version using a Bifactor approach.

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Revisiting the psychometric properties of the McArthur Admission Experience Survey (AES): Validating the Portuguese version using a Bifactor approach

Abstract

Cultural factors play a significant role in shaping the perception of coercion during psychiatric admissions. The present study aimed to assess the psychometric properties of the Portuguese Admission Experience Survey (P-AES). The study employed a cross-sectional approach in five psychiatric departments in three regions of Portugal. A total of 208 patients participated in the survey. Reliability was assessed through internal consistency and test-retest procedures. Internal validity was analyzed using a two-parameter logistic item response model, exploring three models, including a bifactor model. Convergent validity was determined by correlating AES scores with the Coercion Ladder (CL), Client Assessment of Satisfaction (CAT), and Global Assessment of Functioning (GAF) scale. Discriminatory power was assessed by comparing scores between patients with voluntary and involuntary admission status. The P-AES demonstrated satisfactory internal consistency and test-retest reliability. The bifactor model exhibited superior fit compared to the one-factor and three-factor models. Correlations between P-AES and CL, as well as CAT scores, indicated good convergent validity. Additionally, P-AES scores were notably higher in patients with compulsory psychiatric hospital admission compared to those admitted voluntarily, confirming its discriminatory power.

The bifactor model suggests that all three domains of the AES should be used to measure the subjective experience of coercion.

Keywords: McArthur Admission Experience Survey; Perceived coercion; Psychometric; Validation; Portuguese; Bifactor model

Introduction

The significant attention given to the use of coercion in mental health care has prompted a global movement to minimize its use. Coercion encompasses both actions performed upon someone and the subjective experience resulting from those actions. So, it represents both objectively observable actions and subjectively perceived outcomes (1). Perceived coercion is the subjective experience of coercion. It has been suggested that the power dynamics between patients and care providers may play a more significant role in shaping the perception of coercion than the actual coercive acts themselves (2).

There is a growing interest in perceived coercion, as it has been found to have significant detrimental effects on patients' prognoses (3). It is not only related to legal status or the experience of coercive practices but also the level of patient involvement in treatment decisions and knowledge of legal issues (4). High levels of perceived coercion can damage the therapeutic relationship with care providers (5), while lower levels are linked to higher satisfaction with treatment (6). Several tools have been developed to measure the subjective experience of coercion by patients of psychiatric services, such as the Cantril Ladder (7–9), Coercion Experience Scale (10–15), and Nordic Admission Interview (8,16). Nevertheless, the Admission Experience Survey (AES), designed for the MacArthur Coercion Study, stands out as one of most used tools (17) (7,16–26).

The AES is a questionnaire consisting of 16 items based on the MacArthur Admission Experience Interview. It aims to examine the experience of hospitalization, patients' interactions with clinical staff and family members during admission, as well as their input in the decision to be admitted (17). The experiences are categorized into three groups: (i) feelings of coercion or perceived coercion, (ii) negative pressures, and (iii) voice or procedural justice. The Perceived Coercion domain centers around concepts such as freedom, choice, initiative, control, and influence regarding admission to the hospital (27,28). The Negative Pressure domain pertains to experiences of being forced, threatened, or physically compelled to enter the hospital (29). Lastly, the Voice or Procedural justice domain relates to having an opportunity to express one's opinion regarding hospital admission (17,30). The AES has demonstrated favorable psychometric properties and has been valuable in assessing the subjective experience of coercion in various psychiatric clinical environments (31,32). Despite facing criticism for its focus solely on the hospital admission process and its limited ability to assess the impact of other coercive measures in the same situation (10), the AES still holds significant value because the admission experience plays a crucial role in shaping the overall impact of other coercive measures throughout admission and therapeutic relationships formed (33–35). The perception of coercion during psychiatric admission can be influenced by context, culture, and beliefs (29,36).

Hence, it is crucial to examine the impact of diverse cultures on the perception of coercion during psychiatric admissions. Research in this area among Portuguese speaking populations seems to be hindered by the absence of a culturally adapted and standardized tool. By validating the Portuguese version of the Admission Experience Survey, it is anticipated that it will facilitate meaningful comparisons of findings across cultures and pave the way for further investigation into factors that may influence the admission experience.

Psychometric analysis is of utmost importance in ensuring the instrument's reliability, validity, and appropriateness for its intended purpose. It allows for the verification of how well the included items align with the underlying theoretical framework of the instrument, facilitating the evaluation of the phenomenon of interest. These attributes contribute to the overall quality and credibility of research and provide a solid foundation for evidence-based interventions. Not many studies that have used the McArthur Admission Experience survey have validated the instrument in their context before use. The validation processes of the Swedish (24) Chinese (29), French (31) and Italian (32) versions of the AES have been reported. However, doubts have arisen regarding the actual factor structure of the AES due to concerns about the methodology used in the previous psychometric analyses. To ensure accurate assessment of internal validity, the two-parameter logistic (2PL) item response models are preferred considering the dichotomous nature of the AES. This method was solely employed in the validation study of the French version of the AES. Earlier investigations have indicated a three-factor structure, and the French study also supports the same three-factor structure. However, the French study goes on to report that the one-factor structure also exhibits good fit properties. A bifactor model is recommended to explore complex constructs that consist of moderately related dimensions (37). It allows for investigating whether there is a general factor present, and to what extent each specific dimension is distinct from this general factor (37). Thus, it seems reasonable to hypothesize that the AES may be comprised of a general factor (i.e., subjective experience of coercion during admission) that accounts for the commonality shared by its dimensions.

Building upon previous studies, this article proposes a bifactor structure for examining the subjective experience of coercion during admission. Notably, as no previous research has explored the applicability of a bifactor model for the subjective experience of coercion during admission, the findings from this study will have significant implications for further investigations of the concept. The present study aimed to evaluate the validity and reliability of the Portuguese version of the AES, and to assess whether the bifactor model gives a better fit than the three-factor model or one-factor model.

Materials and Methods

Study design and setting

The research employed a cross-sectional approach and took place in five selected public psychiatric departments located in Lisbon, Porto, and Alentejo representing districts from north and south of Portugal. between February 2022 and May 2023. The study sample included patients on admission in the selected psychiatric departments who met the eligibility criteria of being at least 18 years old and being able to give informed consent to participate in the study. Patients with dementia were excluded. Ethical approval was granted by the Ethics committee of Nova medical school (100/2021/CEFCM) and the ethics committee of each psychiatric department.

Measures

The MacArthur Admission Experience survey was used to enable rapid assessment of patients' perceptions of psychiatric hospital admission (31). The Perceived Coercion domain has a scoring range of 0 to 5 while the Negative Pressure domain has a scoring range from 0 to 6. The Voice domain has a scoring range from 0 to 3. Item 9 is discarded as in the original scale, and the 16th item, which asks, "How did being admitted to the hospital make you feel?" and gives four possible options, was not included in the scoring. The GAF (Global Assessment of Functioning) is a scale utilized to assess an individual's social, occupational, and psychological functioning (38). It ranges from 1 corresponding to severely impaired to 100 corresponding to extremely high functioning and is based on the DSM-IV (Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition). The Coercion Ladder (CL) is a visual analogue tool that asks the patient to mark the level of their perceived coercion on a scale of 1 (indicating the minimum use of coercion – "I came totally on my own will and initiative") to 10 (indicating the maximum use of coercion) (39). The Client's Assessment of Treatment Scale (CAT) is a patient-reported outcome measure consisting of seven items designed to assess the patient's appraisal of in-patient care (40). These items explore the patient's satisfaction with the treatment received, the treating clinicians, other mental health professionals, medications, other received treatments, and the overall care received. Each item is rated on a 10-point Likert scale ranging from 0 ("not at all") to 10 ("yes entirely").

Procedure

The McArthur Admission Experience Survey was translated into Portuguese by a bilingual native speaker with clinical experience and subsequently reviewed by a team of experts who were also native speakers. Then the translated questionnaire underwent back-translation from Portuguese to English by an independent translator and was checked again by the team of experts for accuracy. The

instrument was then piloted among five patients admitted to one of the psychiatric departments selected for the study to assess for any difficulties or misunderstandings related to the terminology used. No changes were required at this stage. The study instrument, consisting of the Portuguese-AES (P-AES), CL, and CAT, was administered to the participants as soon as they were stable within the first seven days after admission (T0). The same instrument was administered to the respondents a second time before discharge (T1). Sociodemographic information (such as gender, age, employment status, marital status, nationality, the legal status of admission, and previous involuntary admissions) was obtained from the patients' records. Additionally, GAF scores and diagnoses according to ICD-10 criteria were recorded at both T0 and T1. The reliability of the P-AES scores was assessed using a test–retest approach as the instrument was administered at two different times. The average length of time for the second assessment was 12.54 (SD: 10.37) days. Validity was estimated based on the first assessment, by testing the three-factor model (perceived coercion, negative pressure, and voice subdomains) as reported in previous studies (17,31,32), a one-factor model (31), and a new bifactor model. To assess convergent validity, the following hypotheses were proposed: Firstly, the P-AES, including its perceived coercion and negative pressure domains, would exhibit positive correlations with the Coercion Ladder. Conversely, the Voice domain would demonstrate a negative correlation with the Coercion Ladder. Secondly, it was anticipated that the P-AES, perceived coercion domain, and negative pressure domain would display negative correlations with the GAF and CAT, while the Voice domain would show positive correlations with the GAF and CAT. This was based on the idea that individuals with higher functioning might experience less coercion during the admission process (31), and those who are more satisfied with their treatment could perceive lower levels of coercion. To evaluate discriminatory power, the AES's ability to distinguish between involuntarily admitted and voluntarily admitted patients was examined.

Statistical Analysis

The data's normality was assessed using the Kolmogorov-Smirnov test, and a non-normal distribution was indicated. Consequently, non-parametric statistical methods were employed, namely the Wilcoxon Signed Rank test, for comparing paired data. To estimate the reliability of the MacArthur Admission Experience survey and its domains, McDonald's model-based Omega (ω) (41) and Cronbach's alpha coefficient were employed. Both these coefficients were obtained through the *psych* R package (42). The test–retest reliability was assessed using Spearman's rank correlation. The cutoff criteria, based on Ko and Li's approach, were applied. If the intraclass correlation coefficient (ICC) is below 0.50, it points to unreliable results. A value between 0.50 and 0.75 suggests a moderately reliable outcome, while a range of 0.75 to 0.90 indicates good reliability. Anything above 0.90

signifies excellent reliability (43). The presence of significant changes in P-AES scores between the first and second assessments was evaluated using Wilcoxon tests.

To evaluate the reliability of the items, a two-parameter logistic (2PL) item response model was utilized, given that the items were dichotomous. Item response theory (IRT) evaluates the validity of measurement scales by elucidating the connection between a latent trait (in this case, perceived coercion), the characteristics of the items within the scale, and how respondents answered each item individually (44). This method estimates both item discrimination and difficulty. Additionally, a Confirmatory Factor Analysis (CFA) was conducted using maximum likelihood estimation to assess the adequacy of the factor structure of the P-AES. Three models were estimated: a three-factor model incorporating perceived coercion, negative pressure, and voice domains; a single-factor model with a general perceived coercion domain; and a 2PL Bifactor model, assuming all items load into a general domain, with subsets of items also loading into specific domains (45). The models were obtained by fitting maximum likelihood factor analysis to dichotomous data under the item response theory paradigm using Cai's (46,47) Metropolis-Hastings Robbins-Monro (MHRM) algorithm and quasi-Monte Carlo integration for the parameters estimates. To evaluate the model fit, we considered several indicators, including the root mean square error of approximation (RMSEA), the comparison fit index (CFI), and the Tucker-Lewis fit index (TLI). A RMSEA value of ≤ 0.06 , and CFI and TLI values of ≥ 0.95 indicated that the model fit was good. Alternatively, RMSEA values of ≤ 0.08 , and CFI and TLI values of ≥ 0.90 were deemed acceptable (48). Bifactor models are susceptible to overfitting (49,50), leading to a biased preference for these models when using model selection indices. To prevent excessive model fitting, four commonly employed model selection indices were used to compare the model fitting. These indices include Akaike's information criterion (AIC), Bayesian information criterion (BIC), Hannan–Quinn criterion index (HQ), and sample size-adjusted BIC (SABIC) (51–54). The computation of these indices aimed to ensure a reasonable and unbiased evaluation of the models.

To evaluate the convergent validity of the P-AES with other scales, Spearman correlation coefficients were calculated. Since the convergent validity coefficients do not have established criteria, values exceeding .30 were deemed satisfactory, corresponding to a medium effect size according to Cohen (55). To determine the discriminatory power of the P-AES, an independent sample student t-test was conducted to compare the mean scores of patients admitted voluntarily and involuntarily. All statistical analyses were conducted using R software (56) with its *mirt* package being used to fit the Item Response Theory (IRT) models (57). Two-tailed statistical tests were utilized, and the significance level was established at $\alpha = 0.05$.

Results

Characteristics of study participants

A total of 208 patients from the five psychiatric departments were recruited to complete the survey. The required socio-demographic and clinical information was completed for 152 patients. The mean age of the sample was 46.53 (SD = 16.85), and more than half (54.61%, n = 83) of them were female. A significant proportion of the participants were not employed (48.68%, n = 74), and approximately one-fifth of them were retired (22.37%, n = 34). Most of the participants were single (53.95%, n = 82), and a small portion of them were immigrants in Portugal (12.5%, n = 19). Additionally, about one-third of the sample had an involuntary admission legal status (32.24%, n = 49). The most prevalent diagnosis among the participants were psychotic disorders (44.08%, n = 67).

Psychometric properties of the P-AES

The measures of internal consistency and test-retest reliability were found to be satisfactory, except for the Voice domain which has a Cronbach alpha of 0.654. The intraclass coefficients showed moderate levels of reliability overall, except the Voice domain, which exhibited poor reliability. Significant changes were observed between the scores obtained in the first and second assessments ($p < 0.05$) (Table IV-9.1).

Table IV-9.1: Reliability of the P-AES

Domains	Internal consistency		Test-retest reliability		Wilcoxon test
	McDonald's ω	Cronbach's α	Spearman rho	ICC (2,1) 95% CI	V (p-value)
Perceived Coercion	0.850	0.809	0.701**	0.703 (0.591-0.747)	3167 (0.04)
Negative Pressures	0.853	0.756	0.526**	0.534 (0.41-0.636)	8136 (<0.001)
Voice	0.727	0.654	0.331**	0.286 (0.155-0.408)	8195 (<0.001)
Total Scale	0.910	0.880	0.6113**	0.539 (0.183-0.436)	7718 (<0.001)

* $p < 0.05$. ** $p < 0.01$

Factor loadings ranged from 0.483 to 0.994 for the one-factor model, from 0.582 to 0.989 for the three-factor model, 0.392 to -0.951 in the general factor of the bifactor model, and 0.0506 to 0.851 for the specific factors of the bifactor model. The bifactor model had the best-fit properties compared to the one-factor model and the three-factor models (Table IV-9.2). The four model selection indices

for the bifactor model are consistently lower than those of the other two models, with the three-factor model showing the highest values (Table IV-9.3).

Table IV-9.2: Standardized loadings of the three models

Item*	One-factor model		Three-factor model			Bifactor model					
	F1	h2	F1	F2	F3	h2	F1	f1	f2	f3	h2
1	0.820	0.672	0.732			0.536	0.768	0.208			0.633
2	0.806	0.649		0.755		0.570	0.813		0.186		0.696
3	-0.929	0.864			0.987	0.975	-0.951			0.051	0.907
4	0.994	0.989	0.989			0.978	0.933	0.356			0.998
5	-0.750	0.563			0.766	0.586	-0.801			0.449	0.843
6	-0.647	0.419		0.926		0.858	0.640		0.583		0.750
7	0.928	0.862	0.983			0.966	0.792	0.574			0.957
8	0.680	0.463		0.789		0.623	0.684		0.370		0.605
10	0.483	0.234		0.771		0.595	0.392		0.851		0.878
11	0.512	0.262		0.685		0.470	0.470		0.543		0.516
12	0.610	0.372		0.582		0.338	0.591		0.178		0.381
13	-0.657	0.432			0.593	0.352	-0.713			-0.505	0.763
14	0.513	0.263	0.651			0.424	0.456	0.471			0.429
15	0.633	0.401	0.657			0.431	0.571	0.394			0.481

h2 = communality of the item; * χ^2 = Chi-Square statistic; df = degrees of freedom; CFI = Comparative Fit Index; TLI = Tucker Lewis Index; RMSEA = Root Mean Square Error of Approximation

Table IV-9.3: Comparisons of model fit.

Model	χ^2	df	<i>p</i> -value	RMSEA	90% C.I. for RMSEA	CFI	TLI
One-factor model	205	77	<0.001	0.118	0.094 - 0.140	0.913	0.897
Three-factor model	282	77	0	0.149	0.126 - 0.171	0.860	0.835
2PL Bifactor model	91.2	63	0.012	0.061	0.020- 0.092	0.972	0.981
Direct comparison between the bifactor models with other models							
	AIC	SABIC	HQ	BIC	logLik	χ^2	p
One factor model	1804	1794	1836	1883	-874	68.786	0
Three factor model	1908	1898	1940	1987	-926	172.934	0
2PL Bifactor model	1764	1748	1811	1881	-840		

As a supplementary addition to the factor loadings, the discrimination and difficulty of each item for the three models is presented using the Item Response Theory metric (Table IV-9.4).

Table IV-9.4: IRT parameterization for the P-AES

Items	One-factor Model		Three-factor Model		2PL Bifactor model (with 3 sub-factors)		
	Item difficulty	Item discrimination	Item difficulty	Item discrimination	Item difficulty	Item discrimination _(g)	Item discrimination _(s)
Item 1	-0.445	2.448	-0.375	2.070	-0.456	2.157	0.584
Item 2	0.110	2.340	0.104	1.915	0.107	2.512	0.575
Item 3	0.972	-4.410	4.498	13.424	1.233	-5.312	0.283
Item 4	-0.075	15.288	-0.037	9.646	-0.799	33.732	12.850
Item 5	0.611	-1.938	0.833	2.057	0.995	-3.436	1.926
Item 6	-1.533	1.468	-2.944	3.968	-2.393	2.177	1.985
Item 7	0.962	4.232	1.660	7.139	1.680	6.508	4.711
Item 8	-1.128	1.599	-1.311	2.135	-1.342	1.850	1.002
Item 10	-1.018	0.946	-1.415	2.074	-2.657	1.910	4.149
Item 11	-0.470	1.029	-0.545	1.619	-0.603	1.151	1.330
Item 12	0.333	1.318	0.341	1.224	0.334	1.279	0.384
Item 13	0.349	-1.518	0.439	1.289	0.554	-2.496	-1.767
Item 14	-0.468	1.015	-0.527	1.601	-0.555	1.028	1.060
Item 15	0.435	1.404	0.499	1.626	0.459	1.350	0.930

Note. *IRT* Item Response Theory, *df* degree of freedom, *RMSEA* Root Mean Square Error of Approximation, *C.I.* Confidence Interval, *CFI* Comparative Fit Index, *TLI* Tucker–Lewis Index

Correlation coefficients were in the expected direction and significant for all the variables tested except the associations with the GAF which were neither significant nor in the expected direction. Differences in the scores P-AES and its subscales were significantly different between voluntary and involuntarily admitted patients $p < 0.05$ (Table IV-9.5).

Table IV-9.5: Convergent validity and discriminatory power of the P-AES scores

Convergent validity						
	Coercion Ladder	p-value	GAF	p-value	CAT	p-value
Perceived coercion subscale	0.401	<0.001	0.089	0.200	-0.260	<0.001
Negative pressure subscale	0.475	<0.001	0.117	0.100	-0.342	<0.001
Voice subscale	-0.450	<0.001	-0.126	0.090	0.339	<0.001
Total scale	0.441	<0.001	0.115	0.100	-0.299	<0.001
Discriminatory power						
	Voluntary admission	Involuntary admission				
	Mean score (SD)	Mean score (SD)	2-Sample t-test	df	p-value	
Perceived coercion subscale	2.136 (1.807)	3.250 (1.643)	-4.2	125	<0.001	
Negative pressure subscale	1.750 (1.574)	3.183 (1.927)	-5	96	<0.001	
Voice subscale	1.803 (1.1151)	1.067 (0.9181)	4.8	137	<0.001	
Total scale	5.500 (2.099)	7.067 (2.246)	-4.6	107	<0.001	

Discussion

The main objectives of this study were twofold: first, to evaluate the psychometric properties of the Portuguese version of the Admission Experience Survey (P-AES), and second, to investigate the factor structure of the P-AES in a sample of patients admitted to five psychiatric wards across three regions of Portugal. Reliability refers to the extent of consistency in the observed scores on a specific test for a particular group of individuals (43). To ensure the reliability of test scores, it is advised to gather, combine, and incorporate various sources of evidence (58). In the case of the P-AES, satisfactory levels of internal consistency were observed based on both Cronbach's alpha and McDonald's omega, except for the voice domain, which showed marginally acceptable values. This might be because there are only three items on the voice subscale. When the number of test items is limited, it can violate the tau-equivalent assumption of the Cronbach alpha and lead to an underestimation of reliability (59).

Intraclass Correlation Coefficient (ICC) is a reliability measure that assesses both the correlation and agreement between measurements (43). In this regard, the values were acceptable for the full scale and domains, except for the voice domain which had lower values than acceptable. The lower reliability observed in the voice domain highlights the greater risk of type 2 error in measurements of perceived procedural justice (60,61). The low ICC observed for the voice domain has implications for the adjustment of sample size and power calculations, more subjects are required for a given effect size to be statistically significant (62–64). Significant changes were observed in the total P-AES and its domains. Two main factors influence the evaluation of test-retest reliability: the changing nature of the construct being measured over time and the length of the time interval between the two tests (65). The changes observed in this study may be attributed to the variable length of time for the second assessment which was as long as 2 months in some cases. In test-retest reliability, it is assumed that the true score being measured remains consistent over a brief time period (66). It may also reflect changes in functioning and experiences during stay in the ward. Certain psychological phenomena, such as mood or perceived coercion in this context, can undergo rapid changes in a short period. Furthermore, the interpretation of test-retest reliability assumes that the two test administrations are identical and independent, and that individuals' performance remains consistent across different time points (67). In real-life test settings, meeting these assumptions can be difficult.

In keeping with previous studies, associations were observed among the domains and the entire scale (20,31). The perceived coercion domain was positively associated with the use of negative pressures such as threats and physical force and inversely related to the voice subscale which is the sense of procedural justice (4). To confirm the internal validity of the P-AES, three models were evaluated,

two of them having been previously discussed in earlier studies (20,31). The French validation reported that while a single total coercion score sufficed, the comparison between one- and three-factor models implied that Perceived Coercion, Negative Pressures, and Voice should not be treated as identical and recommended adopting the three-factor solution (31). In our study, the bifactor model consistently displayed the most favorable fit characteristics when compared to the one-factor and three-factor models using multiple model selection indices. The bifactor modeling approach assumes that the interrelationships among items are accounted for by both a general factor (a shared underlying variable) and specific group factors. The general factor, denoting the shared aspect of the subjective experience of coercion during admission, can be understood as the general perceived coercion, a broadly defined concept. On the other hand, the three group factors represent the distinct elements of the three domains and can be interpreted as domain-specific facets of the subjective experience of coercion, each with a more specific definition. The bifactor structure captures both the uniqueness and commonality of the subjective experience of coercion. Therefore, the observed bifactor model in this study indicates that perceived coercion, negative pressures, and voice share certain commonalities under the general subjective experience of coercion factor, while also having separate and unique components independent from the general factor. This aligns with Hodge et al.'s original concept of a core construct, where the experience of coercion is comprehensively described through other group latent factors, such as perceived fairness, relationships with individuals exerting pressure, and the aspect of voice or validation (1). Based on this finding, it is recommended that when assessing the subjective experience of coercion, all three domains should be used, and the total score of the AES along with the scores of its domains should be reported. However, there is concern regarding Item #13 on the AES (My opinion about coming into the hospital didn't matter), as it exhibited negative item discrimination parameters in both the one-factor and bifactor models. This is problematic since it implies that respondents with higher levels of the underlying trait (perceived coercion) are less inclined to endorse a more severe response option (44). Previous research suggests that reverse-worded items in mixed-worded scales may be problematic (68). This can be especially so in negative-concord languages like Portuguese.

Correlations between the P-AES scores and its domains, with the Coercion Ladder and the CAT were largely in line with our hypotheses, suggesting that the P-AES is a valid measure of experience of coercion. The AES scale and its domains did not exhibit the anticipated associations with the GAF, and these associations were not statistically significant. This suggests that functioning, as assessed by the GAF, did not show any significant associations with perceived coercion. These results align with earlier studies indicating that perceived coercion is not strongly linked to the severity of psychiatric symptoms (35,69), but differ from the findings of the French validation study (31). Additionally, the

P-AES demonstrated good discriminatory power, as evidenced by significant mean score differences between voluntarily and involuntarily admitted patients, which supports our initial hypothesis.

Strengths and Limitations

The validation study utilized the two-parameter logistic (2PL) item response theory approach, which is deemed more suitable for the AES due to its dichotomous item format. An advantage of Item Response Theory over Classical Test Theory is that item parameter estimates remain unbiased and independent of the sample, even with unrepresentative samples (70). Additionally, we extended the current understanding of the AES factor structure by exploring a bifactor model, a novel approach not previously explored in validation studies. While this study makes a significant contribution to the existing literature, further research is necessary to validate whether the bifactor model accurately represents the subjective experience of coercion during admission. Nevertheless, several methodological limitations need to be acknowledged. Firstly, convenience sampling was used, which could impact the generalizability of the findings. Secondly, to enhance accuracy, the second assessment for the test-retest should have been conducted within 48 hours. Thirdly, reliance on self-report ratings for concurrent measures introduces the potential risk of artificially high correlations due to mono-method bias (71). Moreover, it is essential to acknowledge that prior research has shown bifactor models to excel in terms of fit statistics compared to other models. Consequently, there is a chance that the bifactor model might have captured some irrelevant information and demonstrated a better fit due to an inclination to overfit the data. However, the study took steps to address this issue by using multiple model selection criteria to minimize potential biases.

Conclusion

The study introduces a bifactor structure to model the subjective experience of coercion during admission. While the domains of perceived coercion, negative pressure, and voice represent distinct concepts, they also share common elements as part of the broader concept of the subjective experience of coercion. This finding would be valuable in future research aimed at gaining a deeper understanding of the subjective experience of coercion. Furthermore, our findings affirm that the P-AES serves as a valid instrument for assessing the subjective experience of coercion during admission among individuals with mental health conditions in Portugal. Validating this questionnaire is a crucial initial step, enabling the testing of additional hypotheses and formulation of interventions to improve the admission experience. When combined with qualitative approaches like on-site observations and interviews, the P-AES can function as a tool for self-evaluation, encouraging more extensive conversations about optimal procedures during the admission process. It is expected to foster the

advancement of future research endeavors in Portuguese-speaking countries and stimulate cross-cultural comparisons on this subject.

Data availability statement

The data analyzed during the current study are available from the corresponding author on reasonable request.

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Declaration of interests

None

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Author contribution statement

Deborah Oyine Aluh conceptualized and designed the study, interpreted the statistical analysis and wrote the first manuscript draft; Sofia Azeredo-Lopes conducted the statistical analysis and made a critical review of the manuscript; Barbara Pedrosa contributed in the translation process of the instrument and made a critical review of the manuscript, Ana Rita Martins, Maria Ferreira de Almeida Mousinho, and Manuela Silva contributed in the data collection and critical review of the manuscript; Ugnė Grigaitė made a critical review of the manuscript, Graça Cardoso and José Miguel Caldas-de-Almeida contributed to the supervision of the project and made a critical review of the manuscript. All authors read and approved the final version of the manuscript.

