



Integration of osteopathy in the Portuguese National Health Service: Perceptions and expectations of citizens and health professionals

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ABSTRACT

Background: Osteopathy's framework varies globally in healthcare systems due to context-specific factors like legal status, healthcare system integration, and implementation levels. With osteopathy expanding in Portugal and recognising the importance of defining its role in the National Health Service, it is essential to understand public perceptions and expectations in the Portuguese context even for more significant equity of access.

Objective: Explore citizen and healthcare professionals' perceptions and expectations regarding integrating osteopathy into the Portuguese National Health Service.

Methods: The study used a qualitative design. Two focus groups were conducted—a citizens' focus group (n = 8) and a health professional's focus group (n = 6). Citizens' focus group was in-person, and the health professional's focus group was online. Analysis of focus group transcripts followed a constructivist paradigm utilising thematic analysis.

Results: Thematic analysis resulted in four principal themes: osteopathy concept; competent osteopath; concerns and expectations, and National Health Service integration. Despite diverse and limited perspectives on its scope, participants generally held positive attitudes towards osteopathy. Nevertheless, barriers to NHS integration were noted, along with suggestions for improving osteopathy's integration into the healthcare system.

Conclusion: This study highlights a positive attitude among participants towards the integration of osteopathy into the National Health Service. However, they acknowledge that the profession faces significant challenges in achieving this integration. Overcoming these obstacles may require a gradual approach, which includes focusing on evidence of effectiveness, wider dissemination, and the establishment of supportive reimbursement systems.

Implication for practice:

- The findings highlight the importance of ensuring credible training, practical experience, and relational skills in osteopathy. These factors are key in influencing how individuals choose osteopaths and can guide practitioners in building trust with patients and positioning their services effectively.
- Addressing concerns related to diagnostic capacity, technique safety, and quality assurance is crucial for improving the safety and quality of osteopathic care, as well as reducing public concerns.
- The study provides valuable insights into the potential benefits and challenges of integrating osteopathy into the National Health Service, offering useful guidance for policymakers and healthcare professionals involved in this decision-making process.

1. Introduction

Osteopathy is based on osteopathic principles and scientific knowledge to guide individual diagnosis and patient treatment, with a patient-

centred approach to healthcare [1]. Its practice varies globally, with statutory recognition in 12 European countries [2], including Portugal. In 2016, Portugal made a significant transition in osteopathic training, adopting a four-year full-time higher education program, resulting in

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osteopaths being fully certified as registered professionals [3]. This change has led to academic and non-academic degree osteopaths practising with a professional license within Portugal's legal framework.

Osteopaths primarily operate in private healthcare, addressing mainly musculoskeletal problems like low back and neck pain [3]. Studies have demonstrated the efficacy of osteopathic care in diagnosing and treating low back pain [4–9], and cost-effectiveness compared to conventional treatment [10].

Low back pain is a leading reason for the general population seeking healthcare, and it represents a significant public health issue in Portugal, as in many other countries [11]. The National Health Plan for 2021–2030 highlights the impact of musculoskeletal diseases contributing to the burden of mortality, illness, and disability on morbidity and mortality in Portugal [12]. Chronic pain represents 2.7 % of the GDP in Portugal, equivalent to €4611 million [13].

In the Portuguese context, the profile of patients seeking osteopathic care closely resembles studies conducted in other countries [14–20]. Musculoskeletal complaints, mainly in the cervical and lumbar region, remain the primary reason individuals seek osteopathic care. On average, patients pay between 31 and 40 euros for a consultation lasting between 46 and 60 min, conducted in private practice settings [3]. The costs associated with these appointments are mostly partially covered by health insurance [2]. In Portugal, over 3.7 million individuals are covered by health insurance [21].

The Portuguese National Health Service (NHS) is currently undergoing a tumultuous period, facing various challenges, including prevention, cost control, investment, human resource retention, and digitalisation [22]. This critical phase is exacerbated by a shortage of human resources due to widespread dissatisfaction among healthcare professionals with the conditions in the public service. There is an increasing prevalence of individuals with complex and persistent health issues [23–26], leading to higher demand for healthcare services and longer waiting times [27].

