

Universidade Nova de Lisboa Instituto De Higiene e Medicina Tropical

HEALTH CARE ACCESS IN TIMES OF COVID-19: THE EXPERIENCES OF REFUGEES IN LISBON

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DISSERTAÇÃO PARA A OBTENÇÃO DO GRAU DE MESTRE EM SAÚDE PÚBLICA E DESENVOLVIMENTO



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HEALTH CARE ACCESS IN TIMES OF COVID-19: THE EXPERIENCES OF REFUGEES IN LISBON

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Dedication

Aos meus pais, pelo amor e apoio incondicionais

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Resumo ACESSO AOS CUIDADOS DE SAÚDE EM TEMPOS DE COVID-19: AS EXPERIÊNCIAS DOS REFUGIADOS EM LISBOA Introdução

De forma a endereçar as necessidades em saúde dos refugiados é essencial que os serviços de saúde sejam dotados de competência cultural e facilitem o acesso desta população aos cuidados de saúde, especialmente num contexto amplificador de iniquidades sociais, como a pandemia da COVID-19. No entanto, não existem estudos em Portugal que explorem o acesso aos cuidados de saúde pelos refugiados durante a pandemia. O objectivo desta tese consiste em descrever as características demográficas e socioeconómicas dos refugiados em Lisboa, e explorar os seus padrões de acesso aos cuidados de saúde durante a pandemia.

Métodos

Foi realizado um estudo transversal descritivo entre Maio e Novembro 2022. Foram entrevistados 36 refugiados a viver em Lisboa mediante a aplicação de um questionário com 38 itens. Foram calculadas estatísticas descritivas para caracterizar o perfil sociodemográfico e de acesso aos cuidados de saúde durante a pandemia.

Resultados

A maioria de participantes era do género masculino (56%), com uma média de idades de 35 anos, casados (72%), detinham pelo menos o ensino secundário (69%), e estavam desempregados (77.8%). Os respondentes eram provenientes de sete países e todos tinham integrado o Programa Municipal de Acolhimento aos Refugiados; a média de estadia era de 17 meses. Todos estavam registados num centro de saúde e durante a pandemia, 94% usaram serviços de saúde. Apesar de a maioria ter testado negativo para o coronavírus (58%), um foi internado devido a COVID-19; 97% foram vacinados contra a COVID-19 e 69% tinham o esquema vacinal incompleto. A maioria conhecia os sintomas mais comuns da COVID-19 (86%) e cumpriu com medidas preventivas (83%). Um quarto dos respondentes não teve acesso a informação sobre a COVID-19 numa língua que compreendesse e apesar de 97% terem precisado de cuidados de saúde durante a pandemia, mais de metade (63%) não os procurou devido a barreiras estruturais e culturais. Metade dos participantes teve dificuldade em conseguir aconselhamento médico por telefone ou email e 39.4% não pôde pagar exames médicos ou tratamentos. Apenas 18.2% procurou apoio psicológico. Um total de 58.8% dos participantes sentiu que os profissionais de saúde nem sempre respeitaram a sua cultura e 64.7% reportaram que os profissionais não discutiram com eles opções terapêuticas.

Conclusões e Implicações

O acesso aos cuidados de saúde é um conceito complexo, no qual várias dimensões de oferta e de procura de cuidados desempenham um papel. O acesso aos cuidados de saúde pelos refugiados requer uma abordagem holística, que implica endereçar as especificidades da sua vulnerabilidade. Os resultados desta tese sugerem que a pandemia da COVID-19 pode ter intensificado iniquidades e barreiras preexistentes no acesso aos cuidados de saúde. Adicionalmente, sublinha a necessidade de investimento numa comunicação inclusiva, em competência cultural e no envolvimento dos doentes nos cuidados, além da melhoria da condição socioeconómica dos refugiados. As características da população refugiada e barreiras no acesso aos cuidados de saúde identificadas nesta tese, poderão servir para informar estudos futuros sobre as necessidades em saúde dos refugiados e assistir no delineamento de estratégias para reduzir as iniquidades no acesso aos cuidados de saúde.

Palavras-chave: refugiados, migrantes, acesso a cuidados de saúde, COVID-19, Portugal

Abstract

HEALTH CARE ACCESS IN TIMES OF COVID-19: THE EXPERIENCES OF REFUGEES IN LISBON

Background & objective

To address the health needs of refugees, it is essential that health services are culturally competent and facilitate the access of this population to health care, especially in a context prone to the amplification of social inequities, such as the COVID-19 pandemic. However, no studies exist in Portugal exploring refugees' access to health during the pandemic. The objective of this thesis is to describe the socioeconomic and demographic characteristics of refugees living in Lisbon and to explore their health care access patterns during the COVID-19 pandemic.

Methods

A cross-sectional descriptive study was conducted from May to November 2022. A 38item questionnaire was applied to 36 refugees living in Lisbon through face-to-face interviews. Descriptive statistics were used to characterize sociodemographic and healthcare access profiles during the pandemic.

Results

The mean age of participants was 35 years, and the majority were male (56%), married (72%), had at least a secondary education (69%), and unemployed (77.8%). The respondents came from seven countries and had all been integrated into the Municipal Refugee Reception Program with a median length of stay of 17 months. All were registered in a primary care center and, during the pandemic, 94% used healthcare services. While the majority never tested positive for the coronavirus (58%), one was admitted to hospital due to severe COVID-19. A total of 97% received COVID-19 vaccination, of which 69% had an incomplete schedule. Most participants were knowledgeable about the most common symptoms of COVID-19 (86%) and were compliant with preventive measures (83%). A quarter of the participants didn't have access to information about COVID-19 in a language they understood, and although 97% needed health care during the pandemic, more than half (63%) didn't seek it because of structural and cultural barriers. Half of the respondents had difficulty getting medical advice by phone or email and 39.4% could not afford a medical examination or treatment. Only 18.2% sought counselling services. A total of 58.8% of the participants felt like healthcare professionals didn't always show respect towards their culture and 64.7% reported that healthcare professionals did not discuss treatment options with them.