References

1. Hoge SK, Lidz C, Mulvey E, Roth L, Bennett N, Siminoff L, et al. Patient, family, and staff perceptions of coercion in mental hospital admission: an exploratory study. *Behav Sci Law*. 1993;11(3):281–93.
2. Verbeke E, Vanheule S, Cauwe J, Truijens F, Froyen B. Coercion and power in psychiatry: A qualitative study with ex-patients. *Soc Sci Med*. 2019 Feb; 223:89-96.
3. Prebble K, Thom K, Hudson E. Service Users' Experiences of Voluntary Admission to Mental Hospital: A Review of Research Literature. *Psychiatry Psychol. Law*. 2015; 22:3, 327-336
4. Jaeger M, Rossler W. Enhancement of outpatient treatment adherence: Patients' perceptions of coercion, fairness and effectiveness. *Psychiatry Res*. 2010 Nov 30;180(1):48–53.
5. Theodoridou A, Schlatter F, Ajdacic V, Rössler W, Jäger M. Therapeutic relationship in the context of perceived coercion in a psychiatric population. *Psychiatry Res*. 2012 Dec;200(2-3):939-44.
6. Katsakou C, Bowers L, Amos T, Morriss R, Rose D, Wykes T, et al. Coercion and treatment satisfaction among involuntary patients. *Psychiatr Serv*. 2010 Mar;61(3):286-92.
7. Fiorillo A, Giacco D, De Rosa C, Kallert T, Katsakou C, Onchev G, et al. Patient characteristics, and symptoms associated with perceived coercion during hospital treatment. *Acta Psychiatr. Scand*. 2012 Jun;125(6):460–7.
8. Kjellin L, Andersson K, Bartholdson E, Candefjord IL, Holmström H, Jacobsson L, et al. Coercion in psychiatric care - patients' and relatives' experiences from four Swedish psychiatric services. *Nord J psychiatry*. 2004;58(2):153–9.
9. Sørgeard KW. Patients' perception of coercion in acute psychiatric wards. An intervention study. *Nord J psychiatry*. 2004;58(4):299–304.
10. Bergk J, Flammer E, Steinert T. "Coercion Experience Scale" (CES) - validation of a questionnaire on coercive measures. *BMC Psychiatry*. 2010 Jan 14;10(1):1–10.
11. Bergk J, Einsiedler B, Flammer E, Steinert T. A randomized controlled comparison of seclusion and mechanical restraint in inpatient settings. *Psychiatr Serv*. 2011 Nov 1;62(11):1310–7.
12. Borgeat F, Zullino D. Attitudes concerning involuntary treatment of mania: results of a survey within self-help organizations. *Eur Psychiatry*. 2004 May 1;19(3):155–8.

13. Guzmán-Parra J, Aguilera-Serrano C, García-Sánchez JA, García-Spínola E, Torres-Campos D, Villagrán JM, et al. Experience coercion, post-traumatic stress, and satisfaction with treatment associated with different coercive measures during psychiatric hospitalization. *Int J Ment Health Nurs*. 2019 Apr 1;28(2):448–56.
14. Mielau J, Altunbay J, Gallinat J, Heinz A, BERPohl F, Lehmann A, et al. Subjective experience of coercion in psychiatric care: a study comparing the attitudes of patients and healthy volunteers towards coercive methods and their justification. *Eur Arch Psychiatry Clin Neurosci*. 2016 Jun 1;266(4):337–47.
15. Steinert T, Birk M, Flammer E, Bergk J. Subjective distress after seclusion or mechanical restraint: one-year follow-up of a randomized controlled study. *Psychiatr Serv*. 2013 Oct 1;64(10):1012–7.
16. Iversen KI, Høyer G, Sexton HC. Coercion and patient satisfaction on psychiatric acute wards. *Int J Law Psychiatry*. 2007 Nov;30(6):504–11.
17. Gardner W, Hoge SK, Bennett N, Roth LH, Lidz CW, Monahan J, et al. Two scales for measuring patients' perceptions for coercion during mental hospital admission. *Behav Sci Law*. 1993;11(3):307–21.
18. Anestis A, Daffern M, Thomas SDM, Podubinski T, Hollander Y, Lee S, et al. Predictors of Perceived Coercion in Patients Admitted for Psychiatric Hospitalization and the Stability of these Perceptions over Time. *Psychiatry Psychol. Law*. 2013 Aug;20(4):492–503.
19. Bindman J, Reid Y, Szmukler G, Tiller J, Thornicroft G, Leese M. Perceived coercion at admission to psychiatric hospital and engagement with follow-up--a cohort study. *Soc Psychiatry Psychiatr Epidemiol*. 2005 Feb;40(2):160–6.
20. Fu JCK, Chow PPL, Lam LCW. The experience of admission to psychiatric hospital among Chinese adult patients in Hong Kong. *BMC Psychiatry*. 2008 Oct 17;8(1):1–11.
21. Gowda GS, Noorthoorn EO, Kumar CN, Nanjgowda RB, Math SB. Clinical correlates and predictors of perceived coercion among psychiatric inpatients: A prospective pilot study. *Asian J Psychiatr*. 2016 Aug; 22:34–40.
22. Mielau J, Altunbay J, Gallinat J, Heinz A, BERPohl F, Lehmann A, et al. Subjective experience of coercion in psychiatric care: a study comparing the attitudes of patients and healthy

volunteers towards coercive methods and their justification. *Eur Arch Psychiatry Clin Neurosci*. 2016 Jun 1;266(4):337–47.

23. O'Donoghue B, Lyne J, Hill M, O'Rourke L, Daly S, Larkin C, et al. Perceptions of involuntary admission and risk of subsequent readmission at one-year follow-up: the influence of insight and recovery style. *J Ment Health*. 2011 Jun;20(3):249–59.

24. Seigel K, Wallsten T, Torsteinsdottir G, Lindström E. Perception of coercion: A pilot study using the Swedish version of the Admission Experience Scale. *Nord. J. Psychiatry*. 1997; 51(1): 49-54.

25. Strack KM, Schulenberg SE. Understanding empowerment, meaning, and perceived coercion in individuals with serious mental illness. *J Clin Psychol*. 2009 Oct;65(10):1137–48.

26. Svindseth M, Dahl A, Hatling T. Patients' experience of humiliation in the admission process to acute psychiatric wards. *Nord. J Psychiatry*. 2007;61(1):47–53.

27. Klag S, Creed P, O'Callaghan F. Development and initial validation of an instrument to measure perceived coercion to enter treatment for substance abuse. *Psychol Addict Behav*. 2006 Dec;20(4):463-70.

28. Sampogna G, Luciano M, Del Vecchio V, Pocai B, Palummo C, Fico G, et al. Perceived Coercion Among Patients Admitted in Psychiatric Wards: Italian Results of the EUNOMIA Study. *Front Psychiatry*. 2019 May 21; 10:316.

29. Fu JCK, Chow PPL, Lam LCW. The experience of admission to psychiatric hospital among Chinese adult patients in Hong Kong. *BMC Psychiatry*. 2008 Oct 17;8(1):1–11.

30. Lidz CW, Hoge SK, Gardner W, Bennett NS, Monahan J, Mulvey EP, et al. Perceived Coercion in Mental Hospital Admission: Pressures and Process. *Arch Gen Psychiatry*. 1995 Dec;52(12):1034-9.

31. Golay P, Senglali I, Beuchat H, Pomini V, Silva B, Loutrel L, et al. Perceived coercion in psychiatric hospital admission: Validation of the French-language version of the MacArthur Admission Experience Survey. *BMC Psychiatry*. 2017 Nov 6;17(1):1.

32. Mandarelli G, Parmigiani G, Trobia F, Tessari G, Roma P, Biondi M, et al. The Admission Experience Survey Italian Version (I-AES): A factor analytic study on a sample of 156 acute psychiatric in-patients. *Int J Law Psychiatry*. 2019; 62:111-116.

33. Silva B, Bachelard M, Amoussou JR, Martinez D, Bonalumi C, Bonsack C, et al. Feeling coerced during voluntary and involuntary psychiatric hospitalization: A review and meta-aggregation of qualitative studies. *Heliyon*. 2023 Feb 1;9(2):e13420.
34. Theodoridou A, Schlatter F, Ajdacic V, Rössler W, Jäger M. Therapeutic relationship in the context of perceived coercion in a psychiatric population. *Psychiatry Res*. 2012 Dec;200(2-3):939-44.
35. O’Callaghan AK, Plunkett R, Kelly BD. The association between perceived coercion on admission and formal coercive practices in an inpatient psychiatric setting. *Int J Law Psychiatry*. 2021 Mar 1; 75:101680.
36. Wertheimer A. A philosophical examination of coercion for mental health issues. *Behav Sci Law*. 1993 Jun 1;11(3):239–58.
37. Reise SP, Bonifay WE, Haviland MG. Scoring and modeling psychological measures in the presence of multidimensionality. *J Pers Assess*. 2013;95(2):129-40.
38. Association AP. *Diagnostic and Statistical Manual of Mental Disorders, (DSM IV)*. Vol. Fourth Ed., Washington DC, APA. 1994. 915 p.
39. Hoyer G, Kjellin L, Engberg M, Kaltiala-Heino R, Nilstun T, Sigurjónsdóttir M, et al. Paternalism and autonomy: a presentation of a Nordic study on the use of coercion in the mental health care system. *Int J Law Psychiatry*. 2002;25(2):93–108.
40. Priebe S, Gruyters T. Patients’ Assessment of Treatment Predicting Outcome. *Schizophrenia Bulletin*. 1995 Jan 1;21(1):87–94.
41. Gadermann AM, Guhn M, Zumbo BD. Estimating ordinal reliability for likert-type and ordinal item response data: A conceptual, empirical, and practical guide. *Pract. Assess. Res. Evaluation*. 2012;17(3):1–13.
42. Revelle WR. *psych: Procedures for Personality and Psychological Research*. 2017.
43. Koo TK, Li MY. A Guideline for Selecting and Reporting Intraclass Correlation Coefficients for Reliability Research. *J. Chiropr. Med*. 2016 Jun 1;15(2):155–63.
44. Yang FM, Kao ST. Item response theory for measurement validity. *Shanghai Arch. Psychiatry*. 2014;26(3):171.

45. DeMars CE. A Tutorial on Interpreting Bifactor Model Scores. *Int. J. Test.* 2013 Oct;13(4):354–78.
46. Cai L. Metropolis-Hastings Robbins-Monro Algorithm for Confirmatory Item Factor Analysis. *J Educ Behav Stat.* 2010 Jun 1;35(3):307–35.
47. Cai L. High-dimensional exploratory item factor analysis by a Metropolis-Hastings Robbins-Monro algorithm. *Psychometrika.* 2010 Mar 28;75(1):33–57.
48. Hu LT, Bentler PM. Fit Indices in Covariance Structure Modeling: Sensitivity to Underparameterized Model Misspecification. *Psychol. Methods.* 1998;3(4):424–53.
49. Rodriguez A, Reise SP, Haviland MG. Evaluating bifactor models: Calculating and interpreting statistical indices. *Psychol. Methods.* 2016;21(2):137–50.
50. Sellbom M, Tellegen A. Factor analysis in psychological assessment research: Common pitfalls and recommendations. *Psychol. Assess.* 2019 Dec 1;31(12):1428–41.
51. Akaike H. Factor analysis and AIC. *Psychometrika.* 1987 Sep;52(3):317–32.
52. Schwarz G. Estimating the Dimension of a Model. *Ann. Stat.* 1978;6(2):461–4.
53. Hannan EJ, Quinn BG. The Determination of the Order of an Autoregression. *J R Stat Soc Series B Stat Methodol.* 1979 Jan 1;41(2):190–5.
54. Sclove SL. Application of model-selection criteria to some problems in multivariate analysis. *Psychometrika.* 1987 Sep;52(3):333–43.
55. Cohen J. *Statistical Power Analysis for the Behavioral Sciences.* Routledge, New York. 1988.
56. R Core Team. *R: A language and environment for statistical computing.* R Foundation for Statistical Computing, Vienna, Austria. 2018.
57. Chalmers RP. *mirt: A Multidimensional Item Response Theory Package for the R Environment.* *J. Stat. Softw.* 2012 May 24; 48:1–29.
58. Messick S. Validity. In: Linn RL, editor. *Educational measurement.* Macmillan Publishing Co, Inc; American Council on Education.; 1989. p. 13–103.
59. Graham JM. Congeneric and (Essentially) Tau-Equivalent Estimates of Score Reliability. *Educ Psychol Meas.* 2006 Dec 1;66(6):930–44.

60. Charter RA. Methodological commentary: Effect of measurement error on tests of statistical significance. *J Clin Exp Neuropsychol*. 2008;19(3):458–62.
61. Perkins DO, Wyatt RJ, Bartko JJ. Penny-wise and pound-foolish: the impact of measurement error on sample size requirements in clinical trials. *Biol. Psychiatry*. 2000 Apr 15;47(8):762–6.
62. Fleiss J. Design and analysis of clinical experiments. 1999. John Wiley & Sons, Inc.
63. Shrout PE. Measurement reliability and agreement in psychiatry. *Stat Methods Med Res*. 1998 Sep;7(3):301-17.
64. Reliability. In: *Encyclopedia of Quality of Life and Well-Being Research*. Dordrecht: Springer, Dordrecht; 2014. p. 5454–5454.
65. Shou Y, Sellbom M, Chen HF. Fundamentals of Measurement in Clinical Psychology. *Comprehensive Clinical Psychology*, Second Edition. 2022 Jan 1; 4:13–35.
66. William R, Condon DM. Reliability. In: *The Wiley Handbook of Psychometric Testing: A Multidisciplinary Reference on Survey, Scale and Test Development*. Wiley-Blackwell; 2017; 709–49.
67. Geisinger KF. Reliability. *APA handbook of testing and assessment in psychology*, Vol 1: Test theory and testing and assessment in industrial and organizational psychology. 2013;21–42.
68. Spector PE, Van Katwyk PT, Brannick MT, Chen PY. When two factors don't reflect two constructs: How item characteristics can produce artifactual factors. *J Manage*. 1997;23(5):659–77.
69. Horvath J, Steinert T, Jaeger S. Antipsychotic treatment of psychotic disorders in forensic psychiatry: Patients' perception of coercion and its predictors. *Int J Law Psychiatry*. 2018 Mar 1; 57:113–21.
70. Embretson SE, Reise SP. Item response theory for psychologists. Lawrence Erlbaum Associates Publishers.
71. Campbell DT, Fiske DW. Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychol. Rev*. 1959 Mar;56(2):81–105.

4.10. Original research article 9

Exploring the Subjective Experience of Coercion Among Patients in Five Portuguese Psychiatric Departments

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Exploring the Subjective Experience of Coercion Among Patients in Five Portuguese Psychiatric Departments

Abstract

Background: The subjective experience of coercion may have a more significant impact on clinical outcomes than formal coercive measures. This study aimed to investigate the subjective experience of coercion among patients on admission in Portuguese psychiatric departments by assessing their perceived coercion, procedural justice, and negative pressures during admission. The study also investigated whether this subjective experience of coercion changed with time during admission, and what the relevant variables were that predicted this change.

Methods: Validated instruments, including the McArthur Admission Experience Survey (AES), were used to collect information from 208 adults admitted to five public psychiatric inpatient departments in rural and urban regions of Portugal between February 2022 and May 2023.

Results: The median global score of the AES at admission was 5.5 (IQR = 8) and 6.5 (IQR = 7) ($V = 342.5$, $p = 0.162$). About a third (32.24%, $n = 49$) of the sample had a legal involuntary admission status, while more than a third of them perceived their admission to be involuntary (40.13%, $n = 61$). The subjective experience of coercion (AES-total) at the first assessment was predicted by the legal status of admission, the perceived necessity of the admission, and the Visual Analogue Scale, while the changes at the second assessment were predicted by the perceived admission status, and the initial procedural justice ($p < 0.05$).

Conclusion: Initial procedural justice plays a significant role in sustaining the subjective experience of coercion. Since psychiatric admissions often involve individuals other than mental health professionals, interventions should involve these stakeholders.

Keywords: Perceived coercion, Negative pressures, procedural justice, Admission experience survey, Portugal

Introduction

Coercion in mental health care is a broad concept that includes both formal acts of coercion, like involuntary admissions, and informal acts of coercion, such as threats. Additionally, it involves perceived coercion, which refers to how individuals subjectively experience being coerced (1,2). The subjective experience of coercion is a complex concept involving perceived coercion during admission, negative pressures such as threats or force, and the perception of procedural justice, which pertains to the extent to which the patient is allowed to express their opinion and their involvement in decision making (3–5). Extant research suggests that this subjective experience of coercion may have a more significant impact on clinical outcomes than formal coercive measures (6). Perceived coercion has been linked with negative effects such as reduced therapeutic alliance with healthcare providers (7,8), patients feeling dehumanized by the treatment (9) and even an increased risk of suicide attempts following discharge (10). Despite its significance, the subjective experience of coercion has not received enough attention in the mental health care discourse (11).

Although the associations between socio-demographic factors and perceived coercion are not consistent (9), several studies have indicated that the female gender is associated with a higher perception of coercion (10,12–14). This gender bias is thought to be due to females being more likely to report feelings of vulnerability, psychological discomfort, and greater emotional responsiveness (15,16). High levels of perceived coercion have also been found to be predicted by being compulsorily admitted, older, and dissatisfied with received treatments (17). Interestingly, perceived coercion is not solely linked to the patient's legal status at admission, as even voluntarily admitted patients have reported high levels of perceived coercion (18,19). Moreover, many patients are not even aware of the legal status of their admission (18). Additionally, informal coercive measures, like non-statutory pressure to comply with treatment (leverage) can also impact the level of perceived coercion (20). Despite some patients revising their perception of the usefulness of admission after treatment, their perception of coercion typically persists (21,22). This suggests that the subjective experience of coercion during admission profoundly affects many patients and merits significant attention (18).

Portugal is a signatory to many international covenants protecting the rights of people with mental health conditions including the Oviedo Convention and the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD). Formal coercive measures such as involuntary admission and treatment are regulated by the Portuguese mental health law that restricts their use as a last resort to be used in the best interest of the person with a mental health condition (23). To comply with ethical standards and international conventions, psychiatric care should be delivered not only in the least restrictive environment but also in a way that minimizes coercion perceived by the patient. Given that

cultural factors such as patient expectation, legislation, and psychiatric practice have been identified as important variables impacting the subjective experience of coercion (24), it is critical to evaluate this experience among patients receiving mental health care in Portuguese services. To effectively improve the psychiatric admission process, it is crucial to comprehend the factors that contribute to the subjective experience of coercion and perhaps even more importantly, to identify what variables sustain these feelings during the admission. This study aimed to investigate the subjective experience of coercion among patients on admission in Portuguese psychiatric departments by assessing their perceptions of coercion, procedural justice, and negative pressures during admission. Furthermore, the study aimed to investigate whether this subjective experience of coercion changed with time during admission, and what were the relevant variables that predicted this change.

Methods

Study participants

Five psychiatric inpatient departments from urban and rural regions of Portugal were purposively selected for the study. One psychiatric department was in the rural area of Alentejo, while the remaining four were in the urban metropolises of Lisbon and Porto. Each of these psychiatric departments is affiliated with general hospitals and has diverse community mental health teams. The required sample size for the study was determined using G*Power software (version 3.1.9) (25). The effect size ($f^2 = 0.15$), significance level ($\alpha = 0.05$), needed statistical power ($1 - \beta = 0.95$), and total number of predictors (15 in this study) were all input factors. According to the analysis, a sample size of 74 individuals was adequate for statistical analysis based on regression. To accommodate possible missing data and facilitate comparisons across study sites, a target of 200 participants was established. Forty consecutively admitted adult patients from each service, without dementia or organic brain diseases, and who were willing to participate in the study were recruited into the study between February 2022 and May 2023. Informed consent was obtained from each participant before the administration of the study instruments. The ethics committees of Nova Medical School and each of the participating services gave their approval to the study.

Instruments

The assessment of perceived coercion was conducted using the McArthur Admission Experience Survey - AES (26), which included statements with dichotomous (true-or-false) options. The AES questionnaire which was translated and validated into Portuguese language (Manuscript under review) comprised three domains with a total score ranging from 0 to 14. The Perceived Coercion subscale (AES-PC) measures freedom, choice, initiative, control, and influence over hospital

admission and is scored from 0 to 5. The Negative Pressures subscale (AES-NP) assesses whether patients were forced, threatened, or physically compelled to be admitted and is scored from 0 to 6. The Procedural Justice or Voice subscale (AES-PJ) measures whether patients had the opportunity to voice their opinion regarding their admission scored from and is scored 0 to 3. The GAF (Global Assessment of Functioning) is a scale employed to evaluate an individual's functioning in social, occupational, and psychological domains (27). It spans from 1 (indicating severe impairment) to 100 (representing extremely high functioning) and is derived from the DSM-IV (Diagnostic and Statistical Manual of Mental Disorders Fourth Edition) (28). The Visual Analogue Scale (VAS), also called the Coercion Ladder, is a visual tool that prompts patients to indicate their perceived level of coercion on a scale of 1 (reflecting minimal use of coercion – “I voluntarily came without any external pressure”) to 10 (indicating maximum coercion) (29). The Client's Assessment of Treatment Scale (CAT) (30) is a patient-reported outcome measure that comprises seven items aimed at evaluating the patient's assessment of in-patient care (30). These items assess the patient's satisfaction with treatment, treating clinicians, other mental health professionals, medications, other received treatments, and overall care received. Each item is rated on a 10-point Likert scale, ranging from 0 (“not at all”) to 10 (“completely”). There was additionally a short form that asked patients their awareness of their legal status of admission (“voluntary”, “involuntary”, or “unsure”), perceived necessity for hospitalization (“necessary”, “unnecessary”, or “unsure”), and perceived health condition (“much improved”, “slightly improved”, “unchanged”, or “worsened”). The staff recorded the patient's legal status of admission and other socio-demographic information.

Procedure

The study instruments were administered to participants within the initial seven days after admission (T0). The same set of instruments was administered to the respondents again prior to their discharge (T1). Sociodemographic information, encompassing gender, age, employment status, marital status, nationality, the legal status of admission, and any prior involuntary admissions, was extracted from the patients' records. Furthermore, GAF scores (27) and diagnoses following the ICD-10 criteria were documented at both T0 and T1.

Data analysis

Firstly, clinical and socio-demographic characteristics were summarized using descriptive statistics including absolute and relative frequencies, the measures of location were reported as medians and the dispersions as interquartile ranges.

Prior to conducting the bivariate statistical analyses, the normality assumption of the data distribution was examined for both the total dataset and each individual group using the Kolmogorov-Smirnov test. The results indicated that the data did not follow a normal pattern in most of the cases. Consequently, non-parametric statistical methods were employed for bivariate comparisons. Wilcoxon signed-rank tests were used to compare differences in AES and its subscale scores in the first and second assessments. Because a significant number of questions were not answered in some questionnaires, these incomplete questionnaires were excluded from the analysis. Chi-squared tests were conducted to understand the associations between the included and excluded samples in terms of socio-demographic and clinical characteristics. To explore the relationship between the AES and its domains with socio-demographic and clinical characteristics, various statistical analyses were conducted, including Mann-Whitney and Kruskal-Wallis tests (with post hoc comparison tests using Holm-Bonferroni correction) for categorical variables, and Spearman correlation coefficients tests for continuous variables.

To further explore variables showing significant associations with the AES and its domains forward and backward stepwise multivariable linear regression models were conducted (18). Furthermore, a series of regression analyses were carried out using the absolute difference of the AES scores as the dependent value. Variable selections were based on iterations where in each of them a set of predictors are added or excluded until the Akaike Information Criterion (AIC) reached its minimum, indicating the best fit of the model. Before any multivariate analysis was carried out, a diagnosis of collinearity was made, obtaining values of variance inflation factor (VIF) < 3 and values of condition index < 4.432 for all the models, both under their threshold of 5 and 10, respectively (31). Residual analyses were conducted to check the regression model assumptions. The results of the multivariable regression are presented as beta values with corresponding *p-values* and the explained variance and *p-value* of each model. A statistical significance level of less than 5% ($p < 0.05$) was used for all cases. R (Version 4.1.3) was used to conduct the statistical analysis (32).

Results

Descriptive Analysis

A total of 208 patients from the five psychiatric departments agreed to complete the survey. The required socio-demographic and clinical information was complete for 152 patients. A total of 55 (36.18%) out of the 152 patients had more than 20% missing variables on the AES and were excluded from the analysis. Except for the services, there were no significant differences between the excluded group and the included group in terms of sociodemographic and clinical parameters. (See Appendix).

A total of 97 participants (46.63%) filled out the MacArthur Admission Experience Survey (AES) at the admission and just 64 (30.76%) completed the follow-up. The average length of time between the two assessments was 12.54 (SD: 10.37) days.

Sample characteristics (N=152)

More than half (54.61%, $n = 83$) of the sample were female. Their ages ranged from 18 to 87 years (Median = 47; IQR = 26.25). Most of the participants were unemployed (48.68%, $n = 74$), and about one-fifth (22.37%, $n = 34$) of them were retired. More than half of them (53.95%, $n = 82$) were single and one in eight (12.5%, $n = 19$) were immigrants in Portugal. About a third (32.24%, $n = 49$) of the sample had a legal involuntary admission status. Psychotic disorder was the most common diagnosis (44.08%, $n = 67$). About three-quarters (76.32%, $n = 116$) of the sample had never been involuntarily admitted before while eleven participants had had three or more previous involuntary admissions (7.24%, $n = 11$). More than a third of the participants thought that their admission was involuntary (40.13%, $n = 61$) while more than half of them perceived their admission to be necessary (67.11%, $n = 102$). Less than half (40.13%, $n = 61$) of them felt that they had much improvement in their health condition while nine of them reported worsened health condition (5.92%). The median GAF score was 60 (IQR= 46) at the initial assessment.

Perceived Coercion (N = 97)

The median global score of the AES at the admission was 5.5 (IQR= 8) and 6.5 (IQR= 7) at the follow-up; Wilcoxon signed-rank tests showed no statistically significant differences between them ($V = 342.5$, $p = 0.162$). The median score of the AES-PC at the admission was 2 (IQR= 3) and 3 (IQR= 4) in the follow-up. The median score of the AES-NP at the admission was 4 (IQR= 3) and 4 (IQR= 2.25) at the follow-up. The median score of the AES-PJ was 1 (IQR= 2) at the admission and follow-up. Wilcoxon signed-rank tests showed no statistically significant differences in the comparisons of the first and second assessments of each domain ($p > 0.05$)

Bivariate Analysis

Associations between patient characteristics and total AES and domain scores

There were no significant differences in the total AES scores in terms of gender, age, marital status, diagnosis, employment status, number of previous involuntary admissions, and the psychiatric departments. The legal admission status showed significant differences ($Z = 3.472$, $p < 0.001$), where patients with a legal involuntary admission status had significantly higher AES scores (Median = 8, IQR = 5) compared to those with voluntary admission status (Median = 4, IQR = 7). Regarding the

perceived admission status, it showed statistically significant differences among their groups ($\chi^2(2) = 30.626$; $p < 0.001$), with statistically significant differences between people who perceived their admission to be involuntary (Median = 10, IQR= 5.5) and those who perceived their admission to be voluntary (Median = 3, IQR= 6). Statistically significant differences in AES score were also found in terms of the perceived health condition ($\chi^2(3) = 9.9421$, $p = 0.019$), where patients who perceived that their health condition had worsened had higher AES scores (Median = 11, IQR = 1) and patients who perceived much improvement had lower AES scores (Median = 5, IQR = 6.5). The perceived necessity of admission also showed statistically significant differences in AES score ($\chi^2(2) = 26.088$, $p < 0.001$), with significant differences among the group that perceived their admission as necessary (Median = 4, IQR = 6), those who considered their admission to be unnecessary (Median = 11, IQR = 4.5), and those who could not determine the necessity of the admission (Median = 9.5, IQR = 5.75). Additionally, the legal status of admission, perceived legal status, perceived necessity of admission, and perceived health condition were all significantly associated with the three AES domains following the same pattern as the full scale, except for the voice domain, where perceived health condition was not a significantly associated variable (Table IV-10.1). Regarding the continuous variables, the correlation coefficient showed that patient satisfaction with their care as measured with the CAT was significantly inversely correlated with AES-total, and with the two domains, except the AES-PJ where CAT was directly correlated ($p < 0.01$) (Table IV-10.2).