Despite the increasing interest in traditional and complementary medicine, including osteopathy, among the population in developed countries [28], little is known about the frequency of osteopathic care, the individual's perceptions and expectations regarding osteopathy and the potential integration of it into Portugal's National Health Service. Integrating osteopathy into the NHS could significantly enhance access to musculoskeletal healthcare for the Portuguese population, offering a promising solution to the current healthcare challenges. However, this requires a thorough understanding of the perspectives and expectations of healthcare professionals and the public. Research indicates diverse and context-specific perceptions and expectations about osteopathy, influencing its integration into the healthcare system [29–33]. Recognising the importance of the general public's opinions in shaping policy decisions is crucial.

This work aims to explore the perceptions of citizens and health professionals regarding osteopathy in the Portuguese context and its potential integration into the National Health Service (NHS).

2. Materials and methods

A qualitative focus group study was designed according to Consolidated Criteria for Reporting Qualitative Research (COREQ) guidance for qualitative studies. Approval for this qualitative study was granted by the NOVA National School of Public Health Ethics Committee of the NOVA University of Lisbon (n°4/2022).

2.1. Design

This study used a qualitative design. Since the intention was to explore the perspectives of actors with different positions, two focus groups of informants were considered: citizens and health professionals.

2.1.1. Participants

Participants were recruited using convenience sampling, departing from the researcher's network and using a snowball technique to gather a group of easily accessible and available people to ensure the study's feasibility. Therefore, convenience sampling was a good starting point to gather preliminary data and insights in the available time.

The selection of participants in the group of citizens had the following inclusion criteria: being regular users of the NHS so that they would be familiar with how it works; being aged between 21 and 65 years old, as this age group is most likely to seek osteopathic care [20]. Gender, age, experience seeking osteopathic care and education level were considered diversification criteria.

The sole criterion for selecting participants in the group of professionals was that they be health professionals. It was intended that there would be diversification within the group, with the participation of health professionals from different areas and specialities, to generate a discussion with different approaches and points of view.

2.2. Data collection

The citizens' focus group was in person. Given the difficulty of bringing all health professionals together in person, the health professionals' focus group was conducted online through the Zoom platform. The citizens' focus group was conducted in May 2022, and the health professionals' focus group was conducted in June 2022.

Two scripts were designed to guide the focus groups (Appendices 1 and 2), based on a script used in another study [29] with the purpose being to provide insight into public and patient perception of osteopathy.

The discussion revolved around four main topics:

1. **Osteopathy** - encompasses the perceptions of healthcare professionals and citizens regarding the profession, including its effectiveness, utility, and safety.
2. **Identification of concerns** - pertains to the concerns voiced by healthcare professionals regarding osteopathic practice.
3. **Expectations** - focuses on the expectations of citizens regarding osteopathic care.
4. **Integration of Osteopathy into the National Health Service** - explores the viewpoints and opinions of healthcare professionals and citizens regarding the incorporation of osteopathy into the National Health Service.

The topics included in the scripts are mostly common in both groups to allow a comparative analysis of the perspectives of the two groups. Two people moderated the focus groups – one assumed the role of facilitator to mediate the discussion, and the other the co-facilitator – to take notes and record relevant details.

A semi-structured approach was chosen, assuming the scripts with flexibility and as a reference for the discussion development.

Before the session with each one of the groups, the participant information sheet was sent by email to explain the study's objectives, inform about the data collection and use process, and their contribution as participants. On the day, a document referring to informed, voluntary, and explicit consent associated with the implementation of good practices in conducting scientific studies involving human beings was delivered. After completing the informed consent form and collecting the sociodemographic data of each participant, the co-facilitator started recording with a digital audio recorder, and the facilitator began the session. The citizens' focus group lasted 90 min, while the health professionals' focus group extended to 120 min.

2.3. Data analysis

After transcribing the discussions generated in the group and anonymising the participants, the results obtained were analysed using the

MAXQDA software. The thematic analysis technique was employed to analyse the text because it allows us to understand the meaning of the messages at a level that goes beyond a common reading [34]. This analysis followed deductive-inductive reasoning, allowing flexibility in adding new categories from existing ones. After the pre-analysis phase, the material was codified and categorised, grouping the ideas according to their similarity and regularity within the various discussion topics. Then, the researchers started by grouping the codes into potential themes and sub-themes. In a constant critical process, the researchers discussed and refined the codes and themes until they were utterly agreed upon and satisfied with the result.