Conclusions and Implications

Access to health care is a complex concept, in which several dimensions on both the supply and demand sides play a role. Health care access by refugees requires a comprehensive approach, that entails addressing the specificities of their vulnerability. This thesis's findings suggest that the COVID-19 pandemic may have enhanced long-standing inequalities and barriers to health care in Portugal. Moreover, it highlights the need to endow inclusive communication, cultural competency, and patient involvement in health care, alongside improving the socioeconomic condition of refugees. Identified population characteristics and barriers to health care access by refugees in this thesis, may inform future studies on the health care needs of refugees in Portugal and ultimately assist in the devising of strategies to reduce inequalities in health care access.

Keywords: refugees, migrants, health care access, COVID-19, Portugal

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List of abbreviations

ACM High Commission for Migration

CPR Portuguese Refugee Council

EU European Union

IOM International Organization for Migration

ISS Social Security Institution

NGO Non-Governmental Organization

NHS National Health System

OECD Organization for Economic Co-operation and Development

OOP Out-of-pocket payments
PAR Refugee Support Platform

PMAR Lx Municipal Refugee Reception Program of Lisbon

SDG Sustainable Development Goals
SEF Immigration and Border Service

UN United Nations

UNHCR United Nations High Commissioner for Refugees

US United States (of America)
WHO World Health Organization

1. INTRODUCTION

1.1 REFUGEES IN THE WORLD

1.1.1 Recent history

The World Wars originated the first large-scale forced movements of people of the 20th century (1) with millions of refugees escaping their devastating consequences. In the post-war periods, these massive, disorganized, and unregulated influxes of people into the neighboring countries, impelled the international community to acknowledge the situation of refugees and take some form of collective action, as countries were struggling to cope with the war's effects and unable to deal with the extensive arrival of people in need of help. Throughout time, steps were progressively taken towards defining and establishing a legal statute and devising protective measures for refugees (1,2).

The end of World War I, marked by the Paris Peace Conference and the Treaty of Versailles in 1919, defined not only the terms of peace but also the creation of an international cooperation organization, the League of Nations (3). Founded in 1920, the League of Nations would constitute a common ground for discussion, aiming to secure territorial integrity, political independence, and thus maintain peace between nations (4). Although the covenants of the League didn't include provisions regarding refugees, in 1921 a High Commission for Russian Refugees is created, following the appeals of humanitarian organizations and the International Red Cross, which pointed out the need for a supranational concerted action in addressing the problem generated by the Russian civil war (2). The League's appointed High Commissioner Dr. Fridtjof Nansen had a prominent role as a humanitarian advocate, responsible for the repatriation and resettlement of thousands of war refugees. He also pioneered the international legalization and protection of refugees through the creation of the Nansen passport (5). The latter entitled refugees to both a legal status in the host country and the ability to

travel in search of employment opportunities, therefore enabling the attainment of self-sufficiency (2).

In 1946, the League of Nations was extinct following the inability to avert World War II and many of its tasks transitioned to the newly formed United Nations (UN, 1945), such as the work on behalf of the refugees initiated by Nansen. The latter met its continuity with the United Nations Relief and Rehabilitation Administration (1943), then with the International Refugee Organization (1947), and ultimately with the United Nations High Commissioner for Refugees (UNHCR, 1950) (6).

In 1951 the term refugee is defined in the United Nations Convention relating to the Status of Refugees, as a person who:

"owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it." (7, p.14)

The 1951 Convention provisions and its 1967 amendment Protocol, which remain the global reference documents to date, establish the statutes, rights, and duties of refugees, as well as the obligations and commitment of the 148 member states towards providing legal protection, employment, and welfare rights in similar conditions to the host countries nationals, including access to healthcare (1). Central to the convention and the international protection law, article 33 introduces the *principle of non-refoulement*, in which no refugee is to be returned to a country where there is a threat to their life or freedom due to their origin, race, religion, social group or political opinions (7).

Through multilevel partnerships, the United Nations through the High Commissioner for Refugees, the World Health Organization (WHO), and the International Organization for migration (IOM) among other UN bodies, work with governments, non-governmental

organizations (NGOs), private sector, and other institutions, providing guidance and support in order to assure that healthcare is made available to refugees (8).

In 2016, following the New York Declaration for Refugees and Migrants, UN member states recommitted to the international protection of refugees agreeing to adopt a Comprehensive Refugee Response Framework (9). The creation of a Global Compact on Refugees and a Global Compact for Safe, Orderly and Regular Migration in 2018, provided the operationalization of collective measures and shared responsibilities in ensuring the respect and protection of human rights in large-scale movements (9). The Global Compact on Refugees advocates for the facilitation of access to healthcare in host countries and the need for a comprehensive and participatory approach, in which through the allocation of resources, services integrate refugees' idiosyncratic needs into healthcare provision, whilst fomenting refugees' active participation in its' delivery (10).

1.1.2 Forced displacement

Forced displacement or "the movement of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters"(11), has been responsible for the displacement of millions of people globally. It comprises movements of refugees, asylum-seekers, internally displaced people, and other people in need of international protection¹ (12).

Forced international displacements are mostly originated in countries where political instability prevails, conflicts and generalized violence are perpetrated, leading to chronic

¹ "other people in need of international protection" is clarified by UNHCR as forcibly displaced people who are in need of: protection against forced returns and access to basic services; and were not reported in the aforementioned categories of asylum-seekers, refugees, people in refugee-like situations.

poverty and food insecurity (13). Civil wars in Syria and South Sudan, the war in Afghanistan, the Venezuelan crisis, the ethnic crisis of the Rohingya from Myanmar, and more recently the war in Ukraine, accounted for 76% of the global refugees until mid-2022 (12). Factors such as climate change and natural disasters operate indirectly as drivers of forced displacement, galvanizing conflicts through the impact on the availability of essential resources like water, food, and land use (14). Other drivers such as the rapid economic and population growth lead to urban overcrowding and poor living conditions prone to hazards and disasters, also take a toll on the most vulnerable driving them to displacement (15).

While the underlying drivers of forced displacement are multiple and interact in a number of complex ways, most are politically rooted and translate into conflict, violence, persecution, and human rights violations (15,16), accounting for 80% of the humanitarian assistance worldwide (13). Additionally, state-based active conflicts show an increasing tendency globally, both in frequency (from 38 in 2020 to 56 in 2020) and duration (from an average of 34 years in 1990 to 57 years in 2013) (13,17). As a result, flows of forcibly displaced people have been rising worldwide, as shown in Figure 1 (12).