Table IV-10.1: Bivariate associations between the AES and its domains with socio-demographic and clinical variables (N = 97).

Variable	N (%)	Total AES		AES-PC		AES-NP		AES-PJ	
		AES Score [Median (IQR)]	Mann-Whitney U /Kruskal-Wallis χ^2 (p-value)	AES Score [Median (IQR)]	U/Kruskal - Wallis χ^2 (p-value)	AES Score [Median (IQR)]	Mann-Whitney U /Kruskal-Wallis χ^2 (p-value)	AES Score [Median (IQR)]	Mann-Whitney U /Kruskal-Wallis χ^2 (p-value)
Gender									
Male	46 (47.42)	6 (7.75)	0.787 (0.434)	2.5 (3.75)	1.091 (0.277)	4.5 (2.75)	0.136 (0.894)	1 (2)	1.075 (0.287)
Female	51 (52.58)	5 (7.5)		2 (3)		4 (3)		1 (2)	
Employment Status									
Employed	30 (30.93)	5 (5.75)	0.876 (0.645)	2 (3)	2.265 (0.322)	4 (4)	1.575 (0.455)	0.5 (2)	1.966 (0.369)
Retired	16 (16.49)	6 (9.25)		2.5 (4)		3 (3.25)		1 (2)	
Unemployed	51 (52.58)	6 (7.5)		3 (3.5)		5 (2)		1 (2)	
Marital Status									
Single	53 (54.64)	5 (8)	0.843 (0.656)	2 (3)	2.372 (0.305)	4 (3)	0.273 (0.873)	1 (2)	0.908 (0.635)
Divorced/Widowed/Separated	22 (22.68)	5.5 (5.75)		1.5 (3)		4 (4)		1 (2)	

Married	22 (22.68)	6 (6.5)		3 (3.75)		5 (2.75)		1.5 (1.75)	
Nationality									
Portuguese	85 (87.63)	6 (8)	0.770 (0.448)	2 (3)	0.780 (0.439)	4 (3)	0.474 (0.640)	1 (2)	0.855 (0.398)
Immigrant	12 (12.37)	5.5 (6.25)		2 (3.25)		5 (2.5)		0.5 (2)	
Legal Admission status									
Voluntary	70 (72.16)	4 (7)	3.472 (< 0.001)	2 (3)	2.313 (0.020)	5 (2.75)	2.698 (0.006)	1 (2)	3.594 (<0.001)
Involuntary	27 (27.84)	8 (5)		4 (2)		2 (4)		2 (2)	
Diagnosis									
Affective disorders	34 (35.05)	6.5 (8)	5.238 (0.264)	2.5 (3)	8.204 (0.084)	4 (3.75)	3.999 (0.406)	1 (2)	3.328 (0.504)
Personality disorders	4 (4.12)	1.5 (2.5)		0.5 (1)		5 (2.5)		0 (0.5)	
Psychotic disorders	38 (39.18)	5.5 (8)		2 (3)		4 (3.75)		1 (2)	
Substance use disorders	8 (8.25)	4 (5.5)		1.5 (2.75)		5 (1.25)		1 (1.5)	
Other psychiatric diagnoses	13 (13.40)	8 (4)		4 (2)		3 (2)		2 (1)	
Perceived Admission status									
Voluntary	59 (60.82)	3 (6) ^a	30.626 (< 0.001)	1 (3) ^a	20.865 (0.001)	(< 5 (2) ^a	8.494 (0.037)	0 (1.5)	30.694 (<0.001)

Involuntary	35 (36.08)	10 (5.5) ^a		4 (2) ^a		2 (3) ^b		2 (2)	
Don't know	3 (3.09)	6 (0)		4 (1.5)		6 (1.5) ^{ab}		1 (0.5)	
Perceived Health Condition									
Much improved	42 (43.30)	5 (6.5) ^a	3.979 (0.019)	1.5 (2.75)	9.502 (0.033)	5 (2) ^a	8.494 (0.037)	1 (2)	6.474 (0.091)
Slightly improved	34 (35.05)	5.5 (7.75)		2.5 (3.75)		4 (2.75) ^b		1 (2)	
Unchanged	16 (16.49)	7 (9.5)		4 (3.25)		4 (3.25)		2 (2.25)	
Worsened	5 (5.15)	11 (1) ^a		4 (1)		1 (1) ^{ab}		2 (1)	
Perceived necessity of Admission									
Necessary	67 (69.07)	4 (6) ^{ab}	26.088 (<0.001)	1 (3) ^{ab}	20.304 (<0.001)	5 (3) ^a	21.97 (<0.001)	1 (2) ^{ab}	15.662 (<0.001)
Not necessary	18 (18.56)	11 (4.5) ^a		4 (2) ^a		1.5 (2.5) ^{ab}		2 (2) ^a	
Don't know	12 (12.37)	9.5 (5.75) ^b		4.5 (1.5) ^b		3.5 (3.25) ^b		2 (0.75) ^b	
Psychiatric department									
1	29 (29.90)	7 (8)	2.065 (0.724)	4 (4)	6.385 (0.172)	4 (2)	0.324 (0.988)	2 (2)	1.544 (0.819)
2	15 (15.46)	6 (7.5)		2 (3.5)		5 (2)		1 (1.5)	
3	20 (20.62)	5.5 (6.25)		1 (2)		4 (5)		1 (2)	
4	27 (27.84)	5 (9.5)		2 (3.5)		4 (4)		1 (2.5)	
5	6 (6.19)	6 (6.25)		2.5 (2.5)		3.5 (1.75)		1 (2)	

Number of previous admissions									
0	75 (77.32)	5 (7)	5.059 (0.168)	2 (3)	5.660 (0.129)	4 (3)	4.299 (0.231)	1 (2)	4.274 (0.233)
1	10 (10.31)	6 (9.5)		1 (4)		3.5 (4)		1.5 (1.75)	
2	5 (5.15)	2 (3)		0 (2)		4 (1)		1 (0)	
≥3	7 (7.22)	10 (4)		3 (1.5)		1 (3.5)		2 (1)	
Age									
18-29	23 (23.71)	5 (6)	5.355 (0.253)	3 (3.5)	3.980 (0.409)	4 (2)	5.129 (0.274)	1 (2)	4.289 (0.368)
30-39	13 (13.40)	7 (8)		2 (3)		4 (3)		2 (1)	
40-49	23 (23.71)	5 (8)		2 (3)		4 (4)		1 (2)	
50-59	16 (16.49)	1.5 (5.5)		1 (4)		5 (2)		1 (2)	
≥60	22 (22.68)	6 (7.25)		3.5 (3)		4.5 (3)		1.5 (2.75)	

The subscript letters indicate statistically significant differences in the post-hoc comparisons.

Table IV-10.2: Correlation matrix (N = 97)

	AES-PC	AES-NP	AES-PJ	CAT	GAF	VAS
AES	0.850***	0.824***	-0.850***	-0.353***	0.086	0.524***
AES-PC	1***	0.465***	-0.662***	-0.364***	-0.004	0.398***
AES-NP	0.465***	1***	-0.582***	-0.252***	-0.153	0.493***
AES-PJ	-0.662***	-0.582***	1***	0.267***	0.068	-0.430***

*** p < 0.001

Multivariable regression analyses

Multivariable regression models of the predictors of the subjective experience of coercion

For the total AES, after a four steps stepwise selection, a regression model was obtained that showed an AIC= 223.3, after a reduction of 3.53% concerning the initial value. This final model had an explanatory capacity of $R^2=48.45\%$. The variables that remained in the model were Legal Admission status, Perceived necessity of admission, and VAS.

For the AES-PC, the regression model obtained after six iterations showed an AIC=57.7, after a reduction of 12.84% concerning the initial. This final model had an explanatory capacity of $R^2=51.68\%$. The variables that remained in the model were the Perceived necessity of admission, VAS, and the AES-PJ.

For the AES-NP, the regression model obtained after six iterations showed an AIC= 71.81, after a reduction of 14.35% concerning the initial. This final model had an explanatory capacity of $R^2=49.11\%$. The variables that remained in the model were the Perceived necessity of admission, VAS and the AES-PJ.

For the AES-PJ, the regression model obtained after five iterations showed an AIC= -54.4, after a reduction of 13.62% concerning the initial. This final model had an explanatory capacity of $R^2=59.75\%$. The variables that remained in the model were the Perceived admission status, AES-PC, and AES-NP. The details of the final model for the AES and its domains scores can be found in **Table IV-10.3**.

Table IV-10.3: Multivariable linear regression models of the predictors of the initial AES and each domain (Perceived coercion, Negative pressure, and Voice) scores.

Variables	Total AES	AES-PC	AES-NP	AES-PJ
	$\hat{\beta}$ (p-value)	$\hat{\beta}$ (p-value)	$\hat{\beta}$ (p-value)	$\hat{\beta}$ (p-value)
Legal Admission status				
Voluntary (ref)				
Involuntary	0.276 (0.005)			
Perceived Admission status				
Voluntary (ref)				
Involuntary				-0.484 (0.004)
Don't know				-0.150 (0.704)
Perceived necessity of Admission				
Necessary (ref)				
Not necessary	0.276 (0.002)	0.143 (0.077)	0.285 (0.001)	
Don't know	0.238 (0.003)	0.196 (0.013)	0.033 (0.674)	
VAS	0.295 (0.001)	0.121 (0.141)	0.232 (0.007)	
AES-PC				-0.442 (0.001)
AES-NP				-0.280 (0.001)
AES-PJ		-0.542 (0.001)	-0.403 (0.001)	
Explanatory capacity	48.45%	51.68%	49.11%	59.75%
	Adjusted R ² = 0.456; F (5,91) = 17.1; p < .001	Adjusted R ² = 0.496; F (4,92) = 24.6; p < .001	Adjusted R ² = 0.469; F (4,92) = 22.19; p < .001	Adjusted R ² = 0.58; F (4,92) = 34.14; p < .001

Predictors of change in AES score and sub-scales between the initial and second assessments

Regarding the differences in the scores of the total AES, after seventeen steps, the regression model obtained showed an AIC= 68.67, after a reduction of 52.55% concerning the initial. This final model had an explanatory capacity of 21.15%. The variables that remained in the model were the initial Voice Scale score, Perceived admission status, and initial GAF score.

Regarding the AES-PC, after eleven steps, the regression model obtained showed an AIC= 11.61, after a reduction of 215.3% concerning the initial. This final model had an explanatory capacity of 48.60%. The variables that remained in the model were the employment status, marital status, diagnosis, the psychiatric department, the perceived admission status, the legal status of the admission, initial Perceived Coercion score, initial Negative Pressures score, and CAT.

Regarding the AES-NP, after fourteen iterations, the regression model obtained showed an AIC= -17.11, after a reduction of 222.74 % concerning the initial. This final model had an explanatory capacity of 41.90%. The variables that remained in the model were the nationality of the patient, initial Perceived Coercion score, initial Negative Pressures score, initial Voice score, GAF, and VAS.

Regarding the differences in the scores of the AES-PJ, after thirteen iterations, the regression model obtained showed an AIC= -57.69, after a reduction of 40.85% concerning the initial. This final model had an explanatory capacity of 56.57%. The variables that remained in the model were the age of the patient, the employment status, the diagnoses, nationality, initial Perceived Coercion score, initial Voice score, and CAT (Table 4).

Table IV-10.4: Multivariable linear regression models of the predictors of changes in the AES and each subscale (Perceived coercion, Negative pressure, and Voice) scores.

Variables	Total AES	AES-PC	AES-NP	AES-PJ
	$\hat{\beta}$ (p-value)	$\hat{\beta}$ (p-value)	$\hat{\beta}$ (p-value)	$\hat{\beta}$ (p-value)
Employment Status				
Employed (ref)				
Retired		-0.270 (0.100)		-0.330 (0.015)
Unemployed		-0.002 (0.993)		-0.070 (0.563)
Age				
18-29 (ref)				
30-39				-0.366 (0.004)
40-49				-0.050 (0.705)
50-59				-0.269 (0.042)
≥60				-0.037 (0.785)
Marital Status				
Single (ref)				
Divorced/Widowed/Separated		0.334 (0.021)		
Married		-0.442 (0.003)		
Nationality				
Portuguese (ref)				
Immigrant			0.334 (0.002)	-0.362 (0.001)
Diagnosis				
Affective disorders (ref)				
Personality disorders		-0.326 (0.012)		-0.091 (0.400)
Psychotic disorders		-0.047 (0.742)		0.137 (0.248)
Substance use disorders		-0.003 (0.979)		-0.246 (0.026)
Other psychiatric diagnoses		0.054 (0.736)		-0.200 (0.090)
Legal Admission status				
Voluntary (ref)				

Involuntary		0.409 (0.022)		
Perceived Admission status				
Voluntary (ref)				
Involuntary	0.179 (0.205)	0.041 (0.818)		
Don't know	0.328 (0.008)	0.330 (0.011)		
Psychiatric department				
1				
2		0.211 (0.189)		
3		0.211 (0.189)		
4		0.068 (0.649)		
5		-0.082 (0.536)		
Initial GAF	-0.217 (0.072)		0.213 (0.056)	
Initial VAS			0.180 (0.162)	
Initial CAT		0.462 (0.003)		0.197 (0.095)
Initial AES-PC		0.470 (0.005)	0.398 (0.006)	-0.278 (0.052)
Initial AES-NP		0.252 (0.180)	0.714 (< 0.001)	
Initial AES-PJ	-0.347 (0.015)		-0.229 (0.136)	0.673 (p< 0.001)
Explanatory capacity	21.15%	48.60%	41.90%	56.57%
	Adjusted R ² = 0.158; F (4,59) = 3.96; p = 0.007	Adjusted R ² = 0.280; F (18,45) = 2.363; p = 0.010	Adjusted R ² = 0.358; F (6,57) = 6.852; p < 0.001	Adjusted R ² = 0.442; F (14,49) = 4.558; p < 0.001

Discussion

This study investigates the factors influencing the subjective experience of coercion, measured through perceived coercion, negative pressures, and procedural justice, during psychiatric admission across five Portuguese psychiatric departments. It also identifies the variables predicting changes in patients' subjective coercion experiences upon re-evaluation. The model that best explained the subjective experience of coercion at the first assessment had the legal status of admission, the perceived necessity of the admission, and the VAS score as significant predictors. Although the total AES, AES-PC, and AES-NP increased at the second assessment, the changes were not statistically significant. The factors that were significantly linked to the changes in the total AES scores were the perceived admission status rather than the legal status of admission, and the initial AES-PJ score. Regarding the AES-PJ, the median score was the same at the initial assessment and follow-up. Changes at the second assessment were significantly associated with a retired employment status, age, and having a specific diagnosis of substance use disorder.

In this study, gender, immigrant status and number of previous admissions were not significantly associated with the subjective experience of coercion and its domains in contrast with previous studies (33,34). A higher proportion of the patients perceived their admission to be involuntary compared to the actual proportion of patients who had a legal involuntary admission status, in keeping with previous studies where patients reported their admission status wrongly (18,35). This implies that these patients experienced coercion despite their "voluntary admission." This is concerning because a previous study showed that people who underwent legally voluntary admissions but still felt coerced had poorer follow-up outcomes, even after accounting for all potential confounding factors (6).

Although the AES scores except the AES-PJ were higher at the second assessment, the change was not statistically significant and corresponds to an extent with previous studies that have recorded a sustained perception of coercion among patients when assessed at different times (21,36). The increase in perception of coercion at the second assessment points to a need for further investigation of what happens in the wards during admissions. Moreover, the explanatory capacity of the model was 21.5%, indicating that other variables not included in this study such as the experience of restrictive practices within the wards may have contributed to the changes in the subjective experience of coercion.

Increased satisfaction with treatment was moderately associated with lower subjective experience of coercion and its domains and increased procedural justice. This association has been reported in previous studies conducted in the United States and England (7,37). The perceived necessity of the

admission lost relevance in predicting changes observed in the second assessment. Previous studies have shown that even when patient who report that their admission was unnecessary revise their belief about necessity of admission, and report that they needed the admission, their perception of coercion remained stable and their attitudes towards hospitalisation did not become positive (21,35). In the multivariable regression analysis, perceived coercion and negative pressures were significant predictors of procedural justice and conversely, the procedural justice was a significant predictor of perceived coercion and negative pressures scores. Procedural justice has been reported to have a moderating influence on perceived coercion in many studies conducted globally (8,38–40).

The perceived status of admission predicted changes in both the overall AES score and the perceived coercion subscale. This underscores the significance of how individuals view their admission status and its role in shaping the subjective experience of coercion. Indeed, prior research has shown that legal status inadequately reflects patients' experiences (3,41) and that the experience of coercion is more likely related to social experiences during the admissions process (42) and the relationship with those responsible for enforcing these laws (43).

Regarding changes in the procedural justice, employment status was a significant factor with retired people showing significant reduction in AES-PJ scores. Age was also a significant predictor with older people between 50-59 showing a reduction in AES-PJ scores. It could be that older people were more sensitive to procedural injustice during their stay in the ward, although a previous study conducted in Ireland reported that a younger age was associated with procedural injustice (33). Specific diagnoses were significantly associated with changes in the voice score with Substance use being a significantly associated with negative changes in the AES-PJ score. This could be because behavioural abnormalities possibly related with intoxication subside after some time and restrictive practices within the wards (44) may be increasingly viewed as procedural injustice. Although the Portuguese mental health legislation indicates that simply being diagnosed with a substance use disorder is insufficient to warrant compulsory admission, people with substance use disorders are known to face a variety of non-legal pressures to undergo treatment, such as demands from family, friends, healthcare professionals, or employers (45,46). Consequently, it has been observed that People with substance use disorders admitted voluntarily and those admitted involuntarily experience similar levels of perceived coercion (47).

Considering that people who did not know their admission status had significant increases in the total AES score and that the initial sense of procedural justice predicted a reduction in the total AES score, the study findings suggest that there may be opportunities for interventions to improve the admission experience by providing all necessary information at the point of admission and increasing sense of

procedural justice, particularly for older people and patients with a diagnosis of substance use disorders. One of the main recommendations from the EUNOMIA study was to tell patients about the grounds for their hospitalisation and the likely length of their stay (48), and this advice is further supported by the Portuguese mental health legislation. The level of procedural justice that is perceived is typically determined by the initial encounter with the admissions process (49); service users frequently make their first contact with non-mental health professionals, such as the police or emergency room staff (44,50). The role of these contacts with non-mental health professionals in forming the initial procedural justice may help to explain why Sorgaard's (51) intervention failed to reduce perceived coercion by increasing patients' sense of procedural justice by involving them in formulating the treatment plan, performing regular evaluations of treatment progress, and renegotiating these plans when necessary. Therefore, strategies to reduce coercion and improve the psychiatric admission process would need to take into account various stakeholders. Although we acknowledge the potential challenges in fully implementing this in real-world scenarios due to the unpredictable nature of situations leading to psychiatric admissions, the significant adverse effects of persistent perceived coercion justify the importance of giving priority to this suggestion.

Strengths and limitations

The use of a psychometrically valid and reliable instrument, multivariable statistical analyses, and the assessment of the subjective experience of coercion with its specific domains are among this study's strengths. However, several methodological limitations are acknowledged. A substantial number of questionnaires were excluded because they had high proportions of missing variables. Experiences of coercive measures experienced during inpatient admission which may explain the changes in the subjective experience of coercion were not collected. Due to the small sample size, it was not possible to make subgroup analyses of the predictors of specific changes (positive and negative changes) in AES scores. Due to different lengths of stay, varied conditions, and variable discharge dates, it was not possible to evaluate every patient at the same time during their hospital stays. Multivariable models consequently included the interval between the two assessments as an independent variable to account for varying hospital stays at the time of evaluation. The administration of questionnaires by professionals from the service where participants were hospitalized may have influenced their responses. Additionally, there may be bias as a result of convenience sampling and the exclusion of patients who were unable to give informed consent.

Conclusion

Satisfaction with care and perceived necessity of hospitalization were associated with the subjective experience of coercion and its specific domains. The subjective experience of coercion increased at second assessment and the factors that were significantly linked to this change were the perceived admission status rather than the legal status of admission, and the initial procedural justice score. by fully and clearly informing patients about what is going to happen and why, letting patients actively choose and express their opinions during the admission process, involving them in creating the treatment plan, conducting routine assessments of treatment progress, and renegotiating these plans as needed. Interventions to enhance procedural justice should involve all relevant stakeholders because psychiatric admissions frequently involve people other than mental health professionals.

References

1. Szmukler PG, Appelbaum PS. Treatment pressures, leverage, coercion, and compulsion in mental health care. 2009 Jun;17(3):233–44.
2. Hem MH, Gjerberg E, Husum TL, Pedersen R. Ethical challenges when using coercion in mental healthcare: A systematic literature review. 2016 Mar 1;25(1):92–110.
3. Gardner W, Hoge SK, Bennett N, Roth LH, Lidz CW, Monahan J, et al. Two scales for measuring patients' perceptions for coercion during mental hospital admission. *Behav Sci Law*. 1993;11(3):307–21.
4. Lidz CW, Hoge SK, Gardner W, Bennett NS, Monahan J, Mulvey EP, et al. Perceived Coercion in Mental Hospital Admission: Pressures and Process. *Arch Gen Psychiatry*. 1995 Dec 1;52(12):1034–9.
5. Hoge SK, Lidz C, Mulvey E, Roth L, Bennett N, Siminoff L, et al. Patient, family, and staff perceptions of coercion in mental hospital admission: an exploratory study. *Behav Sci Law*. 1993;11(3):281–93.
6. Kallert TW, Katsakou C, Adamowski T, Dembinskas A, Fiorillo A, Kjellin L, et al. Coerced hospital admission and symptom change--a prospective observational multi-centre study. *PloS one*. 2011 Nov 30;6(11).
7. Katsakou C, Bowers L, Amos T, Morriss R, Rose D, Wykes T, et al. Coercion and treatment satisfaction among involuntary patients. *Psychiatr Serv*. 2010;61(3):286–92.
8. Sheehan KA, Burns T. Perceived coercion and the therapeutic relationship: a neglected association? *Psychiatr Serv*. 2011;62(5):471–6.
9. Newton-Howes G, Mullen R. Coercion in psychiatric care: systematic review of correlates and themes. *Psychiatr Serv*. 2011;62(5):465–70.
10. Jordan JT, McNiel DE. Perceived Coercion During Admission into Psychiatric Hospitalization Increases Risk of Suicide Attempts After Discharge. *Suicide Life Threat Behav*. 2020 Feb 1;50(1):180–8.
11. Mielau J, Altunbay J, Gallinat J, Heinz A, Bermpohl F, Lehmann A, et al. Subjective experience of coercion in psychiatric care: a study comparing the attitudes of patients and healthy volunteers towards coercive methods and their justification. *Eur Arch Psychiatry Clin Neurosci*. 2016 Jun 1;266(4):337–47.
12. Fiorillo A, Giacco D, De Rosa C, Kallert T, Katsakou C, Onchev G, et al. Patient characteristics, and symptoms associated with perceived coercion during hospital treatment. *Acta Psychiatr Scand*. 2012 Jun 1;125(6):460–7.
13. Raveesh B, Pathare S, Lepping P, Noorthoorn E, Gowda G, Bunders-Aelen JGF. Perceived coercion in persons with mental disorder in India: A cross-sectional study. *Indian J Psychiatry*. 2016 Dec 1;58(Suppl 2):210–20.
14. O'Callaghan AK, Plunkett R, Kelly BD. The association between perceived coercion on admission and formal coercive practices in an inpatient psychiatric setting. *Int J Law Psychiatry*. 2021 Mar 1; 75:101680.
15. Rhodes AE, Goering PN, To T, Williams JI. Gender and outpatient mental health service use. *Soc Sci Med*. 2002;54(1):1–10.

16. Georgieva I, Mulder CL, Whittington R. Evaluation of behavioral changes and subjective distress after exposure to coercive inpatient interventions. *BMC psychiatry*. 2012 May 30;12(1).
17. Sampogna G, Luciano M, Del Vecchio V, Pocai B, Palummo C, Fico G, et al. Perceived Coercion Among Patients Admitted in Psychiatric Wards: Italian Results of the EUNOMIA Study. *Front Psychiatry*. 2019; 10:316.
18. Golay P, Morandi S, Silva B, Devas C, Bonsack C. Feeling coerced during psychiatric hospitalization: Impact of perceived status of admission and perceived usefulness of hospitalization. *Int J Law Psychiatry*. 2019 Nov 1; 67:101512.
19. O'Donoghue B, Roche E, Shannon S, Lyne J, Madigan K, Feeney L. Perceived coercion in voluntary hospital admission. *Psychiatry Res*. 2014 Jan 30;215(1):120–6.
20. Burns T, Yeeles K, Molodynski A, Nightingale H, Vazquez-Montes M, Sheehan K, et al. Pressures to adhere to treatment ('leverage') in English mental healthcare. *Br J Psychiatry*. 2011 Aug;199(2):145–50.
21. Gardner W, Lidz CW, Hoge SK, Monahan J, Eisenberg MM, Bennett NS, et al. Patients' revisions of their beliefs about the need for hospitalization. *Am J Psychiatry*. 1999 Sep 1;156(9):1385–91.
22. Bonsack C, Borgeat F. Perceived coercion and need for hospitalization related to psychiatric admission. *Int J Law Psychiatry*. 2005 Jul 1;28(4):342–7.
23. Lei n.º 35/2023 | DR. 2023.
24. Newton-Howes G, Stanley J. Prevalence of perceived coercion among psychiatric patients: literature review and meta-regression modelling. *The Psychiatrist*. 2012 Sep;36(9):335–40.
25. Faul F, Erdfelder E, Lang AG, Buchner A. G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. In: *Behavior Research Methods*. 2007.
26. Golay P, Semlali I, Beuchat H, Pomini V, Silva B, Loutrel L, et al. Perceived coercion in psychiatric hospital admission: Validation of the French-language version of the MacArthur Admission Experience Survey. *BMC Psychiatry*. 2017 Nov 6;17(1):1.
27. Diagnostic and statistical manual of mental disorders. 1980.
28. Diagnostic and statistical manual of mental disorders, 4th ED. (DSM-IV). *Am J Psychiatry*.
29. Hoyer G, Kjellin L, Engberg M, Kaltiala-Heino R, Nilstun T, Sigurjónsdóttir M, et al. Paternalism and autonomy: a presentation of a Nordic study on the use of coercion in the mental health care system. *Int J Law Psychiatry*. 2002;25(2):93–108.
30. Priebe S, Gruyters T. Patients' Assessment of Treatment Predicting Outcome. *Schizophr Bull*. 1995 Jan 1;21(1):87–94.
31. Kim JH. Multicollinearity and misleading statistical results. *Korean J Anesthesiol*. 2019 Dec 1;72(6):558.
32. Team RC. R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. URL. 2020.
33. O'Callaghan AK, Plunkett R, Kelly BD. What is the role of gender in perceived coercion during psychiatric admission? *Ir. J. Psychol. Med*. 2023 Feb 20;1–5.