2.4. Ethical considerations

Following the International Ethical Guidelines for Research Involving Human Subjects and the Convention for the Protection of Human Rights and Dignity of the Human Being [35] regarding the Application of Biology and Medicine [36], as this study involved human participants, it was necessary to obtain prior informed, voluntary, and explicit consent, thus adhering to best practices in conducting scientific research. This study also complied with ethical research requirements related to human participation and the protection of personal data, considering data storage, processing, and use in accordance with Articles 10, 21, and 31 of the General Data Protection Regulation (GDPR) [37].

3. Results

Eight citizens, three females and five males, aged between 24 and 59, participated in the citizen focus group. They had different levels of education, were all from the Lisbon region, and only two had never used osteopathic care (Table 1).

Six health professionals participated in the health professional focus group, two females and four males, aged between 25 and 60 years. They were from the following cities: Lisbon, Setúbal and Porto. All participants were health professionals; three had never used osteopathic care (Table 2).

Four major themes emerged from the focus group data: osteopathy concept, competent osteopath, concerns and expectations, and integration into the National Health Service. In addition to the major themes, three sub-themes within the concept of osteopathy and four sub-themes within the theme of integration into the National Health Service were identified (Fig. 1). The major themes represent the participants' views of the two focus groups, except for the "competent osteopath", which only reflects the discussion within the citizens' focus group, emphasising the user's perspective. Concerning the theme "Integration in the National Health Service", there were some specificities in the topics discussed by health professionals. These originated two sub-themes only present in their discourse: integration opportunities and integration modalities.

Table 1 Characteristics of citizen focus group.

Citizen	Gender	Age	Level of education	City	Osteopathic care
1	M	26	HS	Lisbon	Yes
2	M	24	MSc	Lisbon	No
3	M	28	BSc	Lisbon	Yes
4	F	24	BSc	Lisbon	No
5	M	41	BSc	Lisbon	Yes
6	F	54	BSc	Lisbon	Yes
7	F	59	BSc	Lisbon	Yes
8	M	27	BSc	Lisbon	Yes

MSc - Master of Science.
 BSc - Bachelor of Science.
 HS - High School.

Table 2 Characteristics of health professional focus group.

Health Professional	Gender	Age	Profession	City	Osteopathic care
1	M	31	Physiotherapist	Setúbal	No
2	M	54	Dentist	Lisbon	Yes
3	M	29	Public Health Doctor	Lisbon	No
4	F	54	Nurse	Lisbon	Yes
5	F	60	Hospital Administrator	Lisbon	No
6	M	25	Nutritionist	Porto	Yes

3.1. Osteopathy concept

The initial theme sets the stage for the participants' discourse by presenting their varied perspectives on the framework and scope of practice in osteopathy, along with its distinctive characteristics in philosophy and practice. The key ideas that build this theme are organised around three subthemes: (1) scope of practice; (2) alternative medicine; (3) holistic approach.

Most participants found it challenging to define a concept, describing osteopathy based on its scope of practice. In this way, most participants would define osteopathy mainly in terms of its application to musculo-skeletal conditions, citing examples such as tendinitis, back pain, muscle problems or knee discomfort. Other participants also referred its application to visceral conditions, such as: "intestinal dysfunctions in babies" and the cranial conditions associated with adults and paediatric age, such as:

Headaches. Citizen 6

I remember low back pain, I remember torticollis not only in adults but, for example, in children and plagiocephaly in paediatrics. Health professional 1

One of the participants mentioned difficulty defining the osteopath's scope of practice, citing overlap with other professions, notably physiotherapy.

There are many things that I almost see the "X" describing physiotherapy at the same time as describing osteopathy, that is, hence there is a grey area here. Health professional 1

On the other hand, when reflecting on the concept and role of osteopathy, several participants discussed its framework for conventional medicine, confronting the concepts of **alternative medicine and complementary medicine**. Some participants advocated a complementary approach to conventional medicine, envisioning collaborative efforts with other healthcare sectors.

It is considered an alternative medicine that involves manipulation of the joints and bones as well as the muscle and fascia components. Citizen 3

I prefer the term complementary rather than alternative medicine because, typically, when something is alternative, it implies substitution. I believe osteopathy is most effective when used with other types of medicine, as the set of all will result in the most important thing – the patient's health. Citizen 5

Finally, some participants developed their perspective concerning osteopathy, referring to elements inherent to its philosophy and principles, namely its **holistic approach** and orientation towards the problem's origins. According to the participants, these characteristics will define and differentiate osteopathy rather than its scope of practice, which may be familiar to other health professions.