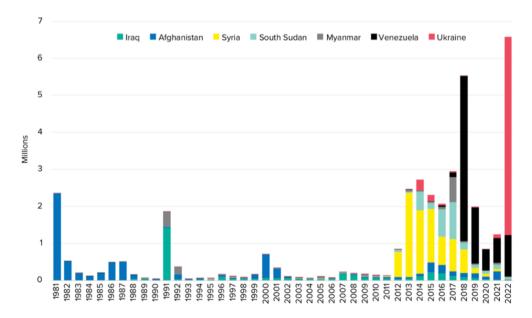


Figure 1. Largest forced displacements across borders 1980-mid-2022 Source: 2022 Mid-year trends, UNHCR, 2022 (p. 5)

In the year 2021 alone, forced displacement accounted for the movement of 89.3 million people worldwide (18), and as of mid-2022, this number increased to 103 million people, with 60.2 million corresponding to internally displaced people, 32.5 million to refugees, 5.3 million to other people in need of international protection, and 4.9 million to asylum seekers (12). In 2021, approximately half of the refugees and other people in need of international protection in the world were of working age and 40% were children, with an equal distribution between genders (18). By mid-2022, the large majority were from six countries (Figure 2) and were predominantly hosted by middle- and low-income countries, with Turkey alone hosting 3.7 million people (12,18).

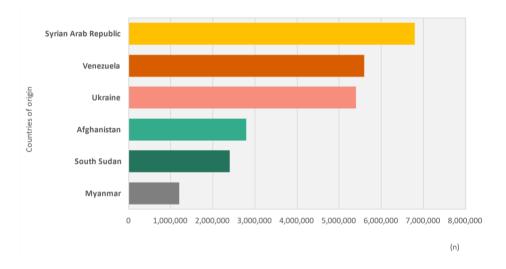


Figure 2. Countries of origin of refugees and other people in need of international protection as of mid-2022

Adapted from: 2022 Mid-year trends, UNHCR, 2022 (p. 2)

Data on asylum-seekers in the European Union (EU) in the last 15 years, shows a tendential increase since 2015, when a large influx of people fleeing conflicts in countries like Syria, Afghanistan, Iraq, and Eritrea, arrived in Europe. In an effort to provide a concerted response to the crisis, EU member states convened in May 2015, issuing the European Agenda for Migration. The Agenda established not only immediate, but also long-term measures in order to address migration challenges, such as relocation and resettlement mechanisms of people in need of international protection throughout EU countries (19).

In 2021, the EU received 535,000 requests for international protection (first-time applicants), which represents an increase of a 28.3% compared to 2020, gradually returning to pre-pandemic numbers (Figure 3) (20,21). By the end of 2021, the EU granted international protection to 275,000 people, including 139,300 refugee status, 80,700 subsidiary protection, and 54,500 humanitarian status² (22).

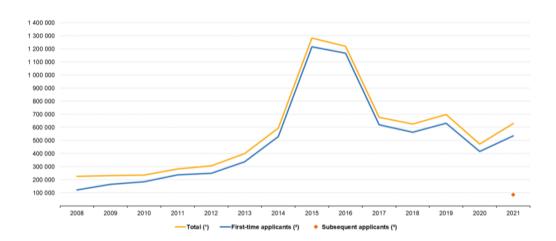


Figure 3. Number of asylum applicants (non-EU citizens), EU, 2008-2021 Source: Population and social conditions, Annual Asylum Statistics, EUROSTAT, 2022

² while the refugee and subsidiary protection statuses are regulated in the EU law, humanitarian protection is granted under national law. It is a form of non-EU protection that at present is usually replaced by subsidiary protection, except in some EU member states (146)

In 2021, most first-time asylum-seekers were male (69.1%) and young (over 80% less than 35 years old), and almost one third were minors (less than 18 years old) (20,21). (Figure 4).

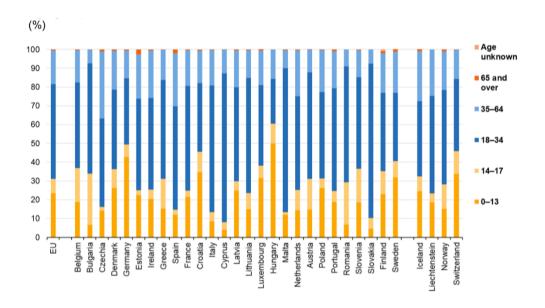


Figure 4. Distribution of first-time asylum applicants (non-EU citizens) by age groups, 2021 Source: Population and social conditions, Annual Asylum Statistics, EUROSTAT, 2022

Regarding the countries of origin of asylum-seekers, most asylum requests in the EU in the last decade were from Syrian citizens. In 2021, around 40% of asylum-seekers were from Syria, Afghanistan, and Iraq (Figure 5), and the highest increase in new applications (compared to 2020) was from Afghanistan nationals (20,21), reflecting the exit of international troops from the country. The majority of asylum-seekers in the EU were hosted in Germany, France, and Spain (22).

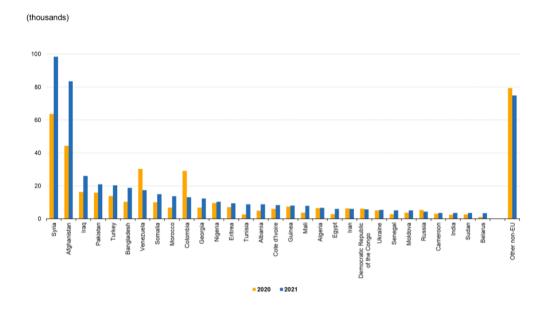


Figure 5. Top 30 citizenships of first-time asylum applicants (non-EU citizens), EU, 2020 and 2021 Source: Population and social conditions, Annual Asylum Statistics, EUROSTAT, 2022

The recent Russian invasion of Ukraine in February 2022 originated the fastest forced displacement of people since World War II (12), and as of the 24th January 2023, Ukranian accounted for approximately 8 million refugees in Europe (23).