34. Martinez D, Brodard A, Silva B, Diringer O, Bonsack C, Morandi S, et al. Satisfaction and Perceived Coercion in Voluntary Hospitalisations: Impact of Past Coercive Experiences. *Psychiatr Q*. 2022 Dec 1;93(4):971–84.
35. Bonsack C, Borgeat F. Perceived coercion and need for hospitalization related to psychiatric admission. *Int J Law Psychiatry*. 2005 Jul 1;28(4):342–7.
36. Bindman J, Reid Y, Szmukler G, Tiller J, Thornicroft G, Leese M. Perceived coercion at admission to psychiatric hospital and engagement with follow-up. A cohort study. *Soc Psychiatry Psychiatr Epidemiol*. 2005 Feb;40(2):160–6.
37. Strauss JL, Zervakis JB, Stechuchak KM, Olsen MK, Swanson J, Swartz MS, et al. Adverse impact of coercive treatments on psychiatric inpatients' satisfaction with care. *Community Ment. Health J*. 2013 Aug;49(4):457–65.
38. McKenna BG, Simpson AIF, Coverdale JH, Laidlaw TM. An analysis of procedural justice during psychiatric hospital admission. *Int J Law Psychiatry*. 2001 Nov 12;24(6):573–81.
39. Galon PA, Wineman NM. Coercion and Procedural Justice in Psychiatric Care: State of the Science and Implications for Nursing. *Arch. Psychiatr. Nurs*. 2010 Oct 1;24(5):307–16.
40. Roche E, Madigan K, Lyne JP, Feeney L, O'Donoghue B. The therapeutic relationship after psychiatric admission. *J. Nerv. Ment*. 2014 Mar;202(3):186–92.
41. Bindman J, Reid Y, Szmukler G, Tiller J, Thornicroft G, Leese M. Perceived coercion at admission to psychiatric hospital and engagement with follow-up--a cohort study. *Soc Psychiatry Psychiatr Epidemiol*. 2005 Feb;40(2):160–6.
42. Swartz MS, Swanson JW, Hannon MJ. Does fear of coercion keep people away from mental health treatment? Evidence from a survey of persons with schizophrenia and mental health professionals. *Behav Sci Law*. 2003 Jul 1;21(4):459–72.
43. Gilbert H, Rose D, Slade M. The importance of relationships in mental health care: A qualitative study of service users' experiences of psychiatric hospital admission in the UK. *BMC Health Serv. Res*. 2008; 8:92.
44. Aluh DO, Santos-Dias M, Silva M, Pedrosa B, Grigaitė U, Silva RC, et al. Contextual factors influencing the use of coercive measures in Portuguese mental health care. *Int J Law Psychiatry*. 2023; 90:101918.
45. Katsakou C, Marougka S, Garabette J, Rost F, Yeeles K, Priebe S. Why do some voluntary patients feel coerced into hospitalisation? A mixed-methods study. *Psychiatry Res*. 2011 May 15;187(1–2):275–82.
46. Wild TC, Roberts AB, Cooper EL. Compulsory substance abuse treatment: an overview of recent findings and issues. *Eur. Addict. Res*. 2002;8(2):84–93.
47. Opsal A, Kristensen Ø, Vederhus JK, Clausen T. Perceived coercion to enter treatment among involuntarily and voluntarily admitted patients with substance use disorders. *BMC Health Serv Res*. 2016 Nov 15;16(1):656.
48. Fiorillo A, De Rosa C, Del Vecchio V, Jurjanz L, Schnall K, Onchev G, et al. How to improve clinical practice on involuntary hospital admissions of psychiatric patients: suggestions from the EUNOMIA study. *Eur Psychiatry*. 2011 May;26(4):201–7.

49. Cascardi M, Poythress NG, Hall A. Procedural justice in the context of civil commitment: an analogue study. *Behav Sci Law*. 2000;18(6):731-40.
50. McKenna BG, Simpson AIF, Coverdale JH. What is the role of procedural justice in civil commitment? *Aust N Z J Psychiatry*. 2000 Aug;34(4):671-6.
51. Sørgaard KW. Patients' perception of coercion in acute psychiatric wards. An intervention study. *Nord. J. Psychiatry*. 2004;58(4):299-304.

Table IV-1: Overview of research publications, main results and implications

Type of paper and phase of research	Title	Journal and publication status	Main results	Implications
Original research 1 st Phase	Beyond Patient Characteristics: A Narrative Review of Contextual Factors Influencing Involuntary Admissions in Mental Health Care	Health care (Published)	The study examined 54 research papers from 19 countries, including 14 European nations, the US, Canada, China, Vietnam, and Taiwan. It identified factors influencing involuntary admissions categorized as service characteristics, mental health laws, recent impactful events, temporal variables, staff factors, and public attitudes. These factors are interconnected and mutually reinforce each other.	The identified contextual factors offer possibilities for implementing effective and sustainable interventions aimed at minimizing involuntary admissions by utilizing comprehensive and intersectoral strategies.
Original research 2 nd Phase	Nigeria's mental health and substance abuse bill 2019: Analysis of its compliance with the United Nations convention on the rights of persons with disabilities.	International journal of law and psychiatry (Published)	The 2019 mental health and substance abuse bill was a substantial improvement over the country's earlier unsuccessful proposed bills. Most of the WHO's recommendations for mental health law were met, however the UNCRPD's recommendations were not.	While the UNCRPD is a positive step towards enhancing the rights of PMHCs, there's a need to provide more detailed guidance on how LMICs can effectively implement its recommendations considering their unique socio-cultural circumstances.
Original research 2 nd Phase	Experiences and perceptions of coercive practices in mental health care among service users in Nigeria: a qualitative study.	International journal of mental health systems	The service users viewed coercion as a necessary evil in severe cases but detrimental to their own recovery. It was seen as an extension of societal stigma and formed a harmful cycle of abuse. The experience of involuntary admission primarily involved deceit, mistreatment, and disdain. Regarding chemical restraints, there were concerns about negative side effects and	The research facilitated better comprehension of coercion within Nigerian mental health institutions, as perceived by those receiving care in those services. The results underscore the immediate need for policies and strategies to

			safety, while mechanical restraints sometimes involved the use of chains.	tackle human rights violations in Nigerian psychiatric hospitals.
Original research 2 nd Phase	Use of coercion in mental healthcare services in Nigeria: Service providers' perspective.	Journal of mental health (Published)	The use of coercion was justified as being in the patients' best interests, useful for achieving treatment goals, and efficient in getting the results wanted. Safety served as both a justification for using coercive measures and a disincentive to use coercive measures deemed risky. The use of coercion in mental healthcare was influenced by sociocultural background, obsolete mental health laws, staff shortages, and attitudes.	The study's findings emphasize the need for addressing the country's severe shortage of mental health resources, as well as the necessity of regular staff training and robust initiatives to reduce stigma among both the general public and mental health professionals.
Original research 2 nd Phase	A qualitative integrative analysis of service users' and service providers' perspectives on ways to reduce coercion in mental health care.	Social psychiatry and psychiatric epidemiology (Published)	The recommendations made by service users and mental health professionals fell into three categories: communication, policies and legislation, and increased resources. Improved communication, in-home consultations, non-legal advocates, and clear regulations and legislation, as noted by service users, would decrease the use of coercion. On the other hand, service providers suggested enhancing public mental health literacy, fostering better relationships with patients, allocating more resources to mental health care, conducting further research on the subject, and implementing measures to regulate coercive actions.	The findings show that service users and mental health professionals in LMICs and HICs have similar views on what can reduce coercion. Recommendations that are relevant to the research setting should be given special consideration, such as improving public mental health literacy, reforming the mental health laws, and increasing access to mental health care.
Commentary 2 nd Phase	A new era for mental health care in Nigeria.	Lancet psychiatry (Published)	The approved law clearly states the rights of PMHCs and is human rights oriented. It overcomes the shortcomings of earlier mental health laws that were submitted in 2003, 2013,	The paper highlights the need for a clear and detailed implementation strategy of the

			and 2019, and while this is a big accomplishment, it does not entirely adhere to the UNCRPD's recommendations.	country's new mental health law.
Original research 3 rd Phase	Contextual factors influencing the use of coercive measures in Portuguese mental health care.	International journal of law and psychiatry (Published)	The four main themes that emerged were: socio-legal factors, staff-related factors, inefficient services, and insufficient resources. Participants discussed how the use of coercive measures was influenced by insufficient organizational structures, staff shortages, staff attitudes, a lack of training, stringent ward rules, an inefficient service organization, mental health legislation, and public perceptions. The COVID-19 pandemic made the system's worsened existing flaws.	The study findings show that factors other than those related to the patients likely play a considerable impact in the use of coercive measures. Portugal needs to fully implement its mental health plan and introduce routine staff training to reduce the use of coercive measures in mental health care.
Original research 3 rd Phase	A Portuguese study of Staff Attitudes towards Coercion in Mental health care.	BMC Psychiatry (Under review)	The mental health professionals in Portugal generally had a pragmatic attitude towards coercion, showing the highest scores on the SACS "Coercion as Care and Security subscale (20.60±3.37). Age and years of work experience were negatively associated with critical attitudes towards coercion (p<0.05). The Portuguese SACS showed satisfactory psychometric properties.	The observed differences in attitudes between younger and older professionals point to the need for tailored interventions. The psychometric qualities of the Portuguese version of SACS were determined to be satisfactory. Its ability to show disparities in staff attitudes based on their sociodemographic and professional characteristics, enables tailored interventions for staff.
Original research 3 rd Phase	Revisiting the psychometric properties of the McArthur Admission Experience Survey	Heliyon (Under review)	The internal consistency and test-retest reliability of Portuguese version of the AES (P-AES) were found to be acceptable. The bifactor model displayed better fit in comparison to both	The bifactor model implies that all three AES categories assess the subjective experience of coercion. The P-AES is

	(AES): Validating the Portuguese version using a Bifactor approach.		the one-factor and three-factor models. Correlations between P-AES, coercion ladder, and CAT scores supported its convergent validity. Furthermore, P-AES scores were significantly higher in patients subjected to involuntary psychiatric hospitalization, underscoring its ability to differentiate between different admission types.	anticipated to encourage the development research in Lusophone countries and to stimulate cross-cultural comparisons on the subject.
Original research 3 rd Phase	Exploring the Subjective Experience of Coercion Among Patients in Five Portuguese Psychiatric Departments	Archives of Psychiatric Nursing (Under review)	At admission, the median global AES score was 5.5 (IQR = 8) and 6.5 (IQR = 7) ($V = 342.5$, $p = 0.162$). A third of the sample (32.24%, $n = 49$) had a legal involuntary admission status, while more than a third considered their admission to be involuntary (40.13%, $n = 61$). The first assessment's subjective experience of coercion (AES-total) was predicted by the legal status of admission, the perceived necessity of the admission, and the Visual Analogue Scale, while the changes observed at second assessment were predicted by the perceived admission status and the initial procedural justice ($p < 0.05$).	The results of the study imply that since psychiatric admissions commonly involve people other than mental health professionals, measures to improve the admission process by improving procedural justice should include every relevant stakeholder.

V. Discussion

This section provides an integrative overview and discussion of the main findings of the ten papers derived from the Ph.D. study. The strengths and limitations of the Ph.D. research will be presented, and implications for public policy will be provided in subsequent subsections.

5.1 Discussion of main findings

The findings of the Ph.D. thesis offer a comprehensive assessment of the contextual elements that contribute to the use of coercive measures in mental healthcare. Previous research has underlined the importance of context in comprehending the issue of coercion in mental health care (191,192). By integrating existing literature and incorporating perspectives from service users and mental health professionals in Nigeria and Portugal, the research provides a global outlook on this complex issue. These combined approaches enable the formulation of robust and contextually relevant recommendations. The research confirms that coercion in mental health care is a pervasive problem that transcends national income levels.

Globally, the primary issues of providing mental health care are universal coverage, comprehensiveness and integration of care, and quality (193). The use of coercion in mental health care is an indicator of the quality of care provided. It seems logical to assume that coercion in mental health care would be less prevalent in countries with more resources for mental health care. However, existing evidence suggests that this assumption is not completely true. The prevalence of coercion in mental health care seems to be paradoxically higher in countries with more resources for mental health care. One possible explanation for this paradox is that when mental health care is more accessible, PMHCs in need of treatment are more likely to be identified and engage with the system, and there is an increased ability to detect and intervene in cases where people pose a risk to themselves or others. Consequently, the number of people subjected to coercion increases. In developing countries, where access to mental health care is limited, there is a higher severity but lower prevalence of coercion in formal mental health care. This correlation does not imply causation; rather, it suggests that the availability and utilization of mental health care resources play a pivotal role in determining the prevalence of coercion.

Although the thesis does not focus on comparing the two countries, it is crucial to grasp their unique socio-political contexts to gain a better understanding of the problem in both settings. Notably, there are significant differences in the attention and policy agenda given to the problem in the European and African regions. In Nigeria, a relatively young African country that achieved democracy only 23 years ago, the enactment of its first human rights-oriented mental health legislation in 2023 marked a significant milestone in recognizing the rights of PMHCs. On the other hand, Portugal, a not-so-young European country that established a democratic regime around 48 years ago, recently replaced their initial legislation from 1998 with a new one in 2023, reflecting their ongoing commitment to protect the rights of PMHCs. Within the broader context of healthcare, it is essential to highlight the significant impact of universal access to health care on the use of coercion in mental health care. Portugal has achieved universal health coverage since as far back as 1979, leading to remarkable improvements in health indicators and accessibility to mental health care for PMHCs. The mental health reforms introduced in Portugal to replace the traditional psychiatric hospital with community-based and integrated mental health services have also played a vital role in influencing the use of coercion. The establishment of a comprehensive national mental health plan in 2007 significantly contributed to the systematic implementation of the reform in mental health services (156). Conversely, Nigeria, like many LMICs, heavily relies on out-of-pocket payments for healthcare and faces the challenges of high rates of infectious diseases and poor health indicators. Access to mental health care is consistently impeded by limited-service availability and high treatment costs, making coercion in mental health care a ‘privilege’ of the few who are financially capable of affording it. These factors warrant careful consideration when seeking to comprehend the prevalence of coercion in mental health care within LMICs.

5.1.1 The influence of mental health legislation

Paper 1, which is a narrative synthesis of the extant literature on contextual factors influencing the use of involuntary admission emphasizes how involuntary admissions of PMHCs may be indicative of a country's underlying mental health laws and policies. It is worth noting the absence of LMICs in the narrative review, which draws attention to the lacking frameworks needed for involuntary admissions in these countries, including robust mental health laws and social services. For HICs that possess well-established structures supporting involuntary admissions, it remains uncertain which specific aspects of the law best safeguard both PMHCs and society. While some countries like Switzerland (194) and Italy (77) have reported significant reductions in involuntary admissions,

others including China (195) saw a rise when new mental health laws went into effect. However, cross-country comparisons within the European Union have not provided conclusive evidence on the specific aspects of mental health laws that influence the rates of involuntary admissions (78,196).

Paper 2 is an analysis of the legal context of coercion in Nigeria's mental health care system. The study acknowledges that the proposed mental health legislation may not fully align with the recommendations of the UNCRPD, but it considers the socio-cultural realities of the country, representing a substantial improvement over previously proposed bill. This proposed legislation recognizes and upholds the rights of PMHCs, in stark contrast to the outdated lunacy act that completely disregarded their rights. Paper 4 & 7 highlight the perspectives of mental health professionals in both Nigeria and Portugal on the role of mental health legislation in the use of coercion. In Nigeria, professionals acknowledge the influence of the outdated mental health law on the use of coercive measures. Conversely, in Portugal, professionals drew attention to how some ambiguities in the 1998 mental health law resulted in subjective interpretations. Furthermore, some professionals in Portugal used mental health laws to justify the deployment of coercive measures such as involuntary admissions. Both countries recently implemented improved mental health legislation. The new mental health law in Portugal aims to comply with the UNCRPD by including provisions for nominated representatives and advanced care planning. However, there are concerns that these provisions may be difficult to fully implement due to the existing shortage of mental healthcare professionals. Similarly in Nigeria, the implementation of the new mental health law may be hindered by issues such as out-of-pocket payments, widespread stigma, and a severe shortage of mental healthcare staff. Paper 6 emphasizes the importance of developing a clear implementation strategy for Nigeria's new mental health law. Although the UNCRPD has offered a framework to protect PMHCs' interests, current mental health systems in many countries fall short of meeting the criteria for a fully UNCRPD-compliant mental health law. Consequently, no country has completely revised its mental health law per the UNCRPD's recommendations. The UNCRPD rightly emphasizes the importance of autonomous decision-making. However, we must also acknowledge that this approach may not be universally accepted in all countries. In communitarian societies like Nigeria, where family values and communal decision-making are highly valued (197), it becomes essential to strike a balance between individual choices and familial considerations.

5.1.2 The influence of mental health services and human resources

Paper 1 reports the importance of having a diverse range of alternatives to inpatient care and social services to fulfil the needs of PMHCs and minimize the need for involuntary admissions. In HICs like Portugal, where deinstitutionalization is almost fully accomplished, the efficiency of the mental health service organization determines how people access and utilize the services. Paper 7 highlights the views of mental health professionals in Portugal that the insufficient availability and inefficient organization of mental health services contribute to the use of coercive measures in Portugal. Insufficient financial resources for mental healthcare and the ineffective structuring of mental health services contribute to a burdened workforce receiving patients via emergency pathways. Some psychiatric departments may have been originally intended for general hospital usage before being modified for mental care, which may account for the structural flaws, notably the lack of outdoor spaces. The national mental health plan, in principle, outlines an effective path to treatment through referrals from primary care providers and a network of community mental health teams. However, in practice, the vast majority of psychiatric admissions take place in emergency rooms, bypassing primary care, community mental health services, and outpatient centers at each psychiatric facility (198).

In LMICs like Nigeria, where psychiatric hospitals are the primary form of care, the utilization of these measures is influenced by the availability and cost of services and the absence of community mental health services. According to Paper 5, Nigeria's service providers and users recognize the protective role played by community mental health services. The service providers emphasized the value of integrating mental health treatment within primary care and community mental health teams. Meanwhile, some service users were convinced that consultations at home could completely replace the necessity for involuntary admissions. Supporting this viewpoint, a recent synthesis of qualitative research on patient experiences of coercion reported that patients highly value the opportunity to remain in their familiar surroundings, surrounded by loved ones, during times of crisis (61). Even though many LMICs may not be able to completely implement a variety of community mental health services, it has been suggested that integrating mental health care into primary care is a practical strategy for providing community mental health care in settings with limited resources. Nigeria's mental health policy acknowledges this recommendation, but it has not been fully implemented in practice. The scenarios in both countries underscore the shared significance of implementation gaps in both LMICs and HICs.

Another common theme shared by both countries is the impact of low staffing ratios on the use of coercive interventions. Despite Portugal having significantly more psychiatrists and mental health nurses per capita compared to Nigeria, it still falls behind other EU countries in terms of mental healthcare professionals (199,200). Papers 3 and 7 report how mental health professionals in both countries have emphasized that limited staff-to-patient ratios result in insufficient time to establish therapeutic relationships and effective communication, ultimately leading to an overreliance on coercive measures. These findings are consistent with studies undertaken in different countries with varied levels of resources (88,201–203). While the impact of limited resources on mental health care and its association with coercion is acknowledged (204), the occurrence of this problem even in comparatively better-resourced countries underscores the fact that it is a challenge that extends beyond the availability of resources for mental health care. Restrictive rules within the wards were emphasized to promote conflict and aggression, resulting in the utilization of coercive measures. In Paper 5, service users and providers in Nigeria agreed that the establishment of clear guidelines and standards for the use of coercive measures would lead to a decrease in their excessive use. Reliance on restrictive rules was highlighted by Portuguese staff in Paper 7 as contributing to conflict and coercion, ultimately leading to patients feeling trapped, dehumanized, and stigmatized (205). The significance of clear communication, rule clarity, and consistency is still obvious despite conflicting findings in literature reviews regarding whether rigid or flexible cultures are more beneficial in managing psychiatric wards (205).

5.1.3 The influence of Staff attitudes and subjectivity

In this thesis, qualitative and quantitative evaluations of mental health practitioners' perceptions and attitudes toward the use of coercion were conducted. There were some disparities in how professionals from Portugal and Nigeria perceived coercion. While many Portuguese mental health practitioners shared the same view as their counterparts in Nigeria that coercion is a necessary evil, they were more aware of the potential for alternative measures. In contrast to the Portuguese staff, who mostly emphasized the importance of receiving training to prevent coercion, a few staff members in Nigeria acknowledged the need for training in de-escalation techniques to effectively handle instances of violence and aggression from service users. This bears considerable consequences for initiatives striving to minimize coercion in that setting. To tackle this problem, a transformative change in professionals' outlook on the human rights of individuals with PMHCs is first required (105). In Paper 8, a systematic assessment of staff attitudes in Portugal was conducted using a validated tool. The study findings show that the mental health professionals in Portugal possess a

pragmatic attitude toward coercion. Although this is preferable to viewing coercion as therapeutic, only a critical attitude towards coercion can spark genuine transformation among professionals. Mental health professionals who had implemented coercive measures in the past six months scored notably higher in the pragmatic attitude category than those who had not. Furthermore, distinctions were observed concerning service locations. Urban-based mental health professionals exhibited more positive attitudes towards coercion (as per the "Coercion as treatment" subscale) compared to their rural counterparts. This could result from increased demand and stress on urban mental health services (206) and the likelihood of encountering culturally diverse users. A notable negative correlation was discovered between critical attitude aspects (the "Coercion as offending" subscale) and age and experience, signifying that as professionals aged and gained experience within the service, their critical views on coercion diminished. This finding is in contrast with previous studies conducted among mental health professionals in Poland (112) and Germany (104) where more experienced professionals had more critical attitudes towards coercion. These variations support the narrative review's conclusions (Paper 1), where staff traits, personal perspectives, and experience were identified as contributing factors to involuntary admissions. This highlights the necessity for tailored interventions for staff members at various points in their careers.

5.1.4 Interplay of factors

It is evident that contextual factors affecting the use of coercion do not act independently, but rather interact and influence one another. The links between these contextual factors are discussed in Paper 1 in detail. Involuntary Admission is significantly influenced by the availability and distribution of mental health and social services, whereby periods of inadequate service capacity and increased demand lead to temporal and seasonal correlations. Additionally, economic downturns and austerity measures not only reduce the capacity for delivering services but also amplify community intolerance towards deviant behaviors, leading to an increased demand for services. This, in turn, places additional strain on mental health services. The legislation on mental health often mirrors the attitudes held by both the general public and professionals towards PMHCs, and this legislation is often internalized by staff and public as well. Similarly, public attitudes and perceptions can also be influenced by events that reinforce stigma, such as violent incidents associated with mental health conditions. The decision-making process for involuntary admission is influenced by these factors, as well as the individual traits of mental health professionals and pragmatic concerns including the availability of alternatives to hospitalization. These dynamics primarily revolve around the need for mental health services and the capacity to meet those needs. The results of Paper 7 support the notion

that the contextual factors influencing the use of coercion in Portuguese mental health care are interrelated. Inadequate mental health care resources are seen as insufficient patient spaces, low staff-to-patient ratios, and a lack of staff training. The COVID-19 epidemic and prior economic downturns compounded these resource constraints. The lack of staff training is reflected through stringent ward regulations, which are designed to improve safety but also create conflicts that demand coercive measures. The staff's varying attitudes and subjectivity when faced with similar aggressive incidents emphasize the insufficiency of training. Furthermore, the mental health legislation itself justified the use of coercive measures for certain staff members. Papers 2, 4, and 5 provide further evidence from Nigeria of the interactions among contextual factors, demonstrating how outdated mental health laws, insufficient resources, and stigma combine to increase the severity and reliance on coercion in mental health services.

5.1.5 Subjective experience of coercion among service users

The research on the experiences of service users in the context of this Ph.D. research is of utmost importance to have a full understanding of the dynamics between service providers and users. By complementing the perspectives of service providers with those of the service users, we can attain a more nuanced understanding of the contextual factors influencing the use of coercion in mental health care. These quantitative and qualitative investigations took into account the practical considerations specific to each country, ensuring a comprehensive and culturally relevant analysis.

Although there was no legal status of admission due to the absence of a legal framework for compulsory admissions at the time the study was conducted, more than half of the service users in Nigeria perceived their admission to be involuntary. The experiences of these service users shed light on severe violations of human rights within the psychiatric hospitals. Both physical force and deception were employed to bring patients into the facilities for treatment. Moreover, the findings reveal a concerning trend where some service users justified coercive measures for other patients, thereby endorsing the very practices that they themselves did not want to experience. This perception reflects the prevalent societal attitudes towards PMHCs. Importantly, previous research among both service users and mental health care staff has suggested that coercion is often perceived as a necessary evil to prevent even greater harm (207–209). While this justification may seem paradoxical, it emphasizes the need for comprehensive interventions that prioritize the well-being and autonomy of individuals while addressing the legitimate concerns of safety and protection. The recognition of the value of effective communication and the desire to have a voice during psychiatric admissions among

Nigerian service users emphasizes the universal importance of empowerment in mental health care. What makes this finding compelling is its alignment with the findings from Portuguese service users, which showed that procedural justice - or the extent of involvement of PMHCs in deciding psychiatric admission—significantly influenced their subjective experience of coercion. This often overlooked but crucial aspect of mental health care—empowering patients and involving them meaningfully in treatment decisions—is key to achieving more satisfactory outcomes and enhancing perceptions of care.

The level of coercion experienced by Portuguese patients in psychiatric departments was found to be lower compared to previous studies conducted in the United Kingdom (28) and Italy (32). Gender, immigrant status, and number of previous admissions did not show a significant association with the subjective experience of coercion, which contrasts with previous research (19,210). Interestingly, a larger proportion of patients perceived their admission as involuntary, even though their actual legal status was voluntary, aligning with the findings of previous studies where patients misreported their admission status (17,18). These findings are concerning because individuals who felt coerced during legally voluntary admissions had poorer follow-up outcomes, even after considering all potential confounding factors (211). The increase in the perception of coercion at the second assessment highlights the need for further investigation into the experiences of patients during their ward admissions. Additionally, the explanatory capacity of the model was 21.5%, suggesting that unexplored variables, such as the use of restrictive practices within the wards, may have influenced changes in the subjective experience of coercion. Notably, the perceived status of admission predicted changes in both the overall AES score and the perceived coercion subscale, emphasizing the significance of how individuals perceive their admission status and its impact on their subjective experience. Previous research indicates that legal status inadequately reflects patients' experiences (45,51) and that the experience of coercion is more likely linked to social interactions during the admissions process (212) and the relationship with those who enforce these laws (213).

The initial procedural justice played a crucial role in predicting changes in the subjective experience of coercion during psychiatric admissions. It emphasizes the significant impact of allowing patients to have a voice and the importance of listening to their opinions. This notion strongly resonates with the reports of Nigerian patients who have expressed their strong desire to speak up and be heard at the point of admission, especially since they are perceived to be emotionally charged and lacking insight into their conditions at that time. Drawing upon a previous study conducted among Norwegian service users, it was found that patients who feel respected and have their opinions valued are less

likely to feel humiliated, violated, powerless, and punished compared to their counterparts. The study concludes that there is a clear link between procedural justice and the experience of coercion, with humiliation acting as a mediating factor (214). The Norwegian service users affirmed that if healthcare professionals truly listened and offered logical responses and explanations, they would feel less humiliated (214). The dismissive attitude toward the opinions of PMHCs has been recognized as a central experience for patients undergoing psychiatric admissions (215) and plays a role in the vast mortality gap found within this population (216).

This underscores that enhancing procedural justice in psychiatric admissions demands a united effort from all parties involved including the police and families of PMHCs, not just mental health professionals. Portuguese mental health professionals highlighted the necessity of training for everyone involved, such as police officers and non-medical workers (Paper 7). Despite having negative views of PMHCs, police officers in Portugal, according to a prior study, recognized the value of receiving specialized training to deal with people going through mental health crises (167). This insight is closely aligned with the conclusion of the narrative review, which strongly advocates for collaboration among different sectors to reduce involuntary admissions.

5.1.6 Validation of study instruments in Portuguese

The validation of the Portuguese version of the instruments used in Phase 3 research is a crucial and advantageous step for not only Portugal but for all Lusophone nations. This significant development paves the way for research and cross-cultural comparisons among these countries, thereby enhancing the overall scope of research in this field. In the validation of the Portuguese version of the SACS, the three-factor solution demonstrated the best fit and strong internal consistency compared to earlier models from Norway (106), Germany (109), Japan (110), and Italy (111). The psychometric analysis indicates that the Portuguese version of SACS can effectively measure staff attitudes towards coercion. Furthermore, it can identify variations in staff attitudes influenced by their sociodemographic and professional features, allowing for tailored interventions for staff members. In validating the P-AES, apart from standard psychometric testing, an innovative approach was employed using bifactor modeling. This approach showed better fit properties compared to the previously proposed one-factor and three-factor solutions. The bifactor model emphasized the distinctiveness and commonalities of the P-AES's three domains, indicating their individual significance in understanding the subjective experience of coercion. This discovery aligns with Hodge et al.'s original concept of a core construct, where the experience of coercion is comprehensively described through latent factors like perceived fairness, relationships with individuals exerting pressure, and the aspect of voice or validation (217). Considering these findings, it is recommended

to evaluate the subjective experience of coercion by employing all three domains of the P-AES and including the total score along with the scores for each individual domain.