A deeper study of the body is needed to understand how it interconnects some body parts with some diseases. Citizen 4

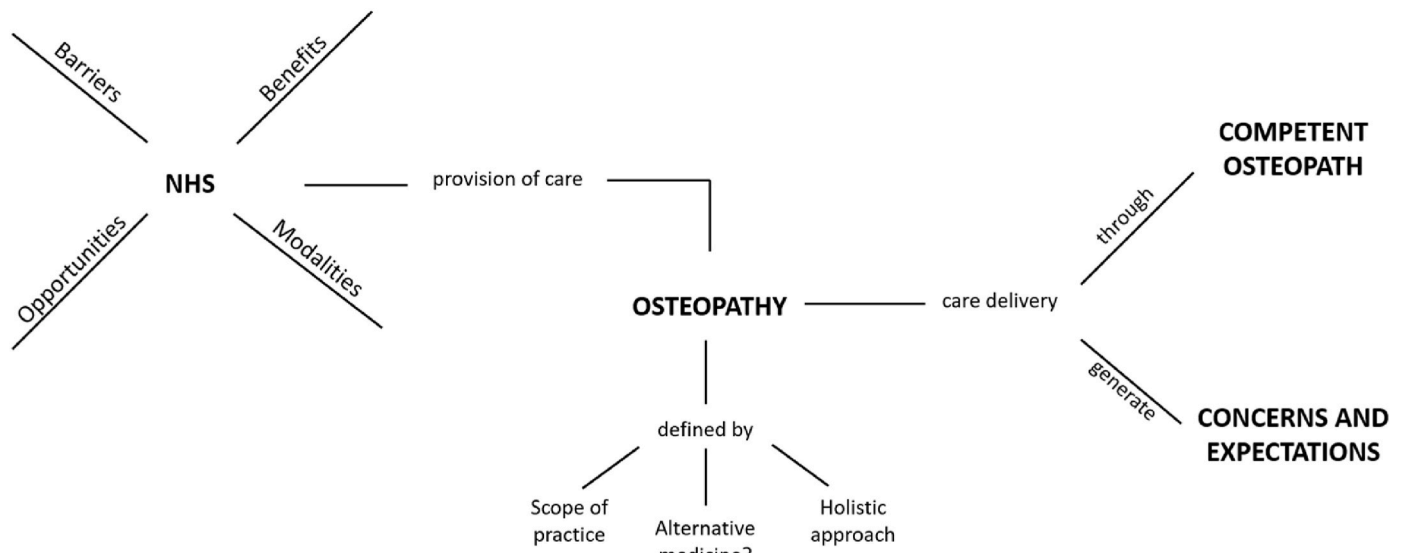


Fig. 1. Themes map.

You like to go to the root of the problem and not treat, for example, just the pain, which physicians usually do. Health professional 4

more comfortable and, consequently, lead to a better solution. Citizen 6.

3.2. Competent osteopath

This theme consolidates citizens' viewpoints on the criteria influencing their choices and satisfaction when seeking an osteopathic professional. Several participants mentioned that when choosing to visit an osteopath for the first time, their decision was influenced by the recommendation of a friend, family member or professional who had already had a good experience with that same osteopath.

I strongly advocate for recommendations, especially from knowledgeable individuals in the field. Citizen 3

However, with no recommendation from anyone, the most important criterion would be credible basic training.

If no one advises us, we can look online for references from basic training. Many people today still call themselves osteopaths but have no training to say so. Citizen 5

In addition to being specialised and up-to-date, training was better when combined with work experience:

Although there must be a balance, the idea is to complement the theoretical and practical parts. I would feel more comfortable with those who already have more experience and have seen more cases because then the diagnostic capacity will also be better, and later, the treatment will be better. Citizen 2

Along with these criteria, the participants considered the osteopath's relational skills relevant and decisive in choosing an osteopath. According to the opinions discussed, the osteopath should have excellent communication skills and empathy, be attentive to the patient's nonverbal communication, and be confident, safe, and sensitive to touch.