1.1.3 Refugees' health vulnerability

Following Dahlgren and Whitehead's rainbow model, health comes as a result of the complex interaction between several social determinants. These determinants are grouped in different levels around the individual and illustrate their influence on health, from the macro to the microlevel, enabling the devising of policies to address each layer (Figure 6).

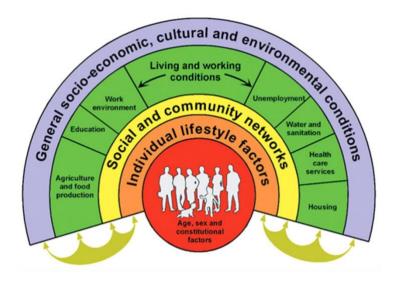


Figure 6. Dahlgren and Whitehead's 1991 rainbow model of the main Determinants of Health Source: Public Health and Global Societies, a survey course in Global Health, PUBH 110, 2023 available at: https://pubh110.digital.uic.edu/

On the outer layer (macrolevel or upstream) are the influences of the general socioeconomic, cultural, and environmental conditions. The second layer represents the living and working conditions such as education, food production, work environment, unemployment, water and sanitation, housing, and healthcare services. The third layer encompasses the social influences and community networks and finally, the fourth layer (microlevel or downstream) includes individual factors such as age, gender, genetics, and lifestyle behaviors (24). The model outlines a *social gradient* in health, in which the most disadvantaged people in terms of socioeconomic status, have the worst health. This inequality in health cannot be therefore addressed, without acting on the social determinants of health (25).

Migrants and particularly refugees are exposed to a number of negative stressors from the start of the migration process, which makes them vulnerable to poor health. Vulnerable populations are more susceptible to suffering illness or disease by virtue of multiple barriers to resources, namely socioeconomic, political, or environmental (26,27). Mechanic (2007) outlined several sources of vulnerability such as poverty and race, stigma and discrimination, the absence of social networks and support, personal

limitations imposed by illness, and lack of access to services due to remote locations in underdeveloped areas (28). These are illustrative of the negative impact that social determinants can have over health, thus generating vulnerability.

Migrants' health is subject to a complex interaction between the social determinants acting on each of the migration phases (origin, transit, destination, and return). Vulnerability factors in the individual, meso, and macrolevels present in each phase, may undermine health and well-being in subsequent phases, thus contributing to the deterioration of health if not countered by interventions that enhance resilience and coping mechanisms (29). Vulnerability can therefore be envisioned as *situational* depending on the circumstances in which the migration occurs, and *individual* relating to personal characteristics such as age, gender, the presence of disability or chronic disease (30).

Considering the baseline adverse conditions in the country of origin that refugees face and force them to flee their homes, whether being political instability, persecution, conflicts or violence, refugees find themselves already in a position of a high situational vulnerability prior to departure. Famine, lack of shelter or overcrowding, and unavailability of access to safe water, hygiene, sanitation, and healthcare contribute to a higher risk of infectious diseases (29). Malaria and upper and lower respiratory tract infections accounted for the top three causes of morbidity among refugees in 2019 and 2020 (31). Chronic conditions, disability, old age, pregnancy, and women's and children's health, which require a longitudinal follow-up are lost in transit, further intensifying the need for care. Additional burden may develop in the different phases of migration in the form of human trafficking, forced labor, and slavery, particularly if the displacement takes place through irregular channels (32). The cumulative traumatic events that may be omnipresent throughout the migration cycle, act as risk factors for the development of mental diseases, being post-traumatic stress disorder and depression the most prevalent among refugees and asylum seekers in Europe (33).

Access to quality and comprehensive healthcare is therefore paramount in destination countries and the specific complexities of health vulnerability in refugees, need to be taken into consideration when devising policies and strategies to address them.

1.2 THE COVID-19 PANDEMIC

1.2.1 The disease

The first cases of COVID-19 were identified in November 2019 in Wuhan, the Chinese province of Hubei. This initial outbreak rapidly spread out and in March 2020, became a worldwide pandemic as classified by the WHO (34). As of January 30th, 2023, the global cases of confirmed COVID-19 added up to a total of 753,001,888 and 6,807,572 deaths (35).

COVID-19 is a highly contagious respiratory disease caused by the surge of a novel coronavirus SARS-CoV-2 that is mainly respiratory transmitted (Figure 7).

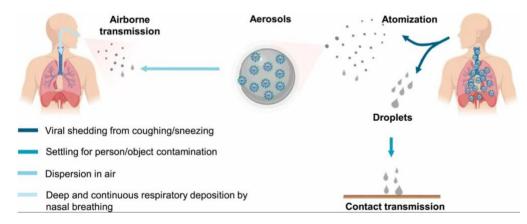


Figure 7. COVID-19 transmission routes

Source: Identifying airborne transmission as the dominant route for the spread of COVID-19, Zhang, R., Li, Y., Zhang, A., Molina, M., Earth, Atmospheric, and Planetary Sciences, 2020 Available at: https://www.pnas.org/doi/10.1073/pnas.2009637117 Reprinted with permission Close contact through proximity, duration of contact, and poor ventilation settings, therefore prone to transmission. The incubation period is 14 days with a median of four to five days to symptom onset following exposure. Symptoms vary and so does the severity of the disease which can range from asymptomatic to critical illness with respiratory and multiorgan failure. A constellation of symptoms such as fever, chills, fatigue, cough, shortness of breath, muscle aches, new loss of taste or smell, sore throat and runny nose, headache, nausea, vomiting, and diarrhea have been associated with the disease (36). People with medical vulnerabilities are at higher risk for severe COVID-19. Among the conditions associated with poorer outcomes of the disease are age 65 years or older, pregnancy, smoking habits, and comorbidities such as diabetes, cardiovascular disease, chronic lung disease, chronic kidney disease, cancer, obesity, transplant recipients, and immunosuppression (37). The gold-standard for diagnosis consists of nucleic acid amplification of the SARS-CoV-2 virus from respiratory samples and at present, treatment options are still under study, some are already in use according to the severity of the disease (i.e. antivirals, monoclonal antibodies) (38). In spite of depending on host conditions, booster doses and virus variants, vaccination effectiveness is alleviating the burden of COVID-19 by reducing the numbers of severe disease, hospitalization, and deaths (39).