5.2. Limitations and strengths

In this thesis, the implicit arguments for strengths and limitations are evident when discussing the conceptual and methodological choices made. An important aspect to consider is the heterogeneity present in conceptual definitions and research methods surrounding coercion and coercive measures. This diversity restricts the comparisons that can be made, highlighting the necessity for thoughtful analysis within the confines of these limitations. Moreover, the absence of standardized data collection on coercion in both countries limited the scope of investigation that could be carried out on formal coercive measures. Although this limitation was restrictive, it presented an opportunity to extract meaningful insights within the given context.

In Phase 1, a narrative review with broad inclusion criteria was conducted, which limited quantitative synthesis and estimation of the effects of contextual factors. This limitation may be considered a strength because it allows us to explore a wide range of factors and observe how different elements interact to influence involuntary admissions. Even though some studies did not find a direct correlation between contextual factors and involuntary admission, they were included in the analysis to present a more comprehensive understanding of the situation. To ensure objectivity, the review exclusively focused on quantitative studies published in peer-reviewed journals. The range of contextual factors examined in the review was limited due to the exclusion of qualitative studies and studies published in languages other than English.

In Phase 2, the study only included two psychiatric hospitals, leaving uncertainty about whether the practices are the same in other hospitals in the country. As with all qualitative studies, there is a limitation on extrapolating beyond the specific study context. However, with caution, one can expect the results to reflect the current reality of Nigerian psychiatric hospitals. This study did not look at verbal abuse or other forms of informal coercion. Another potential limitation is the exclusion of 'unstable patients' from the focus group discussion with service users, who may have different experiences from those included and are more likely to be victims of coercive practices. Moreover, in Paper 4, which reported the interviews with service providers, the participants' familiarity with the interviewers, were also staff members, may have introduced some social desirability bias. This bias could have influenced the emphasis on specific issues over others, potentially overlooking significant directions and themes crucial for understanding coercion in that setting. Phase 2 ends strongly with an integrative synthesis of ideas from service users and service providers on ways to reduce coercion

in Nigerian mental health services. Engaging key stakeholders in the creation of problem-solving strategies has been shown to improve intervention choice, customization, and efficacy (218).

Phase 3 incorporated both quantitative and qualitative methodologies. In Paper 7, the strength of the qualitative study comes from its ability to gather perspectives from doctors and nurses across various parts of the country. To ensure widespread participation, efforts were made to include professionals from a range of services in both urban and rural locations. However, it is important to acknowledge that the findings of this study may not accurately reflect the overall reality of mental health services in Portugal. A limitation in Paper 8, which reported a cross-sectional survey on staff attitudes towards coercion, is the potential influence of social desirability and recall bias. The accuracy and honesty of the responses could be called into question. Furthermore, the correlational relationship between staff characteristics and their attitudes does not imply causation. Due to the data collection process being conducted at only one point in time, the psychometric properties of the SACS over time were not explored. Additionally, the small sample size prevented the performance of an invariance structure analysis. Lastly, this study only utilized one measure of staff attitudes towards coercion (i.e., SACS), which limited the evaluation of concurrent validity and structural validation across other instruments. However, one notable strength in the psychometric validation of the SACS was the deliberate selection of a polychoric correlation matrix for factorial analysis and reliability calculation. This choice was made after a prior normality test revealed that the items deviated from a univariate or multivariate normal distribution. Since the SACS employs a Likert scale for assessing responses, which generates ordinal data, utilizing polychoric correlations provided a more accurate replication of the measurement model employed to produce such data (219).

In Phase 3 as well, the subjective experience of coercion among patients receiving care in five Portuguese psychiatric departments was explored using the AES. In order to validate the P-AES, a different approach was employed using a bifactor model, which has not been previously examined in validation studies. This increased the current understanding of the AES factor structure. Some limitations to this study are acknowledged. The study relied on self-report ratings for concurrent measures, which introduces the possibility of artificially high correlations due to mono-method bias (220). Also, it is crucial to recognize that prior research has demonstrated bifactor models' superiority in terms of fit statistics when compared to other models. Therefore, it is possible that the bifactor model might have captured some irrelevant information and only demonstrated a better fit due to overfitting the data. However, several steps were taken to mitigate this potential bias. Multiple model selection criteria were employed to minimize any undue influences. Paper 10 utilizes a

psychometrically valid and reliable instrument, employs multivariable statistical analyses, and assesses the subjective experience of coercion across specific domains. These are significant strengths that allow for a comprehensive examination. However, some methodological limitations are also acknowledged. A substantial number of questionnaires with missing variables were excluded from the analysis. Data on experiences of coercive measures during inpatient admission that may have explained changes in the subjective experience of coercion were not collected. Furthermore, due to the small sample size, subgroup analyses on predictors of specific changes (positive and negative) in AES scores were not feasible. Evaluating every patient at the same time during their hospital stays was also not possible due to varying lengths of stay, conditions, and discharge dates. As a result, the interval between the two assessments was included as an independent variable in the multivariable models. Additionally, it is worth mentioning that the administration of questionnaires by professionals from the service where participants were hospitalized may have influenced their responses. Furthermore, excluding patients who were unable to provide informed consent introduces a potential bias.

5.3. Future research directions

Improving the current global standards for reporting on mental health practices that involve coercion is of utmost importance to guarantee the reliability of future investigations and establish a solid groundwork for comprehensive research in this field. There remains a significant research gap when it comes to exploring the impact of various macro- and meso-level factors on access to mental health care, that ultimately lead to the employment of coercive measures. There is still more research that needs to be conducted regarding how the extent of universal health care coverage in LMICs and the policies surrounding mental health care for immigrants, especially in Western countries may influence the use of coercion. High out-of-pocket expenses and the absence of a legal framework for mental health care pose substantial obstacles to obtaining mental health care in many LMICs, and limited attention has been given to how these challenges impact the extent and severity of coercive measures used in those settings. Furthermore, evaluating a country's commitment to upholding the human rights of its population may shed light on the degree to which PMHCs' rights are safeguarded. It would be interesting to investigate the possibility of evaluating the direct impact of staff-related factors and public opinions on the use of coercive measures. Additionally, the impact of environmental factors on coercive measures warrants further investigation, especially considering the escalating effects of climate change.

To gain a more comprehensive understanding of coercion in inpatient settings, it is essential to conduct further studies in both countries that explore the viewpoints of service users and their families. Additionally, it is crucial to investigate informal forms of coercion in both countries. Considering that the decision-making process is influenced by various factors, such as emotions and personality traits, future research can enhance current knowledge by combining the SACS with other instruments to capture a wider range of variables related to the decision to resort to coercion. Additional research is needed to validate whether the bifactor model accurately represents the subjective experience of coercion during admission.

Many ideas have been explored to find ways to reduce coercion in various settings. It would be valuable to investigate which interventions will be effective in both countries and explore methods to adapt these strategies to be culturally sensitive and acceptable. Considering policymakers' interest in cost-effective interventions, including economic outcomes in studies evaluating alternatives to coercive measures becomes particularly critical. The employment of coercive measures in healthcare is influenced by various contextual variables, emphasizing the importance of collaboration between

healthcare researchers and experts from diverse fields, including the social sciences. Multidisciplinary research is essential for fully comprehending the problem.

5.4. Policy implications

One of the major strengths of this thesis lies in its dedication to understanding and addressing the specific needs and realities of two vastly different countries. By taking into consideration the unique socio-economic and cultural factors that shape the use of coercive measures in each country, the study provides a solid foundation for contextually relevant recommendations and policies. The research findings have far-reaching implications, as they bring attention to the importance of tailoring interventions to the contextual realities of each country. By doing so, policymakers can avoid the pitfalls of simply adopting generic approaches that ignore the complex interplay between coercive measures and societal dynamics. A contextually sensitive approach ensures that the implemented policies are in line with the distinct needs and circumstances of the country under consideration.

Both countries have rightfully implemented new mental health legislation with the aim of enhancing the rights of PMHCs. However, it is crucial to recognize that legislation alone cannot fully address the issue of coercion in mental healthcare. For meaningful progress, it is necessary to also focus on comprehensive service reform and staff training to effectively implement these laws. Three key interconnected areas require attention in both countries: tackling systemic shortcomings such as staff shortages and inefficient service organizations, providing comprehensive training for mental health professionals, and establishing standardized data collection and monitoring systems for coercive measures, backed by robust regulatory mechanisms.

In Portugal, where considerable progress has been made in terms of deinstitutionalization and the existence of a well-developed mental health plan and policy, it will be beneficial to focus efforts on implementation research. The aim is to identify and address the barriers impeding the full execution of the country's mental health plan. Full implementation of the mental health plan will optimize the organization of mental health services and promote continuity of care. It is also essential to create information systems that record coercive actions for consistent monitoring of such actions in mental health services in Portugal. Studies have demonstrated that economic downturns may signal the necessity for increased capacity to cater to the heightened demand for mental health care. Given Portugal's history of being significantly impacted by economic recessions, it is essential to establish contingency plans for mental health care in times of economic downturns. It is worth noting that austerity measures, which reduce financing for mental health care, are ultimately counterproductive as they lead to increased utilization of mental health services and a greater reliance on coercive measures. In light of this, estimating and predicting the demand for mental health services during

economic declines can help healthcare managers to effectively plan their services. Routine training should be provided for all individuals involved with psychiatric admissions, including professionals in law enforcement and those without medical backgrounds. The emphasis of this training should be on improving communication skills, exploring alternative methods to coercion, and implementing a human rights perspective. Implementing comprehensive staff training programs can significantly boost confidence and contribute to the creation of a more flexible ward environment. It is important to acknowledge the diversity in attitudes towards coercion among Portuguese mental health professionals, suggesting that a one-size-fits-all intervention may not be effective. Instead, customized interventions should be introduced, targeting specific socio-demographic and professional profiles, to promote a shift in attitudes toward coercion.

One of the key suggestions put forth by the EUNOMIA study was to ensure that patients are fully informed about the reasons for their hospitalization and the expected duration of their stay (221). This recommendation is further reinforced by the Portuguese mental health legislation. However, it appears that this advice is not being completely implemented, as indicated by the low level of procedural justice observed among service users. Therefore, in addition to having a human rights-oriented law, it is crucial to develop comprehensive guidelines at the national, regional, and hospital levels that outline specific measures to be taken during psychiatric admissions. Additionally, the viewpoint of the mental health professionals on how the law is often interpreted subjectively emphasizes the urgent need for clearer policies and guidelines regulating the employment of coercive measures in the country. A prior study conducted among Portuguese nurses revealed insufficient knowledge about the indications, implementation, and regulatory framework concerning physical and chemical restraints used on patients (222), strengthening the argument for the creation of comprehensive guidelines and routine training sessions for both doctors and nurses in order to address this issue. The perceived level of procedural justice, which is typically established during the initial encounter with the admissions process, was found to be a significant predictor of increased feelings of coercion among Portuguese service users. Since service users often encounter non-mental health professionals such as police or emergency room staff for their first interaction, strategies to reduce coercion and enhance the psychiatric admission process must involve multiple stakeholders.

Despite the growing recognition of mental health issues, there continues to be a negative perception associated with severe mental health conditions, highlighting the importance for the country to strengthen existing programs aimed at reducing this stigma. The formation of researcher and practitioner consortiums addressing the issue of coercion in different jurisdictions has the potential to

greatly enhance initiatives to minimize coercion in the country, similar to the positive impact seen in European countries involved in the EUNOMIA study (223). Collaborations with other countries can also bring significant advantages in strengthening efforts to reduce coercion. While the FOSTREN project (Fostering and Strengthening Approaches to Reducing Coercion in European Mental Health Services) (224) currently promotes the exchange of research and experience among member states of the European Union to improve understanding of successful interventions and establish an integrated framework for reforming mental health care in the region, establishing a national consortium dedicated to this theme could have an even greater impact in raising awareness and generating interest within Portugal.

Many of the policy recommendations outlined above for Portugal could also be applied to Nigeria, but it is important to consider Nigeria's unique socio-economic and cultural context. While the passing of the National Mental Health Act 2021 is a commendable milestone and an essential first step in protecting the rights of PMHCs in Nigeria, without a clear strategy for implementation, monitoring mechanisms, and accountability, the new law can easily become equivalent to the outdated Lunacy Act. Fully implementing Nigeria's National Mental Health Act 2021 requires significant investment in the mental health care system, increasing access to mental health services, routine training for mental health professionals, the implementation of regulatory measures to ensure human rights protection, and the inclusion of mental health services in primary care to increase accessibility and minimize stigma. However, before achieving this integration, it is first essential to revive and make primary care services affordable to all individuals in the country. The recent report on mental health by the WHO emphasizes the importance of using a variety of approaches to prevent human rights violations in mental health services. This includes expanding community-based services focused on recovery, monitoring and evaluating mental health services, and involving individuals with personal experience of mental health conditions in decision-making processes (225).

In alignment with the global initiatives to decrease the use of force in mental healthcare, it is also necessary to have official records of coercive measures employed in psychiatric hospitals in Nigeria to track their occurrence. Formal documentation of coercive practices not only enables accountability but also acts as a catalyst for change. When the prevalence of coercion is quantified, it becomes harder to ignore or dismiss them as isolated incidents. The provision of concrete evidence supports the argument for urgent intervention and prompts policymakers and stakeholders to take action. To make any real headway, efforts to increase mental health literacy and to reduce stigma must be prioritized. Since social prejudices and misconceptions about mental health issues are deeply entrenched, doing

nothing to address them would make it more difficult to reduce coercion. The few mental health advocacy groups in the country play a crucial role in raising awareness of the problem and lowering stigma. Their efforts are commendable and have undoubtedly made a positive impact. However, it is essential to acknowledge that these organizations are not solely service-user-driven. While the existing advocacy groups focus on providing information and support, activism against violations of human rights and coercion in mental health care is urgently needed. It is crucial for service users to take the lead in this fight, as they have firsthand experience and understand the challenges faced within the system. By advocating for their rights and speaking out against abuses, service users can create much-needed change in mental health care.

Broader strategies for tackling the root causes of the ongoing brain drain, especially security and economic challenges, are crucial in preserving the mental health workforce in Nigeria. These challenges pose significant threats to the stability and effectiveness of the country's mental healthcare system. There exists a unique opportunity to tap into the preference for complementary and alternative practitioners among a substantial proportion of PMHCs in Nigeria. Research has shown the feasibility and benefits of collaborative care between formal mental health care practitioners and alternative practitioners in the country (226). By recognizing and incorporating the contributions of complementary and alternative practitioners, it is possible to revolutionize mental health care in Nigeria. This collaboration will not only expand the options available to people seeking mental health support but also promote a holistic and integrated approach to care, considering the diverse needs and preferences of the population. To successfully integrate complementary and alternative practitioners into the mental health care system, it is essential to provide them with comprehensive training on human-rights approaches to mental health care. Addressing the shortages in human resources in mental health care requires incentivizing professionals to specialize in psychiatry. Encouraging and supporting specialization in this field will help bridge the gap in mental health workforce shortages and ensure an adequate number of skilled professionals to meet the growing demand.

Finally, the current context of coercion in mental health care demands a proactive and comprehensive approach. The thesis underscores the urgency for Portugal and Nigeria to reimagine their approaches to providing care for PMHCs and addressing coercion in mental health care. Through multimodal approaches and intersectoral collaborations, meaningful progress can be achieved.

5.5 Conclusions

One of the main goals of sustainable development goals is to ensure good health and well-being for all at all ages. Coercive practices not only compromise the well-being of individuals but also undermine trust in healthcare systems, discouraging people from seeking the help they need. Coercion in mental health care also disproportionately affects vulnerable populations, including ethnic minorities, and those of lower socioeconomic status. It also disrupts the peace and inclusivity that is essential for sustainable development. Reducing coercion in mental health care is not only a matter of human rights but also aligns with many sustainable development goals.

The thesis aimed to explore the contextual factors that contribute to the use of coercive measures in mental health care in Nigeria, an LMIC, and Portugal, a HIC. The thesis highlights how various factors, independent of patient characteristics or a country's income level, can influence the use of coercive measures in mental health care. In Nigeria, the use of coercion in Nigerian psychiatric hospitals was found to be influenced by poor accessibility to mental and social services, outdated mental health legislation, staff shortages, lack of training, cultural beliefs, and stigma. Similarly, in Portugal, the use of coercive measures in mental health care was found to be influenced by insufficient resources, factors related to staff, such as inadequate training, poorly organized services, and considerations of a socio-legal nature. Additionally, the COVID-19 pandemic worsened the underlying deficiencies within the mental health system, intensifying the need for employing coercion. This thesis emphasizes the significance of resolving fundamental problems within the mental health care system to effectively deliver high-quality mental health care that precludes the need for coercive measures.

Human rights violations by PMHCs reflect a longstanding poor investment in mental health systems. This problem is prevalent worldwide, varying in severity across different countries. Evaluating the impact of these contextual factors can be challenging, but they undeniably contribute to the problem and offer possibilities for long-term interventions. Since contextual factors often reinforce each other and do not act independently, effective strategies to reduce coercion must address them through multiple approaches. It is crucial not to place the sole responsibility for reducing coercion in mental health care on mental health professionals alone, given the involvement of various stakeholders. The complexity of the problem necessitates collaborative efforts involving policymakers, mental health professionals, service users, and the wider society. By engaging all stakeholders, it becomes possible to develop comprehensive solutions that address the root causes of coercion in mental health care.

Policymakers play a crucial role in shaping mental health systems. By investing in mental health systems and implementing relevant policies that protect the rights of PMHCs, they can create an environment that promotes quality care and minimizes coercion. Additionally, policymakers can allocate resources to initiatives that provide alternative and community-based mental health support, reducing the reliance on institutional settings that often perpetuate violations. Mental health professionals, on the other hand, have an essential responsibility in advocating for ethical practices and upholding human rights principles. Through ongoing professional development and training, they can better understand and implement strategies that prioritize patient autonomy and consent. By actively engaging in interdisciplinary collaborations and seeking input from service users, mental health professionals can foster a culture of respect and inclusivity. Service users, as active participants in their own care, should be empowered to make informed decisions about their treatment plans. Ensuring that their rights are respected, and their voices are heard is paramount in reducing coercion. It is possible to develop patient-centered models that prioritize autonomy and encourage recovery by including service users in all aspects of their care.

Lastly, the role of the wider society should not be underestimated. Public awareness campaigns, community education, and de-stigmatization efforts can all contribute to a shift in societal attitudes towards mental health and mental health conditions. By fostering a culture of empathy, understanding, and support, it becomes possible to create an environment where human rights violations in mental health care are seen as unacceptable.

By addressing contextual factors, involving all stakeholders, and fostering collaboration, countries can strive for reform and establish mental health systems that prioritize rights, dignity, and recovery. Quality mental health care, devoid of coercion, should be recognized as a fundamental human right for all individuals.

References

1. World Health Organization. WHO and Mental Health 1949-1961. 1962. <https://iris.who.int/handle/10665/37811?show=full>
2. Szmukler G. Compulsion and “coercion” in mental health care. *World Psychiatry*. 2015;14(3):259.
3. Larsen IB, Terkelsen TB. Coercion in a locked psychiatric ward: Perspectives of patients and staff. *Nurs Ethics*. 2014;21(4):426–36.
4. Norvoll R, Pedersen R. Exploring the views of people with mental health problems on the concept of coercion: Towards a broader socio-ethical perspective. *Soc Sci Med*. 2016; 156:204–11.
5. Biller-Andorno, Bischoff N, Bonsera T, Brauer J, Büchler S, Bula A: Medical-ethical guidelines: assessment of capacity in medical practice. *Swiss Med Wkly*. 2018;149(w20058).
6. Salize HJ, Dressing H. Coercion, involuntary treatment and quality of mental health care: Is there any link? *Curr Opin Psychiatry*. 2005;18(5):576–84.
7. Swartz MS, Swanson JW. Involuntary Outpatient Commitment, Community Treatment Orders, and Assisted Outpatient Treatment: What’s in the Data? *Can J Psychiatry*. 2004 Sep;49(9):585-91.
8. Busch AB, Shore MF. Seclusion and restraint: A review of recent literature. *Harv Rev Psychiatry*. 2000;8(5):261–70.
9. Home - Restraint Reduction Network [Internet]. [cited 2023 May 19]. Available from: <https://restraintreductionnetwork.org/>
10. Hotzy F, Jaeger M. Clinical relevance of informal coercion in psychiatric treatment-A systematic review. *Front Psychiatry*. 2016 Dec 12; 7:197.
11. Pelto-Piri V, Kjellin L, Hylén U, Valenti E, Priebe S. Different forms of informal coercion in psychiatry: A qualitative study. *BMC Res Notes*. 2019;12(1):1–4.
12. Szmukler G, Appelbaum PS. Treatment pressures, leverage, coercion, and compulsion in mental health care. *J Ment Health*. 2009;17(3):233–44.
13. Lessard-Deschênes C, Goulet MH, Pariseau-Legault P. Protocol: Factors associated with perceived coercion in adults receiving psychiatric care: a scoping review protocol. *BMJ Open*. 2022;12(10):e006393.
14. Newton-Howes G, Stanley J. Prevalence of perceived coercion among psychiatric patients: literature review and meta-regression modelling. *Psychiatrist*. 2012;36(9):335–40.
15. Opsal A, Kristensen Ø, Vederhus JK, Clausen T. Perceived coercion to enter treatment among involuntarily and voluntarily admitted patients with substance use disorders. *BMC Health Serv Res*. 2016;16(1):1–10.
16. O’Donoghue B, Roche E, Shannon S, Lyne J, Madigan K, Feeney L. Perceived coercion in voluntary hospital admission. *Psychiatry Res*. 2014;215(1):120–6.
17. Bonsack C, Borgeat F. Perceived coercion and need for hospitalization related to psychiatric admission. *Int J Law Psychiatry*. 2005;28(4):342–7.

18. Golay P, Morandi S, Silva B, Devas C, Bonsack C. Feeling coerced during psychiatric hospitalization: Impact of perceived status of admission and perceived usefulness of hospitalization. *Int J Law Psychiatry*. 2019; 67:101512.
19. Martinez D, Brodard A, Silva B, Diringer O, Bonsack C, Morandi S, et al. Satisfaction and Perceived Coercion in Voluntary Hospitalisations: Impact of Past Coercive Experiences. *Psychiatr Q*. 2022;93(4):971–84.
20. Chieze M, Hurst S, Kaiser S, Sentissi O. Effects of Seclusion and Restraint in Adult Psychiatry: A Systematic Review. *Front Psychiatry*. 2019; 16:491.
21. Aguilera-Serrano C, Guzman-Parra J, Garcia-Sanchez JA, Moreno-Küstner B, Mayoral-Cleries F. Variables Associated with the Subjective Experience of Coercive Measures in Psychiatric Inpatients: A Systematic Review. *Can J Psychiatry*. 2018;63(2):129–44.
22. Theodoridou A, Schlatter F, Ajdacic V, Rössler W, Jäger M. Therapeutic relationship in the context of perceived coercion in a psychiatric population. *Psychiatry Res*. 2012; 200(2-3):939-44.
23. Wynn R. Involuntary admission in Norwegian adult psychiatric hospitals: A systematic review. *Int J Ment Health Syst*. 2018; 12(10)
24. Newton-Howes G, Mullen R. Coercion in psychiatric care: systematic review of correlates and themes. *Psychiatr Serv*. 2011;62(5):465–70.
25. Prebble K, Thom K, Hudson E. Service Users' Experiences of Voluntary Admission to Mental Hospital: A Review of Research Literature. *Psychiatr Psychol Law*. 2014;22(3):327–36. <http://dx.doi.org/101080/132187192014959156>.
26. Pridham KMF, Berntson A, Simpson AIF, Law SF, Stergiopoulos V, Nakhost A. Perception of Coercion Among Patients with a Psychiatric Community Treatment Order: A Literature Review. *Psychiatr Serv*. 2016;67(1):16–28.
27. Larkin A, Hutton P. Systematic review and meta-analysis of factors that help or hinder treatment decision-making capacity in psychosis. *Br J Psychiatry*. 2017; 211(4):205–15.
28. Sheehan KA, Burns T. Perceived coercion and the therapeutic relationship: a neglected association? *Psychiatr Serv*. 2011;62(5):471–6.
29. Galon P, Wineman NM. Quasi-Experimental Comparison of Coercive Interventions on Client Outcomes in Individuals with Severe and Persistent Mental Illness. *Arch Psychiatr Nurs*. 2011;25(6):404–18.
30. Nakhost A, Sirotich F, Pridham KMF, Stergiopoulos V, Simpson AIF. Coercion in Outpatients under Community Treatment Orders: A Matched Comparison Study. *Can J Psychiatry*. 2018; 63(11):757–65.
31. O'Donoghue B, Roche E, Shannon S, Creed L, Lyne J, Madigan K, et al. Longer term outcomes of voluntarily admitted service users with high levels of perceived coercion. *Psychiatry Res*. 2015; 30:229(1–2):602–5.
32. Sampogna G, Luciano M, Del Vecchio V, Pocai B, Palummo C, Fico G, et al. Perceived Coercion Among Patients Admitted in Psychiatric Wards: Italian Results of the EUNOMIA Study. *Front Psychiatry*. 2019; 10:316.

33. Jordan JT, McNeil DE. Perceived Coercion During Admission into Psychiatric Hospitalization Increases Risk of Suicide Attempts After Discharge. *Suicide Life Threat Behav.* 2020; 50(1):180–8.
34. Kjellin L, Høyer G, Engberg M, Kaltiala-Heino R, Sigurjónsdóttir M. Differences in perceived coercion at admission to psychiatric hospitals in the Nordic countries. *Soc Psychiatry Psychiatr Epidemiol.* 2006;41(3):241–7.
35. Fiorillo A, Giacco D, De Rosa C, Kallert T, Katsakou C, Onchev G, et al. Patient characteristics and symptoms associated with perceived coercion during hospital treatment. *Acta Psychiatr Scand.* 2012;125(6):460–7.
36. Kjellin L, Andersson K, Bartholdson E, Candefjord IL, Holmstrøm H, Jacobsson L, et al. Coercion in psychiatric care - patients' and relatives' experiences from four Swedish psychiatric services. *Nord J Psychiatry.* 2004;58(2):153–9.
37. Sørgaard KW. Patients' perception of coercion in acute psychiatric wards. An intervention study. *Nord J Psychiatry.* 2004;58(4):299–304.
38. Bergk J, Einsiedler B, Flammer E, Steinert T. A randomized controlled comparison of seclusion and mechanical restraint in inpatient settings. *Psychiatr Serv.* 2011;62(11):1310–7.
39. Borgeat F, Zullino D. Attitudes concerning involuntary treatment of mania: results of a survey within self-help organizations. *Eur. Psychiatry.* 2004;19(3):155–8.
40. Guzmán-Parra J, Aguilera-Serrano C, García-Sánchez JA, García-Spínola E, Torres-Campos D, Villagrán JM, et al. Experience coercion, post-traumatic stress, and satisfaction with treatment associated with different coercive measures during psychiatric hospitalization. *Int J Ment Health Nurs.* 2019;28(2):448–56.
41. Steinert T, Birk M, Flammer E, Bergk J. Subjective distress after seclusion or mechanical restraint: one-year follow-up of a randomized controlled study. *Psychiatr Serv.* 2013;64(10):1012–7.
42. Mielau J, Altunbay J, Gallinat J, Heinz A, BERPpohl F, Lehmann A, et al. Subjective experience of coercion in psychiatric care: a study comparing the attitudes of patients and healthy volunteers towards coercive methods and their justification. *Eur Arch Psychiatry Clin Neurosci.* 2016;266(4):337–47.
43. Iversen KI, Høyer G, Sexton HC. Coercion and patient satisfaction on psychiatric acute wards. *Int J Law Psychiatry.* 2007;30(6):504–11.
44. Anestis A, Daffern M, Thomas SDM, Podubinski T, Hollander Y, Lee S, et al. Predictors of Perceived Coercion in Patients Admitted for Psychiatric Hospitalization and the Stability of these Perceptions over Time. *Psychiatry Psychol. Law.* 2013; 20(4):492–503.
45. Bindman J, Reid Y, Szmukler G, Tiller J, Thornicroft G, Leese M. Perceived coercion at admission to psychiatric hospital and engagement with follow-up--a cohort study. *Soc Psychiatry Psychiatr Epidemiol.* 2005;40(2):160–6.
46. Gowda GS, Noorthoorn EO, Kumar CN, Nanjegowda RB, Math SB. Clinical correlates and predictors of perceived coercion among psychiatric inpatients: A prospective pilot study. *Asian J Psychiatr.* 2016; 22:34–40.