You must be sensitive. There is no standard; therefore, knowing how to interpret patients is essential. Citizen 7

The ability of the osteopath to develop empathy is essential and valuable for diagnosis. What is most lacking in our society is the difficulty in establishing a diagnosis and the communication component. Moreover, that is why it is also very important to transmit security to the patient; this security will help the patient be

3.3. Concerns and expectations

As in other areas of health, osteopathy is not without concerns on the part of citizens and health professionals. One of the participants even mentioned this transversal nature of the concern inherent in any search for care without distinction to osteopathy. Another participant mentioned a specific cross-cutting concern related to diagnostic ability.

All health professionals have the same weight, and that is why I go to a consultation with fear and distrust, regardless of the speciality. I am more sceptical in that sense, so I cannot distinguish between an osteopath or another medical speciality. Until I have the first experience, they have to conquer me. Citizen 2

What is most lacking in our society is the difficulty in establishing a diagnosis. Citizen 6

Other participants linked the issue of concerns to experiences, stating that positive experiences allow them to seek care without worries.

I have no fears because nothing has ever gone wrong. Usually, when I go to an osteopath, I have no fears. Citizen 1

Both citizens and health professionals were concerned about certain aspects of osteopathic practice, especially the techniques used during consultations. Techniques like manipulations, if not done correctly, could potentially harm the patient, leading to serious outcomes like strokes or even death [38].

The first time I was manipulated in the cervical spine, despite having confidence in the person, I felt fear derived from the negative consequences associated if the technique was not well executed. Osteopaths literally have our lives in their hands, and with physicians, this impact is not so significant. Citizen 7

In the group of health professionals, the concerns referred more to regulation, knowledge production and teaching standardisation. As a newly regulated profession, there may be concerns about regulation and training for osteopaths. The form of access to the profession and maintenance and who and how basic and continuous training throughout life are recognised were also highlighted concerns.

I am concerned that it is not advancing fast enough; at this point, research should already be carried out and controlled in academic, clinical and hospital environments. Health professional 2

Since osteopathy is a very recent profession, I am concerned about this transition period, where it's important to know who we are seeking treatment from. I am unsure whether I am consulting an osteopath who is officially recognised by the Central Administration of the Health System (CAHS), licensed to practice fully, or someone who has only completed a short weekend course—be it one, two, or even five weekends—somewhere in Europe or elsewhere. Health professional 6

Is he a good professional? Since they have no council and no control, who is responsible for it? Health professional 4

Along the same lines, health professionals discussed aspects related to quality and safety assurance, that is, who and how can it be said that the osteopaths working have the skills to carry out their function without endangering the lives of those who seek for osteopathic care. Still, within the scope of quality and safety, one concern was how adverse events were reported and how they could be resolved.

Assurance of the quality of work I think still needs to be developed a lot (...) at least there is a minimum of reality about people's curricula, about people's capabilities, about people's control, about the techniques that are performed, about the safety of the techniques that are performed so that the population can rest assured. This aspect of safety and quality control assurance in the osteopathic profession has not yet been developed. Health professional 2

3.4. Integration in the national health service

This theme reflects the perspectives of both citizens and health professionals regarding the integration of osteopathy into the National Health Service. It highlights the benefits and the barriers associated with this integration, the opportunities that arise from it, and the possibility of building this bridge with the Portuguese public health system.

3.4.1. Integration benefits: from recognition to the quality of life for everyone

When discussing the benefits of integrating osteopathy into the National Health Service, the participants highlighted, on the one hand, a benefit for the profession, on the other hand, benefits for the general population. About the profession, it was pointed out that integration would reflect official recognition of the value of osteopathy, with a potential increase in demand.

Knowledge of the general public regarding osteopathy and, consequently, the increase in demand for this service. Citizen 1

Regarding gains for the population, it was pointed out, on the one hand, the improvement in the quality of life for the population and, on the other hand, equal access to this type of care would be ensured, as the integration of osteopathy into the NHS would resolve the financial barrier.

This is very important for patients' well-being and quality of life. Health professional 5

There are people who have money to pay for osteopathic care. Particularly, it is a bit costly. Only those who can afford it financially can attend these appointments, and that way [integrating into the NHS], it would be more accessible to everyone. Health professional 4

3.4.2. Structural, social, and professional barriers

Although benefits are recognised, most participants recognise this integration as difficult. The biggest challenge identified in this integration involves the structural problems that the National Health Service is

currently experiencing, with the waiting time for an appointment and the inability to respond being some of the problematic points pointed out.