1.2.2 The socioeconomic impact

Aside from the outlined direct effects on health, COVID-19 pandemic brought upon countries a high economic and social burden. Restrictions that were put in place in order to mitigate the pandemic affected the usual functioning of societies and have led to a global crisis with the contraction of most economic activities and resulting in the worst recession since World War II (40). Between- and in-country income inequality rose, the former due to emerging market and developing economies delayed economic recovery in comparison with advanced economies, and the latter with job and income losses striking informal sector workers, low-skilled workers, women, and lower-income households (41,42).

Despite countries policies to lessen COVID-19 effects, measures derived from social distancing, such as curfews, lockdowns, and overall limitations to mobility combined with prolonged quarantine and isolation periods, impacted productivity and trade, paving the way to unemployment and higher costs of living, driving many to poverty (43). According to the World Bank estimates, in 2020/21 the pandemic forced 97 million more people into poverty, and extreme poverty rates induced by COVID-19 in 2020 increased on average by 0.63%, especially affecting low-income countries (41). Health expenditures, particularly out-of-pocket (OOP) spending, accounted for the impoverishment of half a billion people globally in 2017. Additionally, financial costs are reported as the main reason for foregoing healthcare in low-income countries (42).

1.2.3 COVID-19 and Refugees

The COVID-19 pandemic has had a disproportionate effect on the most vulnerable by accentuating inequities that were already present. The burden of COVID-19 on refugees and migrants' social determinants specificities, amplified their pre-existing vulnerabilities. Several compounding and intertwined risk factors contribute to this (44) (Figure 8).

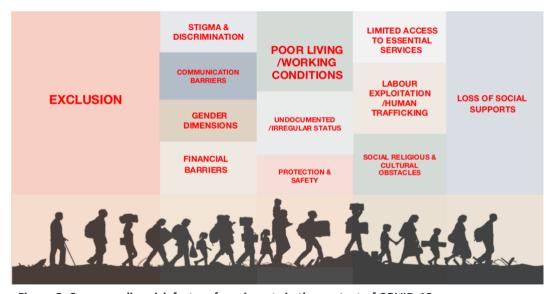


Figure 8. Compounding risk factors for migrants in the context of COVID-19Adapted from: Least Protected, most affected: Migrants and refugees facing extraordinary risks during the COVID-19 pandemic, IFRC, 2020

Firstly, the living conditions of refugees and migrants in informal settlements, detention centers, or camps result in overcrowding, facilitating the exposure and spread of transmissible diseases. COVID-19 mitigation measures like social distancing and isolation in these contexts are very difficult or impossible, thus generating disease and/or aggravating comorbidities (45). Breaking the virus transmission chains is further impaired by the lack or limited access to other essential services like clean water, sanitation, and therefore hygiene, that characterizes many of these settings.

In what concerns employment, migrants and refugees are more likely to work in the informal sector, with a greater risk of job losses and often bypassing governments' financial protection schemes put in place during the pandemic. Loss of income and/or lack of insurance result in limited or absent access to health systems and support. Additionally, migrants are more exposed to the virus in their working environment, as mostly are employed in sectors where person-to-person contact is necessary and telecommuting is limited, such as logistics, deliveries, cleaning services, and construction (44). Lack of access to preventive measures such as masks and protective gear namely in the workplace, add up to increase the vulnerability to the virus (45). Compliance with other protection measures is hampered by the living and working conditions, making it difficult for refugees and migrants to avoid using public transportation and leaving home (45,46).

The ability of refugees and asylum seekers to get protection and safety was undermined by mobility restrictions and border closures imposed by countries, which in parallel contributed to isolation due to the loss of contact with family and communities (44). Many were stranded in borders, losing their prospects of employment and a better life abroad, being exposed to labor exploitation, human trafficking or eventually having to return to their home country (40,44,45). Irregular migration status, apart from contributing to income insecurity, also impedes the seeking of assistance due to fear of deportation or arrest (44,46).

Language barriers in destination countries play an important role in compromising communication with migrants and refugees. They also impede the acquisition of the necessary knowledge about cultural and social norms and practices, that allow their navigation and integration into society. Particularly in the midst of a pandemic, in which additional and novel stressors on the usual functioning of societies require clear and concise messages to be adequately received and understood, conveyed through means of appropriate channels. Lack of understanding of public health measures to adopt and access to culturally adequate information on health care, hinders the inclusion of migrants and refugees in the response to the pandemic, further accentuating their isolation and vulnerability to not accessing care (44,45).

COVID-19-related discrimination in the forms of xenophobia and stigma experienced by migrants and refugees, namely of Asian descent, can also enhance isolation and avoidance of seeking care, screening, or testing (44,45). All of these factors are contributors to the worsening of existing mental health problems due to traumatic life events, especially in the case of refugees. The risk of gender discrimination towards women is also increased during humanitarian and health crises, especially when movement restrictions were put in place. Domestic violence against women and girls in the setting of the pandemic increased globally, as did limitations imposed by the lockdowns in accessing social protection networks by the victims (44).

1.3 HEALTH CARE ACCESS AMONG REFUGEES

With the increasing global migratory flows, health care access by migrant populations has been a subject of international and national research. Long-standing barriers to health care access by refugees and migrants are robustly documented in the literature, with a predominance of qualitative research.

In 2018, Kang et al. identified obstacles to primary care access by refugees and asylum-seekers in the U.K. through a qualitative study. Factors like unawareness about available healthcare services, linguistic differences, discrimination, bureaucracy, and dental care costs contributed altogether to the social marginalization of refugees (47).

Chuah et al. explored refugees' health care needs and access barriers from the perspective of healthcare providers in Malaysia. Constraints in social, cultural, and financial determinants, such as low levels of literacy, language differences, unawareness about individual rights to health, and particularly economic insufficiency, played a decisive role in the lack of access to care. These barriers to health care have the potential to negatively impact the health outcomes of this vulnerable population (48).