47. O'Donoghue B, Lyne J, Hill M, O'Rourke L, Daly S, Larkin C, et al. Perceptions of involuntary admission and risk of subsequent readmission at one-year follow-up: the influence of insight and recovery style. *J Ment Health*. 2011;20(3):249–59.
48. Seigel K, Wallsten T, Torsteinsdottir G, Lindström E. Perception of coercion: A pilot study using the Swedish version of the Admission Experience Scale. *Nord. J. Psychiatry*. 2009;51(1):49–54.
49. Strack KM, Schulenberg SE. Understanding empowerment, meaning, and perceived coercion in individuals with serious mental illness. *J Clin Psychol*. 2009;65(10):1137–48.
50. Fu JCK, Chow PPL, Lam LCW. The experience of admission to psychiatric hospital among Chinese adult patients in Hong Kong. *BMC Psychiatry*. 2008;8(1):1–11.
51. Gardner W, Hoge SK, Bennett N, Roth LH, Lidz CW, Monahan J, et al. Two scales for measuring patients' perceptions for coercion during mental hospital admission. *Behav Sci Law*. 1993;11(3):307–21.
52. Klag S, Creed P, O'Callaghan F. Development and initial validation of an instrument to measure perceived coercion to enter treatment for substance abuse. *Psychol Addict Behav*. 2006;20(4):463–70.
53. Lidz CW, Hoge SK, Gardner W, Bennett NS, Monahan J, Mulvey EP, et al. Perceived Coercion in Mental Hospital Admission: Pressures and Process. *Arch Gen Psychiatry*. 1995;52(12):1034–9.
54. Golay P, Semlali I, Beuchat H, Pomini V, Silva B, Loutrel L, et al. Perceived coercion in psychiatric hospital admission: Validation of the French-language version of the MacArthur Admission Experience Survey. *BMC Psychiatry*. 2017;17(1):1.
55. Katsakou C, Priebe S. Patient's experiences of involuntary hospital admission and treatment: A review of qualitative studies. *Epidemiol Psychiatr Soc*. 2007; 16(2):172-178.
56. Seed T, Fox JR, Berry K. The experience of involuntary detention in acute psychiatric care. A review and synthesis of qualitative studies. *Int J Nurs Stud*. 2016; 61:82–94.
57. Tingleff EB, Bradley SK, Gildberg FA, Munksgaard G, Hounsgaard L. “Treat me with respect”. A systematic review and thematic analysis of psychiatric patients' reported perceptions of the situations associated with the process of coercion. *J Psychiatr Ment Health Nurs*. 2017;24(9–10):681–98.
58. Strout TD. Perspectives on the experience of being physically restrained: An integrative review of qualitative literature. *Int J Ment Health Nurs*. 2010;19(6):416–27.
59. Stubbs B, Leadbetter D, Paterson B, Yorston G, Knight C, Davis S. Physical intervention: a review of the literature on its use, staff and patient views, and the impact of training. *J Psychiatr Ment Health Nurs*. 2009;16(1):99–105.
60. Sugiura K, Pertega E, Holmberg C. Experiences of involuntary psychiatric admission decision-making: a systematic review and meta-synthesis of the perspectives of service users, informal carers, and professionals. *Int J Law Psychiatry*. 2020; 73:101645.
61. Silva B, Bachelard M, Amoussou JR, Martinez D, Bonalumi C, Bonsack C, et al. Feeling coerced during voluntary and involuntary psychiatric hospitalisation: A review and meta-aggregation of qualitative studies. *Heliyon*. 2023;9(2):e13420.

62. Barnett P, Mackay E, Matthews H, Gate R, Greenwood H, Ariyo K, et al. Ethnic variations in compulsory detention under the Mental Health Act: a systematic review and meta-analysis of international data. *Lancet Psychiatry*. 2019;6(4):305–17.
63. Freitas DF, Walker S, Nyikavaranda P, Downs J, Patel R, Khondoker M, et al. Ethnic inequalities in involuntary admission under the Mental Health Act: an exploration of mediation effects of clinical care prior to the first admission. *Br J Psychiatry*. 2023;222(1):27–36.
64. Beghi M, Peroni F, Gabola P, Rossetti A, Cornaggia CM. Prevalence and risk factors for the use of restraint in psychiatry: a systematic review. *Riv Psichiatr*. 2013;48(1):10–22.
65. Beames L, Onwumere J. Risk factors associated with use of coercive practices in adult mental health inpatients: A systematic review. *J Psychiatr Ment Health Nurs*. 2021; 29(2):220-239
66. Pedersen ML, Gildberg F, Baker J, Damsgaard JB, Tingleff EB. Ethnic disparities in the use of restrictive practices in adult mental health inpatient settings: a scoping review. *Soc Psychiatry Psychiatr Epidemiol*. 2023;58(4):505.
67. Elisa DF, Claudio B, Vincenzo V, Paola R. Compulsory admission: are there differences between migrants and natives? Data from a psychiatric emergency service of an Italian metropolitan area. *Heliyon*. 2023;9(3).
68. Walker S, Mackay E, Barnett P, Sheridan Rains L, Leverton M, Dalton-Locke C, et al. Clinical and social factors associated with increased risk for involuntary psychiatric hospitalisation: a systematic review, meta-analysis, and narrative synthesis. *Lancet Psychiatry*. 2019; 6(12):1039-1053
69. Bakola M, Peritogiannis V, Stuckler D, Kitsou KS, Gourzis P, Hyphantis T, et al. Who is coercively admitted to psychiatric wards? Epidemiological analysis of inpatient records of involuntary psychiatric admissions to a University General Hospital in Greece for the years 2008-2017. *Int J Soc Psychiatry*. 2023;69(2):267–76.
70. Kaikoushi K, Nystazaki M, Chatzittofis A, Middleton N, Karanikola NKM. Involuntary psychiatric admission in Cyprus: A descriptive correlational study. *Arch Psychiatr Nurs*. 2022; 40:32–42.
71. Steinert T, Lepping P, Bernhardsgrütter R, Conca A, Hatling T, Janssen W, et al. Incidence of seclusion and restraint in psychiatric hospitals: a literature review and survey of international trends. *Soc Psychiatry Psychiatr Epidemiol*. 2010;45(9):889–97.
72. Hatling T, Krogen T, Ulleberg P. Compulsory admissions to psychiatric hospitals in Norway - international comparisons and regional variations. *J Ment Health*. 2009;11(6):623–34.
73. Weich S, McBride O, Twigg L, Duncan C, Keown P, Crepaz-Keay D, et al. Variation in compulsory psychiatric inpatient admission in England: a cross-classified, multilevel analysis. *Lancet Psychiatry*. 2017;4(8):619–26.
74. Umama-Agada E, Asghar M, Curley A, Gilhooley J, Duffy RM, Kelly BD. Variations in involuntary admission rates at three psychiatry centres in the Dublin Involuntary Admission Study (DIAS): Can the differences be explained? *Int J Law Psychiatry*. 2018; 57:17–23.
75. Gandré C, Gervais J, Thillard J, Macé JM, Roelandt JL, Chevreul K. Involuntary Psychiatric Admissions and Development of Psychiatric Services as an Alternative to Full-Time Hospitalization in France. *Psychiatr Serv*. 2017; 68(9):923–30.

76. van der Post L, Mulder C, Bernardt C, Schoevers R, Beekman A, Dekker J. Involuntary admission of emergency psychiatric patients: report from the Amsterdam Study of Acute Psychiatry. *Psychiatr Serv.* 2009;60(11).
77. Guaiana G, Barbui C. Trends in the use of the Italian Mental Health Act, 1979--1997. *Eur Psychiatry.* 2004;19(7):444–5.
78. Rains LS, Zenina T, Dias MC, Jones R, Jeffreys S, Branthonne-Foster S, et al. Variations in patterns of involuntary hospitalisation and in legal frameworks: an international comparative study. *Lancet Psychiatry.* 2019;6(5):403–17.
79. Price B. Understanding attitudes and their effects on nursing practice. *Nurs Stand.* 2015;30(15).
80. Doedens P, Vermeulen J, Boyette L Lou, Latour C, de Haan L. Influence of nursing staff attitudes and characteristics on the use of coercive measures in acute mental health services—A systematic review. *J Psychiatr Ment Health Nurs.* 2020;27(4):446–59.
81. Brooks RA. U.S. Psychiatrists' beliefs and wants about involuntary civil commitment grounds. *Int J Law Psychiatry.* 2006;29(1):13–21.
82. Rojas-García A, Dalton-Locke C, Rains LS, et al. An investigation of the association between characteristics of local crisis care systems and service use in a national survey. *medRxiv*; 2023. DOI: 10.1101/2023.03.11.23287106.
83. Pawlowski T, Baranowski P. Personality traits of nurses and organizational climate in relation to the use of coercion in psychiatric wards. *Perspect Psychiatr Care.* 2018;54(2):287–92.
84. Jalil R, Huber JW, Sixsmith J, Dickens GL. Mental health nurses' emotions, exposure to patient aggression, attitudes to and use of coercive measures: Cross sectional questionnaire survey. *Int J Nurs Stud.* 2017; 75:130–8.
85. Aasland OG, Husum TL, Førde R, Pedersen R. Between authoritarian and dialogical approaches: Attitudes and opinions on coercion among professionals in mental health and addiction care in Norway. *Int J Law Psychiatry.* 2018; 57:106–12.
86. Erwin P. Attitudes and Persuasion. *Attitudes and Persuasion.* New York: Psychology Press; 2001.
87. Husum TL, Bjørngaard JH, Finset A, Ruud T. Staff attitudes and thoughts about the use of coercion in acute psychiatric wards. *Soc Psychiatry Psychiatr Epidemiol.* 2011;46(9):893–901.
88. Raveesh B, Pathare S, Noorthoorn E, Gowda G, Lepping P, Bunders-Aelen J. Staff and caregiver attitude to coercion in India. *Indian J Psychiatry.* 2016;58(6):221–9.
89. Bregar B, Skela-Savič B, Kores Plesničar B. Cross-sectional study on nurses' attitudes regarding coercive measures: The importance of socio-demographic characteristics, job satisfaction, and strategies for coping with stress. *BMC Psychiatry.* 2018;18(1):1–10.
90. Lepping P, Steinert T, Gebhardt RP, Röttgers HR. Attitudes of mental health professionals and lay-people towards involuntary admission and treatment in England and Germany - A questionnaire analysis. *Eur. Psychiatry.* 2004;19(2):91–5.
91. Molewijk B, Kok A, Husum T, Pedersen R, Aasland O. Staff's normative attitudes towards coercion: The role of moral doubt and professional context - A cross-sectional survey study. *BMC Med Ethics.* 2017;18(1):1–14.

92. Dahan S, Levi G, Behrbalk P, Bronstein I, Hirschmann S, Lev-Ran S. The Impact of “Being There”: Psychiatric Staff Attitudes on the Use of Restraint. *Psychiatr Q*. 2018;89(1):191–9.
93. Khalil AI, Al Ghamdi MM, Al Malki S. Nurses’ knowledge, attitudes, and practices toward physical restraint and seclusion in an inpatients’ psychiatric ward. *Int. J. Cult. Ment*. 2017;10(4):447–67.
94. Mötteli S, Hotzy F, Lamster F, Horisberger R, Theodoridou A, Vetter S, et al. Optimistic recovery expectations are associated with critical attitudes toward coercion among mental health professionals. *Int. J. Ment. Health*. 2019; 49(2):157–69.
95. Laukkanen E, Vehviläinen-Julkunen K, Louheranta O, Kuosmanen L. Psychiatric nursing staffs’ attitudes towards the use of containment methods in psychiatric inpatient care: An integrative review. *Int J Ment Health Nurs*. 2019;28(2):390–406.
96. Riahi S, Thomson G, Duxbury J. An integrative review exploring decision-making factors influencing mental health nurses in the use of restraint. *J Psychiatr Ment Health Nurs*. 2016;23(2):116–28.
97. Aguilera-Serrano C, Goodman-Casanova JM, Bordallo-Aragón A, García-Sánchez JA, Mayoral-Cleries F, Guzmán-Parra J. Attitudes about Mechanical Restraint Use in Mental Health Hospitalization Services: A Spanish Survey. *Healthcare*. 2023;11(13):1909.
98. Luchins DJ, Cooper AE, Hanrahan P, Rasinski K. Psychiatrists’ attitudes toward involuntary hospitalization. *Psychiatr Serv*. 2004;55(9):1058–60.
99. Morandi S, Silva B, Mendez Rubio M, Bonsack C, Golay P. Mental health professionals’ feelings and attitudes towards coercion. *Int J Law Psychiatry*. 2021; 74:101665.
100. Efkenmann SA, Scholten M, Bottlender R, Juckel G, Gather J. Influence of mental health professionals’ attitudes and personality traits on decision-making around coercion: Results from an experimental quantitative survey using case vignettes. *Acta Psychiatr Scand*. 2022;146(2):151–64.
101. Galbert I, Azab AN, Kaplan Z, Nusbaum L. Staff attitudes and perceptions towards the use of coercive measures in psychiatric patients. *Int J Ment Health Nurs*. 2023;32(1):106–16.
102. Bonner G, Lowe T, Rawcliffe D, Wellman N. Trauma for all: a pilot study of the subjective experience of physical restraint for mental health inpatients and staff in the UK. *J Psychiatr Ment Health Nurs*. 2002;9(4):465–73.
103. Bigwood S, Crowe M. “It’s part of the job, but it spoils the job”: a phenomenological study of physical restraint. *Int J Ment Health Nurs*. 2008;17(3):215–22.
104. Krieger E, Moritz S, Lincoln TM, Fischer R, Nagel M. Coercion in psychiatry: A cross-sectional study on staff views and emotions. *J Psychiatr Ment Health Nurs*. 2021;28(2):149–62.
105. Van Doeselaar M, Slegers P, Hutschemaekers G. Professionals’ attitudes toward reducing restraint: the case of seclusion in the Netherlands. *Psychiatr Q*. 2008;79(2):97–109.
106. Husum TL, Finset A, Ruud T. The Staff Attitude to Coercion Scale (SACS): reliability, validity and feasibility. *Int J Law Psychiatry*. 2008;31(5):417–22.
107. Arab M, Gray S, Hamouzadeh P, habibi farhad. Validation of the “staff attitude toward coercion use in treatment of mentally ill patients” questionnaire in selected public psychiatric hospitals of Tehran in 2015. *J. Hospital*. 2017;16(3):31–42.

108. Wu HC, Tang IC, Lin WI, Chang LH. Professional values and attitude of psychiatric social workers toward involuntary hospitalization of psychiatric patients. *J Soc Work*. 2012;13(4):419–34.
109. Efkekmann SA, Scholten M, Bottlender R, Juckel G, Gather J. A German Version of the Staff Attitude to Coercion Scale. Development and Empirical Validation. *Front Psychiatry*. 2021; 11:1458.
110. Fukasawa M, Miyake M, Kikkawa T, Sueyasu T. Development of the Japanese version of Staff Attitude to Coercion Scale. *Front Psychiatry*. 2022; 13:2387.
111. Venturini P, Bassi G, Salcuni S, Kotzalidis GD, Telesforo CL, Salustri E, et al. Psychometric properties of the Italian version of the staff attitude to coercion scale: an exploratory factor analysis. *Front Psychiatry*. 2023; 14:1172803.
112. Kiejna A, Jakubczyk MH, Gondek TM, Rajba B. Kwestionariusz Postaw Personelu Wobec Przymusu (SACS) – Polska adaptacja. *Psychiatr Pol*. 2020;54(1):113–24.
113. United Nations. Principles for the protection of persons with mental illness and the improvement of mental health care | OHCHR. 1991 [cited 2023 Aug 19]. Available from: <https://www.ohchr.org/en/instruments-mechanisms/instruments/principles-protection-persons-mental-illness-and-improvement>
114. Okasha A. The Declaration of Madrid and its implementation. *World Psychiatry*. 2002 Jun;1(2):125.
115. United Nations. The Convention on the Rights of Persons with Disabilities. Training Guide. 2014.
116. European Network of National Human Rights Institutions. Implementing supported decision-making. 2020.
117. Sugiura K, Mahomed F, Saxena S, Patel V. An end to coercion: rights and decision-making in mental health care. *Bull World Health Organ*. 2020;98(1):52–8.
118. Freeman MC, Kolappa K, Almeida JMC de, Kleinman A, Makhshvili N, Phakathi S, et al. Reversing hard won victories in the name of human rights: a critique of the General Comment on Article 12 of the UN Convention on the Rights of Persons with Disabilities. *Lancet Psychiatry*. 2015;2(9):844–50.
119. European Court of Human Rights, Council of Europe. European Convention on Human Rights. https://www.echr.coe.int/documents/d/echr/convention_ENG
120. European Committee for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment (CPT). European Convention for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment Text of the Convention and Explanatory Report.
121. Oviedo Convention and its Protocols - Human Rights and Biomedicine. [cited 2023 Jun 30]. Available from: <https://www.coe.int/en/web/bioethics/oviedo-convention>
122. EU Joint Action on Mental Health and Wellbeing. European Framework for Action on Mental Health and Wellbeing. 2013.
123. Charter of Fundamental Rights. [cited 2023 Jun 30]. Available from: <https://www.citizensinformation.ie/en/government-in-ireland/european-government/eu-law/charter-of-fundamental-rights/>
124. African Charter on Human and Peoples' Rights | African Union. [cited 2021 Sep 4]. Available from: <https://au.int/en/treaties/african-charter-human-and-peoples-rights>

125. The Abuja Declaration: Ten Years On 2001 Promises of commitment and solidarity. 2010.
126. Protocol to the African Charter on Human and Peoples' Rights on the Rights of Persons with Disabilities in Africa | African Union. [cited 2023 Jun 30]. Available from: <https://au.int/en/treaties/protocol-african-charter-human-and-peoples-rights-rights-persons-disabilities-africa>
127. Population, total - Nigeria | Data [Internet]. [cited 2023 Jul 6]. Available from: <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=NG>
128. History – Ministry of Foreign Affairs, Nigeria [Internet]. [cited 2023 Jul 7]. Available from: <https://foreignaffairs.gov.ng/nigeria/nigeria-history/>
129. Life expectancy at birth, total (years) - Nigeria | Data [Internet]. [cited 2023 Aug 19]. Available from: <https://data.worldbank.org/indicator/SP.DYN.LE00.IN?locations=NG>
130. Gureje O, Lasebikan VO, Kola L, Makanjuola VA. Lifetime and 12-month prevalence of mental disorders in the Nigerian Survey of Mental Health and Well-Being. *Br J Psychiatry*. 2006; 188:465–71.
131. VizHub - GBD Results. [cited 2023 Jul 6]. Available from: <https://vizhub.healthdata.org/gbd-results/>
132. Esan O, Appiah-Poku J, Othieno C, Kola L, Harris B, Nortje G, et al. A survey of traditional and faith healers providing mental health care in three sub-Saharan African countries. *Soc Psychiatry Psychiatr Epidemiol*. 2019;54(3):395–403.
133. Gureje O, Nortje G, Makanjuola V, Oladeji BD, Seedat S, Jenkins R. The role of global traditional and complementary systems of medicine in treating mental health problems. *Lancet Psychiatry*. 2015;2(2):168.
134. Whiteford HA, Degenhardt L, Rehm J, Baxter AJ, Ferrari AJ, Erskine HE, et al. Global burden of disease attributable to mental and substance use disorders: Findings from the Global Burden of Disease Study 2010. *The Lancet*. 2013;382(9904):1575–86.
135. WHO. Who-Aims Report on Mental Health System in Nigeria Ministry of Health Nigeria. 2006.
136. Esan O, Abdumalik J, Eaton J, Kola L, Fadahunsi W, Gureje O. Mental health care in Anglophone West Africa. *Psychiatr Serv*. 2014;65(9):1084–7.
137. Gureje O. Revisiting the national mental health policy for Nigeria. *Arch. Ib. Med*. 2003; 4(1):2-4
138. Aregbeshola BS, Khan SM. Primary Health Care in Nigeria: 24 Years after Olikoye Ransome-Kuti's Leadership. *Front Public Health*. 2017; 5:48.
139. Donald Kingdon. The laws of the Federation of Nigeria and Lagos; in force on the 1st day of June 1958. (Microform, 1973) [WorldCat.org].
140. Lunacy Act (1958) Cap. (112), § 2.
141. Westbrook AH. Mental Health Legislation and Involuntary Commitment in Nigeria: A Call for Reform, Wash. U Global Stud L Rev. 2011;397.
142. Lunacy Act (1958) Cap. (112), §§ 11–13 (Nigeria).
143. Nigeria Multidimensional Poverty Index (2022).

144. Asuni T. The dilemma of traditional healing with special reference to Nigeria. *Soc Sci Med Med Anthropol.* 1979;13 (1):33–9.
145. Lasebikan VO. Cultural aspects of mental health and mental health service delivery with a focus on Nigeria within a global community. *Ment Health Relig Cult.* 2016;19(4):323–38.
146. Sheikh TL, Adekeye O, Olisah VO, Mohammed A. Stigmatisation of mental illness among employees of a Northern Nigerian University. *Niger Med J.* 2015;56(4):244.
147. Burns JK, Tomita A. Traditional and religious healers in the pathway to care for people with mental disorders in Africa: a systematic review and meta-analysis. *Soc Psychiatry Psychiatr Epidemiol.* 2015;50(6):867–77.
148. Nigeria: People with Mental Health Conditions Chained, Abused | Human Rights Watch. [cited 2022 Jan 30]. Available from: <https://www.hrw.org/news/2019/11/11/nigeria-people-mental-health-conditions-chained-abused>
149. Nigeria urged to ban chaining people with mental health issues | Mental Health News | Al Jazeera. [cited 2022 Mar 3]. Available from: <https://www.aljazeera.com/news/2019/11/11/nigeria-urged-to-ban-chaining-people-with-mental-health-issues>
150. De Almeida J, Gonalo S, Augusto F, Fronteira I, Hernandez-Quevedo C. Health Systems in Transition - Portugal. Portugal Health system review. *Health Syst Transit.* 2017 Mar;19(2):1-184.
151. Sakellarides C, Castelo-Branco L, Barbosa P. The impact of the financial crisis on the health system and health in Portugal. Copenhagen; 2014.
152. Arnold J, Rodrigues CF. Reducing Inequality and Poverty in Portugal. *OECD Economics Department Working Papers*, No. 1258, OECD Publishing, Paris. 2015. <https://doi.org/10.1787/5jrw21ng3ts3-en>.
153. Statistics | Eurostat. [cited 2023 Jun 24]. Available from: https://ec.europa.eu/eurostat/databrowser/view/ILC_DI04__custom_3459254/default/table?lang=en
154. Morais Nunes A, Cunha Ferreira D, Campos Fernandes A. Financial Crisis in Portugal: Effects in the Health Care Sector. *Int J Health Serv.* 2019;49(2):237–59.
155. Government expenditure on health - Statistics Explained. [cited 2023 Jun 24]. Available from: https://ec.europa.eu/eurostat/statisticsexplained/index.php?title=Government_expenditure_on_health
156. Caldas de Almeida JM. Portuguese National Mental Health Plan (2007–2016) Executive Summary. *Ment Health Fam Med.* 2009;6(4):233.
157. World Health Organisation. WHO Mission to assess the progress of the mental health reforms in Portugal. Copenhagen; 2011.
158. Legido-Quigley H, Karanikolos M, Hernandez-Plaza S, de Freitas C, Bernardo L, Padilla B, et al. Effects of the financial crisis and Troika austerity measures on health and health care access in Portugal. *Health Policy.* 2016;120(7):833–9.
159. Perelman J, Felix S, Santana R. The Great Recession in Portugal: impact on hospital care use. *Health Policy.* 2015;119(3):307–15.

160. Mental Health Europe. Mapping and Understanding Exclusion: Institutional, Coercive and Community-Based Services and Practices across Europe. 2018.
161. Caldas-de-Almeida JM. Towards community-based and socially inclusive mental health care. A situation analysis and recommendations for action. Joint Action on Mental Health and Well-being. 2017
162. Mental Health Atlas 2020 Country Profile: Portugal [Internet]. [cited 2023 Jul 7]. Available from: <https://www.who.int/publications/m/item/mental-health-atlas-prt-2020-country-profile>
163. Caldas de Almeida J, Xavier M, Cardoso G, Pereira M, Gusmão R, Corrêa B, et al. Estudo Epidemiológico Nacional de Saúde Mental - 1.º Relatório. Lisboa. Faculdade de Ciências Médicas. 2013.
164. Cardoso G, Xavier M, Vilagut G, Petukhova M, Alonso J, Kessler RC, et al. Days out of role due to common physical and mental conditions in Portugal: Results from the WHO World Mental Health Survey. *BJPsych Open*. 2017;3(1):15–21.
165. Alonso J, Petukhova M, Vilagut G, Chatterji S, Heeringa S, Üstün TB, et al. Days out of role due to common physical and mental conditions: results from the WHO World Mental Health surveys. *Mol Psychiatry*. 2011;16(12):1234–46.
166. Almeida T, Molodynski A. Compulsory admission and involuntary treatment in Portugal. *BJPsych Int*. 2016;13(1):17.
167. Soares R, Da Costa MP. Experiences and perceptions of police officers concerning their interactions with people with serious mental disorders for compulsory treatment. *Front Psychiatry*. 2018; 10:446563.
168. Lei n.º 35/2023 | DR. 2023.
169. Silva M, Antunes A, Azeredo-Lopes S, Loureiro A, Saraceno B, Caldas-de-Almeida JM, et al. Factors associated with involuntary psychiatric hospitalization in Portugal. *Int J Ment Health Syst*. 2021 Apr 20;15(1):37.
170. Baethge C, Goldbeck-Wood S, Mertens S. SANRA—a scale for the quality assessment of narrative review articles. *Res Integr Peer Rev*. 2019;4(1):1–7.
171. Krueger RA. Focus Groups: a practical guide to applied research. Sage Publications, Inc. 1988
172. Brophy LM, Roper CE, Hamilton BE, Tellez JJ, Mcsherry BM. Consumers’ and their supporters’ perspectives on barriers and strategies to reducing seclusion and restraint in mental health settings. *Aust Health Rev*. 2016;40(6):599–604.
173. Miles M, Michael H. Qualitative data analysis: An expanded sourcebook, 2nd ed. - PsycNET. [cited 2021 Aug 14]. Available from: <https://psycnet.apa.org/record/1995-97407-000>
174. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol*. 2006;3(2):77–101.
175. Software V. MAXQDA 2022. Software. 2022.
176. Braun V, Clarke V. Reflecting on reflexive thematic analysis. *Qual Res Sport Exerc Health*. 2019;11(4):589–97.