Conceptually, it makes perfect sense, but the NHS is not yet prepared to integrate new professions because it cannot respond to what already exists at the moment. It would not do us any good to have osteopathy in public hospitals if later I needed consultation to solve a problem that I have today and that I would only have access to in two years. Citizen 2

In addition to structural problems, the need for human resources and the production of scientific evidence, which are better established in other health professions within the National Health Service, make osteopathy not a priority for policymakers, as indicated by the Health Professional 6:

There are professions that have been around for a longer time and that are better established both in terms of scientific evidence and all these issues and that can take these steps first than osteopathy.

Another significant obstacle identified was the lack of knowledge and recognition among most of the population and health professionals, which inevitably affects the number of individuals seeking osteopathic care.

In addition to informing the population, it would be important to do this work with the medical community as well. So, they start counselling the osteopath because if they do not show confidence in osteopathy, it is more difficult for the patients to have it. Citizen 4

Finally, the low number of licensed professionals in the market was also mentioned, which influences the amount of scientific evidence produced, resulting in low acceptance by other health professionals.

If there have only been graduates since 2020, it is normal that research in Portugal is at the beginning, in the process of trying to find funding for research. Health professional 6

3.4.3. Integration opportunities: evidence, communication, and specialisation

Participants recognised the benefits and barriers to integration and proposed suggestions to enhance integration. One of the identified opportunities is to understand the best practices associated with the integration of osteopathy in other countries and adapt to the Portuguese reality.

Benchmarking other countries is essential to finding out where we do it best. And if it's valid, we don't need to invent anything new. Health Professional 3.

Mention was also made of the need to demonstrate the cost-effectiveness of osteopathy so that decision-makers better accept it.

There is one thing that all governments in the world are sensitive to: money. Therefore, one of the things that is essential to demonstrate is that a specific osteopathic treatment would save money for the state and users. Health Professional 2.

Additionally, the need for greater awareness of the contribution of osteopathy among other health professionals was mentioned.

Go to the physicians who prescribe in health centres and expose certain syndromes that may benefit from certain osteopathic treatment. It goes through there, through improved health communication and a certain investment in it. Health professional 5

Finally, the need for specialisation in particular branches of osteopathy was noted, thus simplifying the referral process for individuals specialised in a specific domain.

Regardless of entering or not, osteopathy will soon follow the path other professions have taken, which is the need for specialisation. Because we all have a limit, be it ethical, moral, or clinical, which prevents me from intervening in a specific area because I do not have the theoretical-practical clinical knowledge to do so, and it is necessary to know whom to refer to. Health professional 1

3.4.4. Integration modalities

This sub-theme represents the hypotheses by which osteopathy could be integrated into a model of care that is better integrated into the community. Some of the proposals in the focus group of health professionals included integration into insurance networks or a reimbursement system for the NHS. Some health professionals reported that:

Our health system is, invariably, moving more and more towards insurance, insurance reimbursement. It is not worth trying to join the National Health Service when what is most effective is direct entry into insurance. Health professional 2

Regarding the issue of being within health centres, honestly, I think it will be easier to have a co-payment and a validation system for osteopathy centres considered certified with licensed and specialised osteopaths. It will be easier for advocacy to be carried out via co-payment, at least in an initial phase, than having an osteopath at the health centre. Health professional 3

Others highlighted the specialities with which osteopathy could work in a multidisciplinary way to benefit the population.

It is extremely important and goes very well with certain hospital specialities, namely orthopaedics and psychiatry. Health professional 5

The participants' proposals reflected, to some extent, that it may be premature or inadequate to adopt a model of integration through Primary Health Care in the Portuguese context, considering the challenges faced by the National Health Service and also all other healthcare professions, such as nutrition, pharmaceutical sciences, dentistry, or physiotherapy, which advocate for their integration into primary health care and will eventually be more consolidated in the country and more anchored in evidence of effectiveness.

4. Discussion

The current study aimed to understand the perceptions of the community and healthcare professionals regarding osteopathy and its potential integration into the Portuguese National Health Service.

4.1. Osteopathy concept

In general, these focus groups' results suggest that citizens and healthcare professionals have favourable perceptions of osteopathy, recognising conditions in which osteopaths can intervene, the benefits, and the distinct philosophy underlying osteopathy compared to other healthcare fields. Participants predominantly reported musculoskeletal problems when seeking osteopathic care, consistent with findings from The Osteopathic Practitioners, Estimates, and Rates (OPERA) studies [3, 39–43]. The description of the holistic approach provided by the focus group members is supported by international bodies' statements [44, 45].