In 2019, Brandenberger et al. through a systematic review of the challenges of health care provision to migrants and refugees in high-income countries, developed the "3C" model, which includes three main determinants of healthcare service delivery: communication, continuity of care, and confidence. The authors identified issues related to: 1) communication, such as the linguistic differences between migrants, refugees, and healthcare professionals; 2) continuity of care, such as the unawareness about available services or means of transportation to healthcare facilities; 3) confidence, such as the lack of inclusion of family and friends in the health decision-making process. The availability of interpreters in healthcare settings, the delivery of information and education to migrants and refugees about the health system, and intercultural training of

professionals, are some of the essential measures to address the challenges of health care provision to these populations and improve health care access (49).

A scoping review on the health needs of non-camp-based refugees in the Middle East and North Africa identified several barriers to health care access, which included the lack of refugee status documentation, discrimination, and language barriers (which led to poor communication with healthcare providers), and long distances to healthcare centers. OOP expenditures were also a major issue for many refugees, who incurred catastrophic expenses in order to get health care (50).

With the advent of the COVID-19 pandemic, reference organizations in migration and health such as the WHO, and global collaborations like the Lancet Migration, called on countries for global action and issued recommendations advocating for the protection of migrant and refugee populations, by ensuring their access to health care regardless of the legal status (51,52). Following those recommendations, several countries implemented national strategies directed at migrant populations (53). In Denmark, Norway, and Sweden, for example, healthcare systems are universal, covering for the health care of migrants and refugees with a legal status. However, undocumented migrants are only entitled to emergency care. In the early phases of the pandemic, migrants in these countries were highly stricken by infections comparatively to the host population (54). Alongside, information about COVID-19 conveyed by national authorities was translated into several languages in the three countries. In the case of Norway, some of the information was specific to migrants' needs (i.e., taking into account the intersectionality of religious backgrounds with COVID-19), although this was not a widespread practice. Additionally, there was an active involvement of civil society in wide-spreading information (such as migrant organizations, NGOs, and high education institutions). A university project for instance, created a website with COVID-19 information available in five languages, and allowed migrants to ask questions and input their experiences in dealing with the COVID-19 pandemic, with the final aim to contribute to healthcare services' improvement (55). As a result of this project, a qualitative study showed that despite the government's production of COVID-19 information in multiple languages, migrants did not consider it to be diligent enough, and recommended measures not adequate to operationalize in the daily living (54).

A mixed-methods study by Benjamen et al. showed decreased health care access among refugees, immigrants, and migrant workers during the pandemic in Canada. Difficulties in access were noted in mental health care, primary care services, and community resources. The former were related to constraints in access to technology and technology literacy, communication and cultural mediation, privacy concerns, lack of available providers and information on healthcare services, and fear of infection; additionally, there were constraints on the social level such as lack of support in child care, language classes, and provision of resettlement services (56). Hynie et. al in a qualitative study among refugees found advantages in virtual mental health care access, including users' convenience in travelling-associated costs and time, especially for people living in remote areas, and enabling the offer of other types of healthcare services. Conversely, several obstacles to this type of health care delivery were identified. Technology costs and complexity, technical and operational issues (i.e. connectivity problems), and interference with quality of care (communication and development of a trustful relationship with providers) (57).

Palattiyil et al., through a mixed methods study on access to HIV/AIDS or TB care with refugees in Kampala, Uganda, highlights the negative impact of the pandemic on the social determinants of health. Poverty, loss of jobs, increased discrimination, and isolation, along with the government's COVID-19 prevention and control measures, led to a disproportionate impact of the pandemic on refugees. Although in Uganda refugees are entitled to HIV/AIDS or TB care, measures that resulted in lack of transportation, higher travelling costs to healthcare facilities, and refugees' exclusion from social supports (such as relief food) all contributed to compromise adherence to treatment, despite some positive adjustments of healthcare services during the pandemic (58).

1.4 REFUGEES: THE PORTUGUESE CONTEXT

1.4.1 Refugees in Portugal

As previously mentioned, as a result of conflicts in Syria, Afghanistan and Iraq, a significant influx of refugees arrived in the EU in 2015, leading to a refugee crisis in Europe (59). Since then, apart from the spontaneous asylum seekers' and refugees' requests, Portugal has participated in the European international protection schemes through resettlement and relocation mechanisms, and more recently, the humanitarian admission program for Afghan nationals (60). The number of requests for asylum in Portugal has been traditionally low (61). From 2017 to 2021 there were on average, around 1482 requests for international protection/year with some oscillations (62). It is relevant to note the lowest number of applications in 2020 due to the pandemic, as shown in Figure 9.

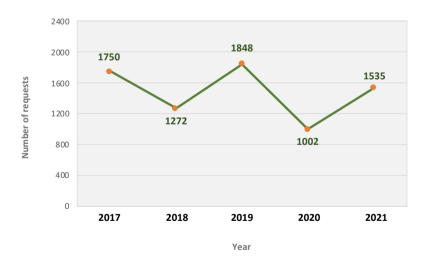


Figure 9. Requests for International Protection in Portugal 2017-2021Adapted with permission from: SEF, Relatório de Imigração, Fronteiras e Asilo 2021 (p.68)

Requests for international protection are not all granted asylum (63). Rejections are justified on several grounds, for instance, the applicant's nationality is not considered among those in need of international protection, the applicant does not meet the Asylum Act's criteria for refugee or subsidiary protection, among others. As of June 2021, of the 1535 requests, 226 (14.8%) were granted refugee status and 78 (5%) subsidiary protection (60).

Portugal's participation in the relocation of asylum-seekers through international protection schemes (60), is shown in Table I. It is noticeable the large influx of Afghan refugees in 2021, as Portugal assisted with their evacuation and relocation following the exit of U.S. troops from Afghanistan (60).

TABLE I. Number of relocated asylum-seekers through international protection schemes 2015-2021

INTERNATIONAL PROTECTION SCHEME	NUMBER OF PEOPLE RELOCATED
2015-2018 RELOCATION MECHANISM	1550
AGREEMENT E.U. / TURKEY (2016-2017)	142
2018-2019 RELOCATION MECHANISM	930
UNACCOMPANIED CHILDREN 2020-	199
PORTUGAL/GREECE BILATERAL AGREEMENT	100
HUMANITARIAN BOATS	264
AFGHANS HUMANITARIAN ADMISSION	768

Data concerns the end of 2021

Source: Observatory for Migration, Applicants and Beneficiaries of International Protection in

Portugal, Statistical Asylum Report, 2022

Sociodemographic information on resettled refugees and asylum-seekers in Portugal is often incomplete. In 2021, available data on newly arrived refugees and asylum-seekers through the different entry mechanisms shows that similarly to most European countries, in Portugal the majority of asylum-seekers were men (54%) under 39 years of age (83%).