177. Eldh AC, Årestedt L, Berterö C. Quotations in Qualitative Studies: Reflections on Constituents, Custom, and Purpose. *Int. J. Qual. Methods.* 2020;19.
178. Team RC. R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. URL. 2020.
179. Gadermann AM, Guhn M, Zumbo BD. Estimating ordinal reliability for likert-type and ordinal item response data: A conceptual, empirical, and practical guide. *Pract. Assess. Res. Evaluation.* 2012;17(3):1–13.
180. American Psychological Association. Diagnostic and Statistical Manual of Mental Disorders, (DSM IV). Vol. Fourth Ed., Washington DC, APA. 1994. 915 p.
181. Høyer G, Kjellin L, Engberg M, Kaltiala-Heino R, Nilstun T, Sigurjónsdóttir M, et al. Paternalism and autonomy: a presentation of a Nordic study on the use of coercion in the mental health care system. *Int J Law Psychiatry.* 2002;25(2):93–108.
182. Priebe S, Gruyters T. Patients' Assessment of Treatment Predicting Outcome. *Schizophr Bull.* 1995;21(1):87–94.
183. Koo TK, Li MY. A Guideline of Selecting and Reporting Intraclass Correlation Coefficients for Reliability Research. *J Chiropr Med.* 2016;15(2):155–63.
184. Yang FM, Kao ST. Item response theory for measurement validity. *Shanghai Arch Psychiatry.* 2014;26(3):171.
185. Akaike H. Factor analysis and AIC. *Psychometrika.* 1987;52(3):317–32.
186. G S. Estimating the Dimension of a Model. *Ann. Stat.* 1978;6(2):461–4.
187. Hannan EJ, Quinn BG. The Determination of the Order of an Autoregression. *J. R. Stat. Soc., Ser.* 1979;41(2):190–5.
188. Sclove SL. Application of model-selection criteria to some problems in multivariate analysis. *Psychometrika.* 1987;52(3):333–43.
189. Chalmers RP. mirt: A Multidimensional Item Response Theory Package for the R Environment. *J Stat Softw.* 2012; 48:1–29.
190. Kim JH. Multicollinearity and misleading statistical results. *Korean J Anesthesiol.* 2019;72(6):558.
191. Boumans CE, Egger JIM, Souren PM, Mann-Poll PS, Hutschemaekers GJM. Nurses' decision on seclusion: patient characteristics, contextual factors and reflexivity in teams. *J Psychiatr Ment Health Nurs.* 2012;19(3):264–70.
192. Mann K, Gröschel S, Singer S, Breitmaier J, Claus S, Fani M, et al. Evaluation of coercive measures in different psychiatric hospitals: the impact of institutional characteristics. *BMC Psychiatry.* 2021;21(1):1–11.
193. Wainberg ML, Scorza P, Shultz JM, Helpman L, Mootz JJ, Johnson KA, et al. Challenges and Opportunities in Global Mental Health: A Research-to-Practice Perspective. *Curr Psychiatry Rep.* 2017;19(5):28.
194. Hotzy F, Hengartner MP, Hoff P, Jaeger M, Theodoridou A. Clinical and socio-demographic characteristics associated with involuntary admissions in Switzerland between 2008 and 2016: An

observational cohort study before and after implementation of the new legislation. *Eur. Psychiatry*. 2019; 59:70–6.

195. Ma Y, Zhang J, Rosenheck R, He H. Why did China’s mental health law have a limited effect on decreasing rates of involuntary hospitalization? *Int J Ment Health Syst*. 2022;16(1):1–6.
196. Salize HJ, Dressing H. Epidemiology of involuntary placement of mentally ill people across the European Union. *Br J Psychiatry*. 2004; 184:163–8.
197. Jegede AS, Adegoke OO. Advance Directive in End of Life Decision-Making among the Yoruba of South-Western Nigeria. *BEOnline*. 2016;3(3):41.
198. Ramos J, Santos J, Jorge S, Maia T, Cardoso G. Pathways to care for first psychiatric admissions in Lisbon. *Psychiatr Serv*. 2015;66(8):888–91.
199. Burvill PW. Looking beyond the 1:10,000 ratio of psychiatrists to population. *Aust N Z J Psychiatry*. 1992;26(2):265-9.
200. Number of psychiatrists: how do countries compare? - Products Eurostat News - Eurostat [Internet]. [cited 2023 Aug 24]. Available from: <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20200506-1>
201. Asher L, Fekadu A, Teferra S, De Silva M, Pathare S, Hanlon C. “I cry every day and night, I have my son tied in chains”: physical restraint of people with schizophrenia in community settings in Ethiopia. *Global Health*. 2017;13(1).
202. Wilson C, Rouse L, Rae S, Kar Ray M. Mental health inpatients’ and staff members’ suggestions for reducing physical restraint: A qualitative study. *J Psychiatr Ment Health Nurs*. 2018;25(3):188–200.
203. Gagnon MP, Desmartis M, Dipankui MT, Gagnon J, St-Pierre M. Alternatives to seclusion and restraint in psychiatry and in long-term care facilities for the elderly: Perspectives of service users and family members. *Patient*. 2013;6(4):269–80.
204. McKeown M, Thomson G, Scholes A, Jones F, Baker J, Downe S, et al. “Catching your tail and firefighting”: The impact of staffing levels on restraint minimization efforts. *J Psychiatr Ment Health Nurs*. 2019;26(5–6):131–41.
205. Alexander J, Bowers L. Acute psychiatric ward rules: a review of the literature. *J Psychiatr Ment Health Nurs*. 2004;11(5):623–31.
206. Gruebner O, Rapp MA, Adli M, Kluge U, Galea S, Heinz A. Cities and Mental Health. *Dtsch Arztebl Int*. 2017;114(8):121.
207. Sibitz I, Scheutz A, Lakeman R, Schrank B, Schaffer M, Amering M. Impact of coercive measures on life stories: qualitative study. 2011;199(3):239-44.
208. Wilson C, Rouse L, Rae S, Kar Ray M. Is restraint a “necessary evil” in mental health care? Mental health inpatients’ and staff members’ experience of physical restraint. *Int J Ment Health Nurs*. 2017;26(5):500–12.
209. Spinzy Y, Maree S, Segev A, Cohen-Rappaport G. Listening to the Patient Perspective: Psychiatric Inpatients’ Attitudes Towards Physical Restraint. *Psychiatr Q*. 2018;89(3):691–6.

210. O'Callaghan AK, Plunkett R, Kelly BD. What is the role of gender in perceived coercion during psychiatric admission? *Ir J Psychol Med.* 2023;1–5.
211. Kallert TW, Katsakou C, Adamowski T, Dembinskas A, Fiorillo A, Kjellin L, et al. Coerced hospital admission and symptom change--a prospective observational multi-centre study. *PLoS One.* 2011; 30:6(11).
212. Swartz MS, Swanson JW, Hannon MJ. Does fear of coercion keep people away from mental health treatment? Evidence from a survey of persons with schizophrenia and mental health professionals. *Behav Sci Law.* 2003;21(4):459–72.
213. Gilbert H, Rose D, Slade M. The importance of relationships in mental health care: A qualitative study of service users' experiences of psychiatric hospital admission in the UK. *BMC Health Serv Res.* 2008; 8:92.
214. Svindseth M, Dahl A, Hatling T. Patients' experience of humiliation in the admission process to acute psychiatric wards. *Nord J Psychiatry.* 2007;61(1):47–53.
215. van den Hooff S, Goossensen A. How to increase quality of care during coercive admission? A review of literature. *Scand J Caring Sci.* 2014;28(3):425–34.
216. Liu NH, Daumit GL, Dua T, Aquila R, Charlson F, Cuijpers P, et al. Excess mortality in persons with severe mental disorders: a multilevel intervention framework and priorities for clinical practice, policy and research agendas. *World Psychiatry.* 2017;16(1):30.
217. Hoge SK, Lidz C, Mulvey E, Roth L, Bennett N, Siminoff L, et al. Patient, family, and staff perceptions of coercion in mental hospital admission: an exploratory study. *Behav Sci Law.* 1993;11(3):281–93.
218. Majid U, Kim C, Cako A, Gagliardi AR. Engaging stakeholders in the co-development of programs or interventions using Intervention Mapping: A scoping review. *PLoS One.* 2018;13(12).
219. Holgado -Tello FP, Chacón -Moscoso S, Barbero -García I, Vila -Abad E, Holgado-Tello FP, Barbero-García I, et al. Polychoric versus Pearson correlations in exploratory and confirmatory factor analysis of ordinal variables. *Qual Quant.* 2010; 44:153–66.
220. Campbell DT, Fiske DW. Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychol Bull.* 1959;56(2):81–105.
221. Fiorillo A, De Rosa C, Del Vecchio V, Jurjanz L, Schnall K, Onchev G, et al. How to improve clinical practice on involuntary hospital admissions of psychiatric patients: suggestions from the EUNOMIA study. *Eur Psychiatry.* 2011;26(4):201–7.
222. Cunha M, André S, Bica I, Ribeiro O, Dias A, Andrade A. Chemical and Physical Restraint of Patients. *Procedia Soc Behav Sci.* 2016; 217:389–99.
223. Kallert TW, Glöckner M, Onchev G, Raboch J, Karastergiou A, Solomon Z, et al. The EUNOMIA project on coercion in psychiatry: study design and preliminary data. *World Psychiatry.* 2005;4(3):168.
224. Home - FOSTREN [Internet]. [cited 2022 Aug 8]. Available from: <https://fostren.eu/>
225. World Mental Health Report Transforming mental health for all. 2022 [cited 2022 Jul 6]. Available from: <https://www.who.int/teams/mental-health-and-substance-use/world-mental-health-report>

226. Gureje O, Appiah-Poku J, Bello T, Kola L, Araya R, Chisholm D, et al. Effect of collaborative care between traditional and faith healers and primary health-care workers on psychosis outcomes in Nigeria and Ghana (COSIMPO): a cluster randomised controlled trial. *The Lancet*. 2020;396(10251):612–22.

VII. Appendices

Appendix I: Extraction sheet for Narrative review

Extraction sheet for Narrative review

[illegible]

Appendix II: Informed consent forms for Service users and Mental health professionals in Nigeria and Portugal

Informed consent for Service users

Dear participant,

Although mental health care in Nigeria has improved significantly over the years, in terms of quality, some insufficiencies persist. The Revised Mental Health bill which is expected to further improve the quality of care and protect the rights of service users is still under consideration by the National Legislative Assembly.

International studies show that coercion occurs in most mental health care settings and contextual factors may influence their use, but there is scarce evidence available in Nigeria regarding this practice. Thus, within the scope of a Global Public health PhD research, which aims to understand the contextual factors that influence the use of coercion, we are carrying out a qualitative investigation, through Focus group discussions, to understand the experiences and perceptions of service users in Nigeria about the use of coercion in the Psychiatric hospitals.

This study is being developed by Deborah Aluh; doctoral student supervised by Prof. José Miguel Caldas de Almeida.

Your collaboration would be very important for the success of the study.

Therefore, we invite you to share your experiences in this field, asking you to accept to participate in the discussion.

The interview will be recorded on an audio recorder. All responses will be anonymous and confidential. There are no right or wrong answers. The best answer is your opinion, sincere and personal. Participation in this study is completely voluntary and does not entail any harm if you do not intend to participate.

We guarantee that the data collected will be used exclusively for scientific production. By participating in the study, you will be contributing to a better understanding of this situation, which will allow the investigation of possible measures to minimize the use of coercion in mental health services. We also ask that you complete a short sociodemographic survey.

By signing this document, you accept to participate in the study.

CONSENT

Participant Signature: _____

DATE/...../....

Appendix 3: Informed consent for Mental health professionals

Dear participant,

Although mental health care in Nigeria has improved significantly over the years, in terms of quality, some insufficiencies persist. The Revised Mental Health bill which is expected to further improve the quality of care and protect the rights of service users is still under consideration by the National Legislative Assembly.

International studies show that coercion occurs in most formal health care settings and contextual factors may influence their use, but there is no evidence available in Nigeria regarding this practice. Thus, within the scope of a Global Public health PhD research, which aims to understand the contextual factors that influence the use of coercion, we are carrying out a qualitative investigation, through interviews, to understand the experiences and perceptions of mental health professionals in Nigeria about the use of coercion in the Psychiatric hospitals.

This study is being developed by Deborah Aluh, doctoral student supervised by Prof. José Miguel Caldas de Almeida.

Your collaboration would be very important for the success of the study.

Therefore, we invite you to share your experiences in this field, asking you to accept to participate in an interview developed for this purpose.

The interview will be recorded on an audio recorder. All responses will be anonymous and confidential. There are no right or wrong answers. The best answer is your opinion, sincere and personal. Participation in this study is completely voluntary, and does not entail any harm if you do not intend to participate.

We guarantee that the data collected will be used exclusively for scientific production. By participating in the study, you will be contributing to a better understanding of this situation, which will allow the investigation of possible measures to minimize the use of coercion in mental health services.

We also ask that you complete a short sociodemographic survey at the beginning of the interview.

CONSENT

Participant Signature: _____

DATE/...../....

Efeitos dos fatores contextuais no uso de medidas de coerção em serviços de saúde mental – ESTUDO QUALITATIVO

Consentimento informado

Profissionais de saúde

Caro participante,

Embora os cuidados de saúde mental em Portugal tenham melhorado significativamente ao longo dos anos, em termos de qualidade continuam a persistir algumas insuficiências. A Lei de Saúde Mental de 1998 especifica os princípios que regulam os direitos e o tratamento compulsivo das pessoas com doença mental em Portugal, e está atualmente a ser revista para cumprir integralmente os objetivos de redução das medidas coercivas e reforço da autonomia do paciente.

Existem alguns estudos internacionais que mostram como os fatores contextuais podem influenciar o uso da coerção, mas as evidências disponíveis em Portugal são ainda limitadas.

Assim, no âmbito do estudo FOSTREN, que pretende estudar os fatores de risco para o uso de coerção em serviços de psiquiatria na Europa, estamos a desenvolver uma investigação de tipo qualitativo, através de entrevistas, para compreender as perceções dos profissionais de saúde sobre os fatores contextuais que pode influenciar o uso da coerção.

Este estudo está a ser desenvolvido pela Dra. Deborah Aluh, doutoranda orientada pelo Prof. Doutor José Miguel Caldas de Almeida e financiada por uma bolsa de La Caixa.

A sua colaboração seria muito importante para o sucesso do estudo.

Vimos, por isso, convidá-lo/a a partilhar as suas experiências neste domínio, pedindo-lhe que aceite participar numa entrevista desenvolvida para este efeito.

A entrevista será gravada em gravador áudio. Todas as respostas serão anónimas e confidenciais. Não há respostas certas ou erradas. A melhor resposta é a sua opinião, sincera e pessoal. A participação neste estudo é totalmente voluntária, e não acarreta nenhum tipo de prejuízo, caso não pretenda participar.

Garantimos que os dados coletados serão utilizados exclusivamente para produção científica. Ao participar no estudo, estará a contribuir para uma melhor compreensão desta situação, o que permitirá investigar possíveis medidas para minimizar o uso da coerção nos serviços de saúde mental.

Solicitamos também que preencha um pequeno questionário sociodemográfico.

A Coordenadora do Estudo
Deborah Aluh

CONSENTIMENTO

Assinatura do Participante: _____ DATA/...../....

Efeitos dos fatores contextuais no uso de medidas de coerção em serviços de saúde mental

Consentimento informado Profissionais de saúde

Caro participante,

Embora os cuidados de saúde mental em Portugal tenham melhorado significativamente ao longo dos anos, em termos de qualidade continuam a persistir algumas insuficiências. A Lei de Saúde Mental de 1998 especifica os princípios que regulam os direitos e o tratamento compulsivo das pessoas com doença mental em Portugal, e está atualmente a ser revista para cumprir integralmente os objetivos de redução das medidas coercivas e reforço da autonomia do paciente.

Existem alguns estudos internacionais que mostram como os fatores podem influenciar as taxas de internamento compulsivo, mas as evidências disponíveis em Portugal são ainda limitadas.

Assim, no âmbito do estudo FOSTREN, que pretende estudar os fatores de risco para o uso de coerção em serviços de psiquiatria na Europa, estamos a desenvolver uma investigação, para compreender as perceções dos profissionais de saúde sobre de coerção.

Este estudo está a ser desenvolvido pela Dra. Deborah Aluh, doutoranda orientada pelo Prof. Doutor José Miguel Caldas de Almeida e financiada por uma bolsa de La Caixa.

A sua colaboração seria muito importante para o sucesso do estudo.

Todas as respostas serão **anónimas e confidenciais**. Não há respostas certas ou erradas. A melhor resposta é a sua opinião, sincera e pessoal. A participação neste estudo é totalmente voluntária, e não acarreta nenhum tipo de prejuízo, caso não pretenda participar.

Garantimos que os dados coletados serão utilizados exclusivamente para produção científica. Ao participar no estudo, estará a contribuir para uma melhor compreensão desta situação, o que permitirá investigar possíveis medidas para minimizar o uso da coerção nos serviços de saúde mental.

A Coordenadora do Estudo

Dra. Deborah Aluh
Instituto de Saúde Mental Global de Lisboa
Contacto telefónico: 939048341

CONSENTIMENTO

Assinatura do Participante: _____

DATA/...../....

CONSENTIMENTO INFORMADO
Estudo sobre os efeitos de fatores contextuais sobre o uso de medidas de
coerção em serviços de saúde mental

A equipa do Instituto de Saúde Mental Global de Lisboa, que faz parte do Centro de Investigação Integrada em Saúde, da Nova Medical School, está a realizar um estudo, dirigido pela Dra. Deborah Aluh, que tem como objetivo compreender as perceções de coerção entre pessoas atendidas em Serviços de Psiquiatria.

O/A Senhor/a foi escolhido/a para participar neste estudo porque foi internado/a num Serviço de Psiquiatria.

Pedimos-lhe para preencher um questionário sobre a sua perceção do uso de medidas de coerção durante o seu internamento.

A participação no estudo é voluntária e se decidir não participar isso não afetará, de nenhum modo, os cuidados que recebe.

Todas as suas opiniões serão mantidas confidenciais.

Caso alguma questão não seja inteiramente clara ou necessite de mais informações, por favor não hesite em pedir à investigadora para esclarecer as suas dúvidas.

Dra. Deborah Aluh

Instituto de Saúde Mental Global de Lisboa

Contacto telefónico: 939048341

Eu confirmo que:

Compreendi a explicação que me foi dada relativamente ao estudo que se pretende realizar (métodos e objetivos) ☐

Pude fazer as perguntas que achei importantes, obtive resposta a todas e fiquei devidamente esclarecido(a) ☐

Foi-me explicado que todos os dados fornecidos serão mantidos confidenciais ☐

Foi-me explicado que tenho o direito de recusar em qualquer momento a participação no estudo, sem que haja qualquer tipo de problema. ☐

Consinto livremente em participar nesta investigação ☐

Assinatura _____ **Data** ____/____/____
____/____

Appendix III: Sociodemographic forms for patients and mental health professionals in Nigeria and Portugal

Experiences and perceptions of Service users on coercion in Nigerian Psychiatric hospitals

Code: _____

Gender: Male ☐ Female ☐

Level of education: No formal education ☐ Primary ☐ Secondary ☐ Tertiary ☐

Age: _____

Marital status: Single ☐ Married ☐ Separated/Divorced/Widowed ☐

Diagnosis: _____

Status of admission: Voluntary ☐ Involuntary ☐

Length of current admission _____ days /weeks/ months

Number of previous hospitalizations: _____

Perspectives of Mental health professionals on coercion in Nigerian Psychiatric hospitals

Code: _____

Gender: Male [] Female []

Age: _____

Profession: _____

How long have you been practicing? _____

Career level: Senior level [] Mid-level [] Junior level []

Have you had any specialized training regarding the use of coercion in Mental health care? Yes []
No []

Do you have a relative/friend with a mental disorder? Yes [] No []

Perfil sociodemográfico dos profissionais

Código : _____

Género: Masculino ☐ Feminino ☐ Outro ☐

Idade: _____

Profissão: Psiquiatra ☐ Enfermeiro(a) ☐

Actividade principal: Hospital Geral ☐ Equipa comunitária de saúde mental ☐ Hospital Psiquiátrico ☐ Outro ☐

Anos de exercício profissional: _____

Tem algum familiar/amigo com doença mental: Sim ☐ Não ☐

Relativamente ao exercício das suas funções, considera que esteve envolvido(a) em alguma prática coercive nos últimos seis meses? Sim ☐ Não ☐

Alguma vez recebeu treino/formação especializada em relação ao uso de coerção: Sim ☐ Não ☐

S/N: _____ Date: _____

Patient Sociodemographic Details

Gender: Male ☐ Female ☐

Age: _____

Employment status: Employed ☐ Unemployed ☐ Retired ☐

Marital status: Single ☐ Married ☐ Divorced/Widowed/Separated ☐

Nationality: Portuguese ☐ Immigrant ☐

Legal status of Admission: Voluntary ☐ Involuntary ☐

Number of previous involuntary admissions: _____

GAF score: 1st Assessment _____ 2nd Assessment _____

Diagnoses according to the ICD-10 criteria: Substance use disorders (F10-F19) ☐ Psychotic disorders (F20-F29) ☐ Affective disorders (F30-F39) ☐ Anxiety disorders (F40-F49) ☐

Personality disorders (F60-F69) ☐ Other psychiatric diagnosis ☐

Appendix IV: Qualitative study guides for Focus group discussions and semi-structured interviews in Nigeria and Portugal

Focus Group guide (Nigeria)

Process	Description
Definition of the objectives that are intended to be achieved through the Interview	To examine the experiences and perceptions of service users on the use of coercive practices To assess service users' perceptions of facilitators and barriers to the use of coercion To understand the effects of the use of coercion on service users and their families and to identify proposed mitigation strategies.
Discussants	Service users with differing socio-demographic (e.g., age, gender, length of admission) will be purposively selected and contacted to participate in the study.
Moderator	Psychologist/Social Worker with experience in carrying out Focus group discussions will be employed to collect data from the service users
Deadline	January 2022
Logistics	Acquisition of the audio recorder; Payment of Moderator; Snacks for participants
Communication	Oral communication (audio recording);
Focus group estimated duration	Discussion is expected to take approximately 60 to 90 minutes; Please record start and end time.
Appointment	The invitation to participate will be made to the selected participants. The research project and its purposes will be explained to the participants. We will give an informed consent that will be read and signed by participants; The moderator will also explain the objectives of the investigation and the purpose of the focus group, making herself available to clarify any doubts that may arise. Each participant will be purposively selected to achieve an inclusive sample for the Focus group discussion.
Focus group discussion	Dimensions and variables to be studied: - service users' narratives, views and perceptions on Coercion (Involuntary admissions, Mechanical restraint, Physical

	restraint, seclusion, ECT, Chemical restraint) and frequency of use; reasons for the use of coercion; barriers and facilitators to the use of coercion. Strategies that could reduce the use of coercion in mental health care.
To be considered	The following must be considered: - The discussants' state of mind (confidence, confusion, embarrassment...). - Contradictions of the discussants. - Moments when the discussants express their emotions. - Body language. - Tone and rhythm of the discussants' language. - Environment where the interview takes place.
Formal aspects to consider	Presentation: - Moderator has to remain neutral to ensure that everyone feels comfortable expressing their opinion. - Discussants can withdraw consent to participate at any point during the discussion.
Consent	Explain the project and scope of the Focus group discussion; request authorization from the discussants to record the discussion via audio; ask them for permission to take notes; clarify any doubts that arise; deliver the informed consent for reading and signing;
To be considered during Focus group discussion	During the discussion: - Allow the discussants to express themselves clearly - Focus the respondent on the main topics. - Elicit further information from shy participants - Deal with dominant participants by acknowledging their opinion and soliciting other opinions End the Focus group discussion: - Meet the Focus group time limit.

	- Make an overview of the main ideas. - Ask for additional comments. Take notes: - Note down the discussants' bodily and emotional dispositions.

Interview Script

Dimensions	Questions	Topics to be addressed
Socio-demographic characterization	1. A short form can be distributed to discussants before the focus group discussion starts	age, gender, diagnosis, previous hospitalisation, length of current hospitalisation, status of admission
Experience and Perception of Coercion	2. What do you think about coercion in mental health care? 3. What are your experiences of Involuntary admissions? 4. What are your experiences of the use of chemical/physical/mechanical restraint? 5. What are your experiences of the use of ECT without your consent?	Define Coercion in the beginning. Ask probing questions about events that led to the use of each coercive practice
Mitigation strategies	6. Do you think the use of coercion can be eliminated? 7. What strategies can be put in place to eliminate/reduce the use of coercion?	Barriers and facilitators. Mitigation strategies.

Semi-structured interview guide (Nigeria)

Process	Description
Definition of the objectives that are intended to be achieved through the Interview	To examine the personal narratives, views, and perceptions of mental health care professionals on the use of coercive practices and to facilitators and barriers to the use of coercion To understand the effects of the use of coercion on health care professionals, patients and family and to identify proposed mitigation strategies.
Interviewed	Nurses and Psychiatrists with differing socio-demographic (e.g., age, gender, career level) will be purposively selected and contacted to participate in the study.
Interviewers	Psychologist/Social Worker with experience in carrying out interviews will be employed to collect data from the mental health care professionals
Deadline	January 2022
Logistics	Acquisition of the audio recorder; Payment for researcher
Communication	Oral communication (audio recording);
Interview estimated duration	Variable, but interviews are expected to take approximately 30 to 45 minutes;
Appointment	The invitation will be made to the selected participants. The research project and its purposes will be explained to the participants. We will give an informed consent that will be read and signed by participants; The interviewer will also explain the objectives of the investigation and the purpose of the interview, making herself available to clarify any doubts that may arise. Each participant will be recruited based on similarities or disparities from patients already interviewed and sampling will continue until no new topics emerge from the interviews
Interview	Dimensions and variables to be studied: - To examine the individuals' narratives, views and perceptions on Coercion (Involuntary admissions, Mechanical

	restraint, Physical restraint, seclusion, ECT, Chemical restraint) and frequency of use; reasons for the use of coercion; barriers and facilitators to the use of coercion. To identify strategies that could reduce the use of coercion in mental health care.
To be considered	The following must be considered: - The interviewee's state of mind (confidence, confusion, embarrassment...). - Contradictions of the interviewee. - Moments when the respondent expresses their emotions. - Body language. - Tone and rhythm of the interviewee's language. - Type of language used. - Environment where the interview takes place.
Formal aspects to consider	Presentation: - Create a relaxed atmosphere, showing kindness and attention to the interviewee. - Maintain professionalism, trying to get the interviewee to answer questions and clarify any doubts they may have. Project description: - State the scope of the interview
Consent	Explain the project and scope of the interview; request authorization from the respondent to record the interview via audio; ask the respondent for permission to take notes; clarify any doubts that arise; deliver the informed consent for reading and signing;
To be considered during interviews	Following the interview: - Help the interviewee to express themselves clearly. - Focus the respondent on the main topics. - Encourage the respondent to expose more about the most important topics. End the interview:

	- Meet the interview time limit. - Make an overview of the main ideas. - Present a final acknowledgment. Take notes: - Note down the respondent's bodily and emotional dispositions. - Occasionally, just in case the recording of the interview is not authorized, proceed with the direct transcription of the interview.

Interview Script

Dimensions	Questions	Topics to be addressed
Socio-demographic characterization	1. I would like to ask you to talk about yourself, please.	age, gender, profession, career level, years of practice, Attendance of specific trainings on mental health and human rights. Skip this if sociodemographic questionnaire is used.
Perception of Coercion	2. What do you think about coercion in mental health care? 3. What do you think about Involuntary admissions? 4. What do you think about the use of chemical/physical/mechanical restraint? 5. What do you think about the use of seclusion? 6. What do you think about the use of ECT without patient's consent?	Ask probing questions about frequency of use, and if they think the specific coercive practices are indeed coercive.
Experience of Coercion	7. Can you describe the events that usually lead to the use of the coercive practices mentioned above? 8. Please explain factors that encourage the use of coercive practices. 9. Please explain factors that discourage the use of coercion. 10. Can you describe one or more specific experiences where you have had to use a coercive practice?	Personal experience of coercion, barriers and facilitators.
Outcomes of Coercion	11. Do you think the use of coercion can be eliminated? 12. What strategies can be put in place to reduce the use of coercion?	Mitigation strategies.