4.2. Competent osteopath

Concerning the factors influencing the selection process and satisfaction with the osteopath, the recommendation by someone trusted was highlighted by the Professional Census of Osteopathy [46], carried out in the United Kingdom, among other studies [47,48]. In addition, another highly emphasised criterion was the recognised and updated

training of the osteopath corresponding to the results of the OPEN project [33]. Since the health field is constantly changing and updating, health professionals must be aware of best practices as they serve as a bridge between the user and the knowledge generated by scientific research, policies, and the practices to implement that knowledge [49].

Respecting the aspects considered necessary in an osteopath, communication and empathy, security, confidence and sensitivity to touch were mentioned, in line with other studies [33,50]. According to Stefanelli [51], empathy, mutual respect, and trust are three vital elements of the communicative process that make interpersonal communication effective, therapeutic, or adequate. Through these characteristics, individualised care can be offered, respecting the patient's beliefs, values, and culture [51]. Touch, a form of non-verbal communication, is used by the osteopath to examine, diagnose, and treat [52]. In this case, the conversation between the osteopath's hands and the user's body will allow a sense of care and reciprocity [53]. Touch as a therapeutic enhancer has an associated value in the user-professional relationship, which is why it is a topic that health professionals often address [54].

4.3. Concerns and expectations

Both citizens and health professionals expressed concerns about osteopathy, including diagnostic capacity, technique safety, quality assurance, knowledge production, teaching standardisation, and practice control. These concerns go beyond what is mentioned in a study that highlighted issues related to osteopaths' behaviour and clinical care, particularly focusing on communication deficiencies and inadequate informed consent, an aspect of quality assurance [55]. Clinical care concerns included adverse treatment effects and inappropriate or unnecessary treatments. Another study on concerns and complaints against osteopaths highlighted adverse events, particularly focusing on potential complications from techniques like manipulations [56]. Improper execution or contraindications may lead to severe complications, such as vertebral artery dissection followed by stroke [56]. Regarding complaints and adverse events, it is important to mention that there is currently no data in Portugal.

These concerns may be related to the reality in each country since the state of osteopathy in Portugal differs from that in the United Kingdom. In Portugal, osteopathy has recently become a fully regulated licensed degree and clinical practice; however, better control of osteopathic practice is needed to ensure greater security when choosing an osteopathic professional. All matters related to safety, complaints and sanctions are ensured by the General Inspectorate of Health Activities, the authority responsible for auditing, inspecting, supervising, and sanctioning health activities in Portugal [57]. Santos & Mendes argue that osteopathy's future involves the creation of a council to provide practice with better quality and thus gain credibility with the population and their peers [58], as already happens in the United Kingdom with the General Osteopathic Council (GOsC).

4.4. Integration into the National Health Service

Regarding integrating osteopathy into the National Health Service, several points of view were discussed in the group.

4.4.1. Integration benefits: from recognition to the quality of life for everyone

When discussing benefits, recognition of osteopathy's value, enhanced quality of life, and equitable access to care were mentioned, aligning with findings from a qualitative study on osteopathic treatment among cancer patients in palliative care [59]. Also, a cost-utility analysis found osteopathy to be a cost-effective strategy for neck pain and a more favourable option for low back pain compared to usual care [10]. Integrating osteopathy within the National Health Service would allow access to people who cannot afford these treatments, as many

individuals lack the financial capacity to afford these expenses. In Portugal, the minimum wage is set at €820 gross [60]. According to the Barometer on the financial capacity of Portuguese families in 2022, approximately 74 % of families face monthly financial difficulties, with 8 % in a critical situation: they struggle to cover all essential expenses (transportation, food, healthcare, housing, leisure, and education) [61]. Research indicates that making complementary medicine accessible as part of healthcare for disadvantaged communities would be well-received [62,63].

4.4.2. Structural, social, and professional barriers

Concerning the identification of barriers, the challenges faced by the NHS, limited awareness among the population and health professionals, the low number of graduates and the lack of scientific evidence create resistance to this integration. These are particular points associated with the Portuguese reality. However, the complaints of lack of evidence are transversal to other countries [32,64]. Studies prove regions with a greater demand for osteopathic treatments tend to be those where GPs frequently recommend or refer patients to osteopaths for treatment [65, 66]. Prescribing traditional and complementary medicine on behalf of a GP is beneficial as it demonstrates confidence and influences acceptance by patients [67]. While this practice is not yet widespread in Portugal, it is noteworthy that physicians and other health professionals are already referring patients to osteopaths [3].