Data on education is scarce as there is no information on Afghan nationals, which were the largest group arriving in Portugal in 2021, being primary school education the most representative for the remainder (37%). By the end of 2020, most asylum-seekers were nationals from Syria, Iraq, Sudan, Nigeria, and Mali, and 22% were unemployed in their origin countries. To note, over 80% of refugees and asylum-seekers arriving in Portugal in 2021 through all programmed entry mechanisms, were registered in the NHS (except for the Afghans, which was 69.4%) (60).

1.4.2 Support Organizations

The Immigration and Borders Service (SEF), currently under restructuration, has been the responsible national entity for processing asylum requests (62) and articulates with the Portuguese Refugee Council (CPR) (UNHCR partner) in order for the latter to provide legal counselling and reception services to refugees and asylum-seekers. CPR is responsible for the initial hosting of refugees and asylum-seekers upon arrival to Portugal (in the Refugee Reception Center) and, in partnership with municipalities, it also hosts asylum-seekers in the EU relocation schemes. CPR also issues the Portuguese Asylum Information Database report annually (63).

The High Commission for Migration (ACM) is in charge of the integration and delivery of public services to refugees and asylum-seekers, in collaboration with asylum support offices and centers, and articulation with reception institutions (61). Within ACM, the Support Unit for the Integration of Refugees coordinates refugees' and asylum-seekers' integration and matching with hosting institutions.

The *phasing out* of the integration program is under the responsibility of the Social Security Institute (ISS), which provides social assistance to refugees who are not financially autonomous by the end of the program (63). District Services of ISS are in charge of the decentralized reception and integration of the beneficiaries of international protection throughout the country (64). The Portuguese language training course and

professional qualifications recognition are under the responsibility of the Institute for Employment and Professional Training (63).

The Refugee Support Platform (PAR), formed by several civil society actors (NGOs, associations, universities, among others) provide support to refugees and asylum-seekers in housing, health, education, language training and work besides hosting families through a dedicated program (63). The Jesuit Refugee Service coordinates PAR, manages and monitors the refugee reception center and integration process, and provides training to PAR hosting entities. Finally, different organizations such as municipalities and NGOs throughout the country also participate in the hosting and integration of refugees and asylum-seekers (63).

1.4.3 The Municipal Refugee Reception Program in Lisbon

In accordance with the proceedings of the European Agenda for Migration and the national Asylum Act (article 76th), the Working Group for the European Agenda for Migration devised the Reception and Integration Framework for Asylum Seekers and Refugees (19,60,65), establishing an integration program with the duration of 18 months. The Framework set up a set of 10 core intervention areas which include: 1) access to food, 2) access to housing, 3) access to health care, 4) access to education, 5) Portuguese language learning, 6) access to training, recognition, validation and certification of competencies, 7) access to the labor market, 8) access to community services, 9) access to information and legal support, and 10) interpretation and translation of documents (60).

In Lisbon, the city council created the Municipal Refugee Reception Program (PMAR LX) in 2015, with the objective to assist people in need of international protection (asylum-seekers and refugees) in their integration, during the first two years upon arrival to the municipality. Drawing on the Reception and Integration Framework for Asylum

Seekers and Refugees, PMAR LX is designed around nine areas which take place during the different phases of the program, and is developed in cooperation with civil society organizations. It comprises support to housing, health care, learning of the Portuguese language, access to food and clothing, access to training, skills validation and labor market, and community participation. It is organized in three phases: 1st Reception, 2nd Monitoring, and 3rd Integration. The first phase has a duration of approximately one month and encompasses refugees' reception, transfer to the transit institution (Temporary Refugees Reception Center), food and clothing assistance, processing of documentation including registration in the National Healthcare System (NHS) and in the National Immunization Program, registration in the Tax Authority (in order to obtain a social security number and tax identification number), individualized follow-up with cultural mediation, medical and psychological triage, and legal support. During this phase, asylum seekers are also introduced to the Portuguese labor market and, through referral to the employment offices of PMAR Lx partners, the recognition of professional skills takes place (66). The Monitoring phase lasts 17 months, during which refugees are transferred to autonomous housing provided by the Municipality and receive a monthly allowance. In close collaboration with the community intervention association CRESCER Na Maior, asylum seekers receive regular assistance from the association's technical teams, which provide support with food, health, education, and access to training courses and the labor market. During this phase, it is intended to continue the Portuguese language training program initiated in the first phase, in view of providing asylum seekers with a progressive acquisition of language proficiency. The third phase lasts around six months and foresees the acquisition of a greater autonomy by refugees, and providing a more focused assistance on community participation and access to the labor market (66). Both in the national integration program and PMAR Lx, the last six months of the programs correspond to a phasing out stage. At this point, the responsibility for the support of the beneficiaries of international protection transits to the ISS, in the same conditions as nationals and with the possibility of access to integration programs available to all migrants (63).

1.4.4 The Community Intervention Association CRESCER Na Maior

CRESCER Na Maior (hereafter CRESCER) is a community intervention association founded in 2001 in Lisbon with the purpose of developing assistance projects to vulnerable populations such as the homeless and people with drug use and dependence. The organization provides welfare support at its headquarters and undertakes projects assisted by technical teams in the greater Lisbon area. It is financed by both public and private partners and counts on a multidisciplinary collaboration of professionals from psychology, social service, psychiatry, nursing, communication, catering, and design, among others (67).

Since 2016 that CRESCER also cooperates with the PMAR Lx in the Monitoring phase, in which it promotes the transition of refugees and asylum seekers from the Refugee Reception Center to temporary autonomous housing granted by the municipality of Lisbon. Through the project "É UMA VIDA" (It's a life) which is based on the housing first concept created in the U.S. in the early '90s, CRESCER promotes the inclusion of refugees in the communities and in the general society, whilst fostering their progressive autonomy through means of an individualized intervention (68–70). The project depends on a multidisciplinary team of social service, psychology, international relations and intercultural mediation professionals who are responsible for the case management and the cultural mediators for the interpretation and translation. During the 17 months of the Monitoring phase, CRESCER provides multidimensional support that ranges from temporary houses preparation; collaborating with SEF in obtaining the necessary documentation, conducting interviews, notification of decisions; mediation with community services such as social security and healthcare centers; aid in job search and financial management; promotion of cultural and sports activities and assistance in searching for own house at the end of the program (68).