Focus Group interview guide (Portugal)

Process	Description
Definition of the objectives that are intended to be achieved through the Interview	To understand the perceptions of health professionals about the contextual factors that may influence the use of psychiatric compulsive hospitalization. To understand the perceptions of health professionals about the contextual factors that may influence the use of mechanical restraints. To understand the perceptions of health professionals about the contextual factors that may influence the use of chemical restraint
Discussants	Nurses and Psychiatrists with differing socio-demographic (e.g., age, gender, career level) will be purposively selected and contacted to participate in the study.
Moderator	Research assistant with experience in carrying out Focus group discussions
Deadline	February 2023
Logistics	Acquisition of the audio recorder; Payment of Moderator; Refreshment for participants
Communication	Oral communication (audio recording);
Focus group estimated duration	Discussion is expected to take approximately 60 to 90 minutes; Please record start and end time.
Appointment	The invitation to participate will be made to the selected participants. The research project and its purposes will be explained to the participants. We will give an informed consent that will be read and signed by participants; The moderator will also explain the objectives of the investigation and the purpose of the focus group, making herself available to clarify any doubts that may arise. Each participant will be purposively selected to achieve an inclusive sample for the Focus group discussion.
Focus group discussion	Dimensions and variables to be studied:

	Dimensions and variables to be studied: -To identify relevant contextual factors at the macro-, meso- and micro level To examine the individuals' perceptions on contextual factors that influence the use of Coercion (Involuntary admissions, Mechanical restraint, Physical restraint, Chemical restraint) in relation to barriers and facilitators.
To be considered	The following must be considered: - The discussants' state of mind (confidence, confusion, embarrassment...). - Contradictions of the discussants. - Moments when the discussants express their emotions. - Body language. -Tone and rhythm of the discussants' language. - Environment where the interview takes place.
Formal aspects to consider	Presentation: - Moderator must remain neutral to ensure that everyone feels comfortable expressing their opinion. - Discussants can withdraw consent to participate at any point during the discussion.
Consent	Explain the project and scope of the Focus group discussion; request authorization from the discussants to record the discussion via audio; ask them for permission to take notes; clarify any doubts that arise; deliver the informed consent for reading and signing;
To be considered during Focus group discussion	During the discussion: - Help the discussants to express themselves clearly - Focus the respondent on the main topics. - Elicit further information from shy participants

	- Deal with dominant participants by acknowledging their opinion and soliciting other opinions End the Focus group discussion: - Meet the Focus group time limit. - Make an overview of the main ideas. - Ask for additional comments. Take notes: - Note down the discussants' bodily and emotional dispositions.

Script

Dimensions	Questions	Topics to be addressed
Socio-demographic characterization	A short form can be distributed to discussants before the focus group discussion starts	age, gender, profession, career level, years of practice, Attendance of specific trainings on mental health and human rights.
Identification of relevant contextual factors	1. What do you think are the contextual factors that influence the use of coercion in mental health care? -Involuntary admissions - Use of physical and mechanical restraint - Use of chemical restraints	Contextual factors at the National level, Regional and organisational level.
Influence of contextual factors	2. How do these factors influence the use of coercion? - Involuntary admissions - Use of physical and mechanical restraint - Use of chemical restraints	How do these factors serve as barriers and facilitators?

Appendix V: Portuguese version of the Staff Attitudes towards Coercion Scale (SACS)

Sentimentos e atitudes dos profissionais em relação à coerção

Coerção refere-se a hospitalização involuntária, tratamento compulsivo, medicação forçada, isolamento, unidades de internamento à porta fechada e imobilização.

1 = Discordo totalmente; 2 = Discordo; 3 = Não concordo nem discordo; 4 = Concordo; 5 = Concordo completamente

S/N		1	2	3	4	5
1	O uso de coerção é necessário como forma de protecção em situações perigosas					
2	Devido a questões de segurança, a coerção deve ser por vezes usada					
3	O uso de coerção pode ter um impacto negativo na relação terapêutica					
4	O uso de coerção é uma declaração de falha por parte dos serviços de saúde mental					
5	A coerção pode representar cuidado e protecção					
6	A coerção deveria ser mais usada no tratamento					
7	A coerção pode prevenir o desenvolvimento de uma situação perigosa					
8	A coerção viola a integridade do utente					
9	Para utentes gravemente doentes, a coerção pode representar segurança					
10	Os doentes sem crítica para a doença requerem o uso de coerção					
11	O uso de coerção é necessário em utentes perigosos e agressivos					
12	Utentes regressivos necessitam de uso de coerção					
13	Demasiada coerção é usada no tratamento					
14	A escassez de recursos leva a maior uso de coerção					
15	A coerção poderia ser bastante reduzida através de mais tempo e contacto pessoal					

Appendix VI: Portuguese version of the McArthur Admission Experience Survey (P-AES)

Estudo de Coerção de MacArthur

S/N: _____ Date: _____

Time of Assessment: First [] Second []

Questionário de Experiência de Admissão: Versão Curta

"Vou agora ler-lhe algumas afirmações sobre a sua vinda actual ao hospital. Por favor responda “verdadeiro” ou “falso” a cada afirmação. Procure responder a cada questão individualmente, independentemente de lhe parecem similares entre si.”

	Verdadeiro	Falso	Não sei
1. Senti-me livre para fazer o que queria em relação a vir ao hospital.	[]	[]	[]
2. As pessoas tentaram forçar-me a vir para o hospital.	[]	[]	[]
3. Tive possibilidade suficiente de dizer se queria vir para o hospital.	[]	[]	[]
4. Eu escolhi vir para o hospital.	[]	[]	[]
5. Pude dizer o que queria em relação a vir para o hospital.	[]	[]	[]
6. Alguém me ameaçou de forma a que eu viesse para o hospital.	[]	[]	[]
7. Foi minha ideia vir para o hospital.	[]	[]	[]
8. Alguém tentou fisicamente fazer-me vir para o hospital.	[]	[]	[]
9. Ninguém parecia querer saber se eu queria ou não vir para o hospital.	[]	[]	[]
10. Fui ameaçado(a) com internamento.	[]	[]	[]
11. Eles disseram que iriam fazer com que eu viesse para o hospital.	[]	[]	[]
12. Ninguém me tentou forçar a vir para o hospital.	[]	[]	[]
13. A minha opinião acerca de vir para o hospital não teve importância.	[]	[]	[]
14. Eu tive bastante controlo acerca de vir para o hospital.	[]	[]	[]
15. Eu tive maior influência do que qualquer outra pessoa acerca de vir para o hospital.	[]	[]	[]
16. Como se sentiu em relação ao facto de ter sido internado no hospital?			

Sentiu-se:

a. Zangado.	☐	☐	☐
b. Triste.	☐	☐	☐
c. Satisfeito.	☐	☐	☐
d. Aliviado.	☐	☐	☐
e. Confuso.	☐	☐	☐
f. Assustado.	☐	☐	☐

Gostaria que, numa escala de 1 a 10, se posicionasse relativamente ao nível de coerção sentido aquando da sua vinda ao hospital, por favor.

10	Máximo de uso de coerção
9	
8	
7	
6	
5	
4	
3	
2	Mínimo de uso de coerção (Vim ao hospital por vontade e iniciativa próprias)
1	

1. Acredita que aqui está a receber o tratamento e cuidados adequados?

De modo algum

Sim,completamente

0	1	2	3	4	5	6	7	8	9	10
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

2. Sente que o (a) seu (ua) terapeuta e/ou medico(a) o(a) compreende-o e está (ão) envolvido (a) (s) no seu tratamento/cuidados?

De modo algum

Sim,completamente

0	1	2	3	4	5	6	7	8	9	10
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

3. O seu relacionamento com a equipa e outros(as) trabalhadores(as) é agradável?

De modo algum

Sim,completamente

0	1	2	3	4	5	6	7	8	9	10
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

4. Acredita que está a receber a medicação correta /adequada a si?

De modo algum

Sim,completamente

0	1	2	3	4	5	6	7	8	9	10
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

5. Acredita que neste local, os restantes elementos relativos ao tratamento/cuidados são os mais adequados para si?

De modo algum

Sim,completamente

0	1	2	3	4	5	6	7	8	9	10
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

6. Sente-se respeitado(a) e bem tratado(a) aqui?

De modo algum

Sim,completamente

0	1	2	3	4	5	6	7	8	9	10
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

7. O(s) tratamento(s) e cuidados a que tem sido submetido(s) têm sido úteis para si?

De modo algum

Sim,completamente

0	1	2	3	4	5	6	7	8	9	10
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Relativamente às seguintes questões assinale a opção correspondente, por favor:

1. Em termos legais, a sua hospitalização foi:

- a) Voluntária;
- b) Involuntária;

c) Não sei.

2. Pensa que a sua hospitalização foi:

- a) Necessária;
- b) Desnecessária;
- c) Não sei.

3. Desde que foi hospitalizado(a), a sua saúde:

- a) Melhorou bastante;
- b) Melhorou um pouco;
- c) Não se modificou;
- d) Piorou.

Appendix VII: Ethical Approvals

Decisão final sobre o projeto

"Effects of contextual factors on the use of coercion measures in mental health services"

A Comissão de Ética da NMS|FCM-UNL (CEFCM) decidiu, aprovar por unanimidade, do ponto de vista ético, o projeto de investigação intitulado *"Effects of contextual factors on the use of coercion measures in mental health services"* (nº 100/2021/CEFCM), submetido pela Doutoranda Deborah Oyine Aluh, no âmbito do Doutoramento em Saúde Pública Global, sob a orientação do Professor Doutor José Miguel Caldas de Almeida.

Lisboa, 7 de julho de 2021

O Presidente da Comissão de Ética,


(Professor Doutor Diogo Pais)

TO WHOM IT MAY CONCERN

The Ethics Research Committee of NMS|FCM-UNL (CEFCM) has unanimously approved, the Project entitled *"Effects of contextual factors on the use of coercion measures in mental health services"* (No. 100/2021/CEFCM) submitted by Deborah Oyine Aluh, PhD student in Global Public Health, under the supervision of José Miguel Caldas de Almeida, MD, PhD.

Lisbon, July 7th, 2021

The Chairman of the Ethics Research Committee,


(Diogo Pais, MD, PhD)



FEDERAL NEURO-PSYCHIATRIC HOSPITAL

P.M.B 1108, BENIN CITY

www.fnphbenin.gov.ng; info@fnphbenin.gov.ng

+2348032231189; +2348151130304

OUR REF : PH/A.864/VOI.XX/157

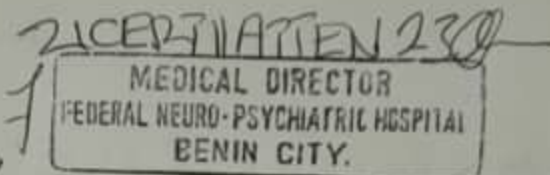
22th November, 2021

Deborah Oyine Aluh

Nova University of Lisbon Portugal,

Telephone number: +351-93904841,

E-mail address: aluhdeborah@yahoo.com, do.aluh@ensp.unl.pt.



Re: Application for Permission to carry out Research

I am directed to refer to your letter dated 14th September, 2021 seeking permission to carry out your research work on "Experiences and perception of coercion among service users and health care professionals in your institution in Federal Neuro-Psychiatric Hospital, Uselu, Benin City". After due consideration of your proposal, approval has been granted to you to carry out your research work.

We hope that findings and conclusions will be made available to us on completions of the research.

O. Igbinedion (Mrs)

For: Chairman, Ethical Committee.

FEDERAL NEUROPSYCHIATRIC HOSPITAL, ENUGU

CHIME AVENUE, NEW HAVEN, P.M.B. 01181, ENUGU, NIGERIA

Website: www.fnhe.gov.ng Email: contact@fnhe.gov.ng

Tel: 08104043012, 08118909280

DR. MONDAY N. IGWE

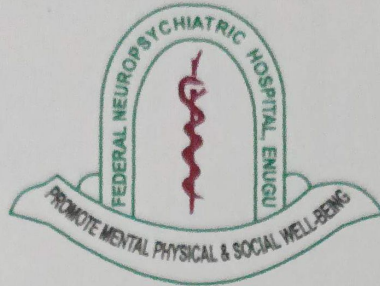
MBBS, FMCPsych.

Medical Director

DR. VINCENT N. UBOCHI

MBBS, FMC Psych, Dip. Stat.

Head Clinical Services



HON. SHABAN OHINOYI SHUAIBU

Chairman Board of Management

DR. NGOZICHUKWU N. UNAOGU

MBBS, FWACP (Psych)

Head Training & Research

IGWENAGU N. C. (Mrs.)

Bsc, Mkt. Msc Pub Rel

PGD Health Admin/Mgt

Msc Health Admin/Mgt

Ag. Assistant Director of Administration

9th November, 2021

Justus Uchenna Onu MBBS, FWACP, FMCPsych,
Honorary Consultant Psychiatrist,
Federal Neuropsychiatric Hospital,
Enugu.

Dear Dr Justus Uchenna,

RE: APPROVAL FOR ETHICAL CLEARANCE

This is to convey to you the approval of the Ethical Committee of Federal Neuropsychiatric Hospital, Enugu on your study Proposal titled, **"EXPERIENCES AND PERCEPTIONS OF COERCION AMONG SERVICE USERS AND HEALTHCARE PROVIDERS IN NIGERIAN PSYCHIATRIC HOSPITALS"**.

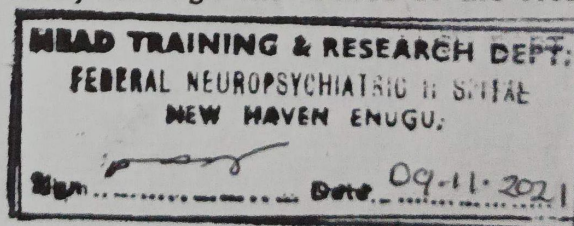
Kindly ensure you comply strictly with the detail procedure specified in your Proposal.

In addition, you are required to submit one (1) copy each of the Proposal and final research work to the Hospital Library through the Office of the Head, Training and Research.

Thank you and best wishes.

Dr. Unaogu Ngozichukwu Nneka (FWACP)

Head, Training and Research



PARECER DA COMISSÃO DE ÉTICA

Nº de identificação de registo 30/2022

TIPO DE ESTUDO: ESTUDO CLÍNICO

"Os efeitos de fatores contextuais sobre o uso de medidas de coerção em Serviços de Saúde Mental"

Após reunião de 04 de Maio de 2022, tendo pareceres favoráveis da UIC (Unidade de Investigação Clínica), e do EPD (Encarregado da Proteção de Dados) estando, a documentação entregue, de acordo com as normas de submissão impostas por esta CE, deliberou-se emitir parecer favorável.

Ouvido o Relator, o processo foi votado pelos Membros da Comissão de Ética para a Saúde do Hospital Prof. Dr. Fernando Fonseca, EPE presentes em reunião de 04 de Maio de 2022:

Presidente

Dra. Teresa Brandão

Vogais

Dra. Ana Miranda

Dr. José Tomé

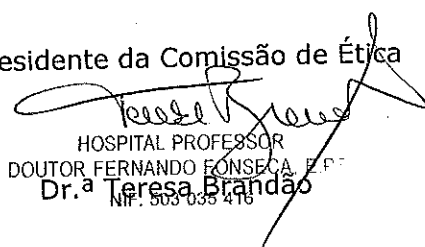
Dr. Vasco Rodrigues

Enf.ª Sónia Semião

Mais se declara que a Comissão de Ética para a Saúde do Hospital Prof. Dr. Fernando Fonseca, EPE, cumpre com as Normas da Boa Prática Clínica.

Pelo exposto, emitiu-se a 04 de Maio de 2022, **Parecer Favorável.**

A Presidente da Comissão de Ética



HOSPITAL PROFESSOR
DOUTOR FERNANDO FONSECA, E.P.E.
Dr.ª Teresa Brandão
NIF: 503 035 416

Documento nº I21963-202206

Tipo de Registo: Interno

Tipo: Geral\Ofício AD HOC**Assunto:** Submissão de projeto " Efeitos de fatores contextuais sobre o uso de medidas de coerção em serviços de saúde mental"**Data:** 28-06-2022**Remetente:** (02709) Carla Monteiro Branco**Destinatário:** (04283) Diana Mota**Confidencial:** Não**Concluído:** Sim**Estado:** Concluído**Informação:** Exma. Senhora

Diretora Clínica

Dra. Diana Mota

Envio o projeto de Investigação " Efeitos de fatores contextuais sobre o uso de medidas de coerção em serviços de saúde mental" cuja investigadora é a Dra. Deborah Aluh .

A Unidade de investigação e Ensaaios Clínicos (UIEC) verificou e confirmou que o estudo está em conformidade com os procedimentos em vigor no Centro Hospitalar de Vila Nova de Gaia/Espinho, EPE, solicitando desta forma a sua aprovação.

Secretariado da UIEC

Carla Branco

Criado em 28-06-2022 11:14 por Carla Monteiro Branco

Editado em 28-06-2022 11:14 por Carla Monteiro Branco

Circulações

Data Envio	Tipo	De	Para	Prazo de resposta	Leitura em	Respondida por	Respondida em	Estado do Workflow
28-06-2022 19:07	Para conhecimento	Diana Mota	Carla Monteiro Branco		29-06-2022 10:21	N/A	N/A	

Mensagem

Resposta: (Autorizo) de acordo com pareceres técnicos favoráveis

28-06-2022 11:14	Para autorização	Carla Monteiro Branco	Diana Mota	28-06-2022 19:06	Diana Mota	28-06-2022 19:07

Mensagem

Documento concluído.

Resposta

(Autorizo) de acordo com pareceres técnicos favoráveis

Estados

Estado	Editado por	Data
Concluído	Carla Monteiro Branco	28-06-2022 11:14

Anexos

Nome	Observações	Versão	Tamanho	Estado	Adicionado por	Editado em	Editado por
 I.DQ2		1.00	15,42 MB	Check In	Carla Monteiro Branco	28-06-2022 11:14	Carla Monteiro Branco

PARECER DA COMISSÃO DE ÉTICA PARA A SAÚDE

TÍTULO DO ESTUDO/PEDIDO

“Efeitos de fatores contextuais sobre o uso de medidas de coerção em serviços de saúde mental”

Documento do CES: 106/2022

Serviço onde irá decorrer o Estudo: Serviço de Psiquiatria do CHVNG/E

Investigador Principal: Deborah Aluh/ Prof Dr José Caldas de Almeida -Orientador

A Comissão de Ética para a Saúde do Centro Hospitalar de Vila Nova de Gaia/Espinho, EPE, em reunião ordinária do dia **14/06/2022**, apreciou a documentação constante do dossier submetido para o estudo acima referenciado:

- Impresso UIEC com resumo projeto investigação submetido
- Impresso CES
- Requerimento ao Presidente CA
- Aprovação do projeto de investigação pelo Diretor do Serviço de Psiquiatria
- Elo de ligação (Dr Lima Monteiro)
- Consentimento Livre e Esclarecido (CIEL) e informação ao participante
- Declaração de não existência de conflito de interesses
- Compromisso de comunicação dos resultados obtido
- CV investigador principal/ outros investigadores

Apreciação:

Estudo observacional, multicêntrico, europeu, de âmbito académico, que inclui todos os pacientes na admissão ao internamento que estejam clinicamente estáveis e capazes de dar o seu consentimento informado e todos os profissionais que tenham trabalhado no Serviço de Saúde Mental durante pelo menos 6 meses e são convidados a preencher o questionário ao internamento.

Amostragem de conveniência.

Tem como objetivo avaliar a percepção das práticas de coerção entre as pessoas com doença mental internadas em serviços de psiquiatria, através do instrumento *MacArthur Admission Experience Survey*, devidamente validado para o contexto português/avaliar as atitudes dos profissionais de saúde mental em relação ao uso de

medidas de coerção, através de escala devidamente validada para Portugal/estudar as percepções de profissionais de saúde mental em relação ao uso de práticas coercivas em Portugal, através de métodos qualitativos/estudar as associações entre a percepção de medidas coercivas e fatores contextuais.

Tempo previsto duração investigação de Maio a Setembro de 2022.

A colheita de dados é feita pelos profissionais da saúde mental da unidade de internamento através da aplicação de escalas/questionários.

Os dados serão recolhidos de forma anónima e armazenados num computador com palavra passe segura no Instituto de Saúde Mental Global de Lisboa, sendo responsável pelo acesso o Presidente do Instituto. Estes dados serão mantidos durante 3 anos, sendo posteriormente destruídos.

Variáveis consideradas: idade/sexo/emprego/estado civil/grupo étnico/ nível educacional/variáveis de tratamento (satisfação, internamento voluntário, internamentos anteriores)/fatores contextuais ligados aos serviços de saúde.

CIEL (devidamente instruído de acordo com a Declaração de Helsínquia) e informação ao participante.

Garantem confidencialidade e anonimato.

Não está prevista a sua transferência para países terceiros ou organizações internacionais.

Está prevista a publicação dos resultados.

Não apresenta custos acrescidos para os doentes/instituição.

Trabalho não financiado.

Somos de opinião que não existem impedimentos éticos e deve ser dado parecer favorável à realização do estudo.

Ouvido o relator, o processo foi votado pelos membros da Comissão de Ética para a Saúde do Centro Hospitalar de Vila Nova de Gaia/EPE presentes:

Presidente: Enf^a Ana Saraiva

Restantes Membros:

Dra. Amelia Pereira

Dra Ana Isabel Paixão

Dra Ana Luísa Ferreira

Somos de opinião que não existem impedimentos éticos e deve ser dado parecer favorável à realização do estudo “Efeitos de fatores contextuais sobre o uso de medidas de coerção em serviços de saúde mental”, depois de clarificados os esclarecimentos solicitados e retirada do projeto de investigação a variável etnia.

Data: 14 /06 / 2022

A Presidente da Comissão de Ética para a Saúde


Enf. Ana Saraiva

EXTRATO DA ACTA DA REUNIÃO N.º 08/2022 DA COMISSÃO DE ÉTICA
HOMOLOGADA PELO CONSELHO DE ADMINISTRAÇÃO EM 19.10.2022 (Ata nº 42, Ponto 4.1)

Aos catorze de outubro de dois mil e vinte e dois, pelas catorze horas e trinta minutos, na Sala João Paradela do Departamento de Saúde Mental da ULSBA, EPE, reuniu a Comissão de Ética da ULSBA, estando presentes: Aida Maria Matos Pardal, Enfermeira, Ana Cristina Pardal Charraz, Psicóloga, Carla Alexandra Bicas Pereira Lourenço, Técnica Superior de Serviço Social, José Maria Afonso Coelho, Capelão e Coordenador do Serviço de Assistência Espiritual e Religiosa, Sara Isabel Veiga Martins, Assistente de Medicina Geral e Familiar, e Sílvia Edgar Aurélio Lampreia Guerreiro, Farmacêutica. Não puderam estar presentes e justificaram a sua falta Ana Matos Pires, Assistente Graduada-Sénior de Psiquiatria, Diretora do Departamento de Saúde Mental, e Presidente desta Comissão, António Joaquim Conceição Silva, Juiz e Presidente da Comarca de Beja, Rui Manuel Pereira Ruivo, Engenheiro do Serviço de Gestão Integrada da Qualidade, Segurança e Ambiente. -

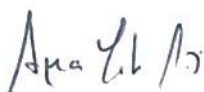
----- Foram tratados os seguintes assuntos: -----

«««PONTO QUATRO – EDOC/2022/41103 – Projeto «Estudo sobre os efeitos de fatores contextuais sobre o uso de medidas de coerção em serviços de saúde», a realizar por Deborah Oyine Aluh. -----

--- A Comissão de Ética não tem nada a opor e emite parecer favorável. -----

Beja, 20 de outubro 2022

A Presidente da Comissão de Ética



Ana Matos Pires



Comissão de Ética para a Saúde

N.º Registo no RNEC: 20170700050

PARECER

Código de Aprovação 2395

Projeto de Investigação de Doutoramento,

Título: “Efeitos dos fatores contextuais no uso de medidas de coerção em serviços de saúde mental”

Investigadora Principal – Doutoranda: **Dra. Deborah Aluh** (Aluna no Doutoramento em Saúde Pública Global, do Instituto de Saúde Mental Global de Lisboa | Universidade Nova de Lisboa)

Serviço no CHLO onde decorrerá o estudo: **Serviço de Psiquiatria e Saúde Mental de Adultos do CHLO**

Após reunião de 06 de novembro de 2023 e estando o projeto de acordo com as normas de submissão impostas por esta CES, deliberou-se emitir **parecer favorável** à realização do mesmo.

A Comissão de Ética para a Saúde solicita à Investigadora Principal que, quando da conclusão deste projeto, lhe seja enviada uma síntese dos resultados e conclusões do mesmo.

Ouvido o Relator, o processo foi votado pelos Membros da Comissão de Ética para a Saúde do Centro Hospitalar de Lisboa Ocidental presentes em reunião de 06 de novembro de 2023:

Presidente: Dra. Paula M. R. Peixe

Dra. Lucília Carvalho, Dra. Aida Ferraria, Enf.^a Clara Carvalho,

Dra. Helena Farinha, Dra. Maria João Pais, Dr. Carlos Neves e Pe. João Valente

Pelo exposto, emitiu-se a 07 de novembro de 2023, **parecer favorável**.

Presidente da Comissão de Ética para a Saúde

Paula M. R. Peixe

Presidente da Comissão
de Ética para a Saúde do CHLO

Dra. Paula M. R. Peixe

Presidente

Prof. Doutor João Forjaz de Lacerda

Vice-Presidente

Profª. Doutora Helena Cortez-Pinto

Membros

Profª. Doutora Ana Isabel Lopes
Doutora Carla Fonseca
Profª. Doutora Claudia Sofia Oliveira Dias Monge
Prof. Doutor Daniel Caldeira
Profª Doutora Dulce Brito
Mestre Enfermeira. Graça Roldão
Prof. Doutor João Lavinha
Dra. Laura Silva Dias
Profª. Doutora Maria do Céu Patrão Neves

Exma. Senhora

Dra. Deborah Oyine Aluh

Instituto de Saúde Mental Global de Lisboa

Rua do Instituto Bacteriológico, 5, - Edifício Amarelo

1150-190 Lisboa

Lisboa 23 de Junho de 2022

Nossa Refª. Nº 121/22

Assunto: Projeto "Efeitos dos fatores contextuais no uso de medidas de coerção em serviços de saúde mental"

Relator: *Prof. Doutor João Forjaz de Lacerda*Consultor: *Profª. Doutora Maria Luísa Figueira*

Pela presente se informa que o projeto citado em epígrafe, obteve, na reunião ocorrida em 3 de Junho de 2022, parecer favorável da Comissão de Ética, considerando-se observados os imperativos que fundeiam as Boas práticas clínicas, os preceitos internacionalmente reconhecidos de qualidade ética e científica que devem ser respeitados na conceção e na realização dos estudos clínicos que envolvam a participação de seres humanos.

No uso das competências próprias constantes do disposto no Decreto-Lei. N.º 97/95 de 10 de Maio, e no exercício das suas funções em observância ao deliberado na Lei n.º 21/2014 de 16 de Abril, que aprova a lei da investigação clínica, na sua atual redação alterada pela Lei n.º 73/2015 de 27/07/15, complementada pelo Decreto-Lei n.º 80/2018 (DR n.º 198-2018, Série I de 2018/10/15) que reforça o papel das comissões de ética no contexto da instituição em que se integram, na sua missão de contribuir para o cumprimento de princípios da ética e da bioética, na prestação de cuidados de saúde e na realização de investigação clínica, e ainda em harmonia com os regulamentos internos do CHULN, os códigos deontológicos, as convenções, e as recomendações constantes das declarações e diretrizes internacionais, designadamente as Declarações de Helsínquia e de Tóquio, da Organização Mundial de Saúde e da União Europeia, a Comissão de Ética avaliou o projeto, que considera obedecer aos requisitos éticos fundamentais que devem ser respeitados, refletindo o primado da dignidade e da integridade humanas.

Encontra-se assegurado o direito à integridade moral e física do participante, cumpre as precauções essenciais, cujo desígnio visa minimizar eventuais danos para os seus direitos de personalidade, bem como o direito à privacidade e à proteção dos dados pessoais que lhe dizem respeito, respeitando os imperativos refletidos no Regulamento Geral sobre a Proteção de Dados (RGPD) entrado em vigor em 25 de Maio de 2016 e plenamente aplicável a partir de 25 de Maio de 2018, (Regulamento (UE) 2016/679 do Parlamento Europeu e do Conselho de 27/04/16), de 27 de abril, publicado no Jornal Oficial da União Europeia, no dia 4 de Maio de 2016, e na Lei n.º 58/2019, de 8 de Agosto

Com os melhores cumprimentos,

O Presidente da Comissão de Ética do CAML


Prof. Doutor João Forjaz de Lacerda