4.4.3. Integration opportunities: evidence, communication, and specialisation

Health professionals also presented some opportunities underlying this integration, such as benchmarking, cost-effectiveness studies, specialisation and awareness among other health professionals about the benefits of osteopathy. Awareness among other professionals, through informative materials, treatment guidelines, associated risks, and evidence on osteopathic practice to support a health professional in recommending osteopathy, is in line with what is suggested in the results of another research [32]. Additionally, two other studies underscore the importance of raising awareness among the general population [33,59], although the health professional group did not explicitly mention this. Despite only one participant mentioning the need for specialisation, it aligns with what is already being done in other areas of healthcare [68,69]. The need for specialisation arises from the importance of addressing specific populations rather than specific conditions or techniques, meaning osteopaths need to deeply understand the needs of a particular population (e.g., paediatric population) while maintaining the fundamental and philosophical principle of a patient-centred approach as a whole. All these suggestions were already some of the paths taken by other health professions and osteopathy in other countries for better acceptance in the health system [10].

4.4.4. Integration modalities

Finally, health professionals suggest that integration goes through a model of integration of osteopathy into networks of insurance providers or a system of reimbursement of the National Health Service, with this integration of the osteopath also being carried out within multidisciplinary teams. According to a study in the United Kingdom on GPs' attitudes towards complementary medicine, 52 % believe the NHS should pay for osteopathy [70]. Integrating osteopaths within multidisciplinary teams is also consistent with suggestions made in a study on integrative medicine models in contemporary primary healthcare [71].

4.5. Strengths and limitations

One notable strength of this study lies in the expertise of one of the researchers in qualitative methodology. This proficiency facilitated the organisation of scripts for focus groups and the interpretation of data, likely contributing to the rigour and depth of the qualitative analysis. Despite this strength, this study encountered several barriers. Firstly,

due to the chosen data collection technique, there was a challenge in achieving data saturation, primarily because of the difficulty in recruiting participants who could meet at the same location and time. Consequently, the sample size remained small, potentially impacting the representativeness of the population utilising osteopathic care, particularly as the gender distribution was tilted towards more males than females. Moreover, the recruitment method may introduce bias into the findings, given that the participants mainly had favourable and positive experiences towards osteopathic practice. Additionally, the lack of diversity in participants' geographic locations, primarily concentrated in specific cities, may not fully capture the perspectives of individuals residing in other regions. This limitation underscores the need for broader geographic representation to ensure a more comprehensive understanding of the topic.

5. Conclusion

Most participants in this study expressed a positive attitude towards the integration of osteopathy into the NHS, despite having different perspectives. However, several obstacles were identified. Firstly, the novelty of osteopathy within healthcare poses a significant challenge, as it has yet to gain widespread recognition and understanding among the general population and healthcare professionals. Additionally, the limited number of professionals with higher education in osteopathy limits its integration into the healthcare system. Furthermore, the lack of scientific evidence may contribute to scepticism and resistance towards osteopathy within the medical community and regulatory bodies.

In this manner, a more substantial integration of osteopathy in the Portuguese health system may go through a gradual path. Production of evidence of effectiveness, greater dissemination of osteopathy and adoption of reimbursement systems may be needed until maturity is guaranteed for real integration into the National Health Service to ensure greater equality of access and benefits for the population's quality of life.

As far as we know, this is the first study to investigate the perceptions of citizens and health professionals regarding osteopathy and its integration into the NHS. Regardless of its limitations, this exploratory study allowed us to reflect on the importance of a more extensive study that reflects the reality of the Portuguese population's perception to support and guide health policies.

CRedit authorship contribution statement

Beatriz Maria: Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Software, Resources, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Silvia Gomes:** Writing – original draft, Supervision, Methodology, Investigation, Conceptualization. **Ana Rita Goes:** Writing – review & editing, Writing – original draft, Validation, Supervision, Software, Resources, Methodology, Formal analysis, Data curation, Conceptualization.

Ethical approval details

Approval for this qualitative study was granted by the Ethics Committee of the NOVA National School of Public Health of the NOVA University of Lisbon (Approval number CEENSP n°04/2022).

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Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence

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Appendix A. Supplementary data

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