The follow-up is individualized and takes place through two home visits a week by the technical teams and in parallel, a hotline available 24 hours a day 7 days a week provided by a team member who is on call. The technical teams are constituted by a social worker or psychologist, and a cultural mediator. The latter are integrated into the teams as

"Pares" (*Pairs*) as they are recipients or former recipients of the PMAR Lx. Cultural mediators also assist the association with interpretation and translation services. In 2022, the program assisted a total of 69 people (of which 10 families) from Iraq, Syria, Afghanistan, Mali, Somalia and Eritrea.

Within the scope of refugee and asylum seekers inclusion and autonomy promotion, CRESCER has other projects like the "NO Border", in which the organization assists in the search for employment, legal and psychosocial support, medical and psychological care, housing, mediation and translation, among others. These services are delivered by a technical team of social workers, interpreters, a psychiatrist, a psychologist, and a lawyer (68).

Another project called "Marhaba – O Médio Oriente à mesa" (Marhaba – Middle East at the table) aims to foster the cultural inclusion of refugees and asylum seekers through the use of gastronomy, providing technical training in catering (68).

1.4.5 Asylum: health care access legal frame

The right to health care is enshrined in the Portuguese Constitution in the article 64th in which it is stated that:

1. Everyone has the right to the protection of health and the duty to defend and promote it; a) through a universal and general national health system, tendentially free of charge, and taking into account the social and economic conditions of the citizens; 3. To ensure the right to health protection, it is primarily up to the State to: a) Ensure the access to preventive, curative and rehabilitation medicine to all citizens regardless of their economic situation (71).

According to the Asylum Act, asylum seekers and their respective families are entitled to health care in the NHS in the same conditions as the Portuguese nationals. This includes providing adequate and specialized medical and mental care in cases of additional vulnerability, such as in pregnancy, disability, victims of torture, sexual violence, and other types of violence. It also safeguards the right to mental health care in these situations (72)(65).

The Ministerial Order No. 30/2001 establishes that the entitlement to health care initiates with the asylum request procedure and that it is provided free of charge. Upon the presentation of the asylum request declaration or temporary residency permit, asylum seekers are entitled to health care that includes medication and medical assistance in emergency situations and primary care services. The latter comprises health promotion and disease prevention, outpatient care such as general medicine, family planning, maternal and child health, and geriatric care; specialized medical assistance in the areas of mental health, ophthalmology, otorhinolaryngology and stomatology; non-specialized inpatient care; diagnosis and treatment including rehabilitation, nursing and home visits (73).

The Joint Informative Document No. 13/2016/CD/ACSS establishes that upon a positive decision on the request for international protection and being attributed the statute of refugee (or subsidiary protection), the beneficiaries and respective families are entitled to registration in the NHS and are exempt of the payment of user fees (74).

More recently, the Portuguese Health Act No. 95/2019 also states that migrants and asylum seekers are to be considered beneficiaries of the NHS regardless of their legal status (75).

Within the context of the COVID-19 pandemic, the Government issued the Decree-Law No.12-A/2020 which establishes exceptional and temporary measures related to the COVID-19 pandemic. Article No. 6-A exempts people registered in the NHS from the payment of fee charges related to the diagnosis and treatment of COVID-19 disease (76). Following WHO recommendations on the protection of refugees and migrants during the pandemic (52), the Ministerial Order No. 3863-B/2020 establishes the temporary regularization of all migrants in Portugal (including asylum seekers) who applied for a residence permit before the 18th March 2020 (declaration of the state of emergency) (77). Along the same lines, the Directorate-General of Health issued the information No. 010/2020 which reinforces health care access in the NHS by migrants and refugees in the context of the pandemic to be granted, removing documental impediments to access care and the extension of the validity of documents of stay in national territory (78).

According to the Norm No. 003/2022 of the Directorate-General of Health, all people in Portugal, including asylum-seekers and refugees, are entitled to receive vaccination in keeping with the 2020 National Immunization Program, including the vaccine against COVID-19 (79).

1.4.6 Health care access

There are gaps in research concerning health care access by refugees in Portugal, however, there are published studies on health care access and utilization by the overall immigrant population.

In 2011, Dias et al. addressed the determinants of access and utilization through the perspective of the professionals of the greater Lisbon primary care centers, identifying cultural and socioeconomic barriers such as economic insufficiency, religious beliefs, unawareness of health care rights, and health services navigation (80). In a 2018 study involving 1375 immigrants from Lisbon's metropolitan area and 320 professionals from primary care centers in the greater Lisbon area, Dias et al., explored the perceptions of both groups on the access and utilization of healthcare services. Through the combination of three studies (two quantitative and one qualitative) economic, cultural, linguistic, and discriminatory obstacles were also identified (81). These constraints lead to an underutilization of healthcare services by the immigrant population (80,82–84).

Martins, O. et al. through a cross-sectional study in Lisbon's Metropolitan Area, showcased the disproportionate socioeconomic impact of the COVID-19 pandemic on immigrants compared with natives. Findings revealed that COVID-19 effects amplified immigrants' previous hardships leading to greater job loss, lay-offs, and income losses, with a consequential impact on livelihoods. Moreover, in the early stages of the pandemic, immigrants had increased difficulties in accessing healthcare services in comparison with natives. Immigrants were more likely to face hindrances in obtaining medical appointments, in complying with children's vaccination, and in the acquisition of pharmaceuticals (85,86).

A 2021 survey on health care access by immigrants in Portugal highlights the unmet needs for medical care due to financial constraints, long waiting lists, lack of time due to occupational or family responsibilities, dissatisfaction, and lack of trust in public healthcare services (87).

In recent years, efforts were made in Portugal in order to bridge the communicational gap between migrants and the hosting communities, thus promoting their integration. In this context, the High Commission for Migration (ACM) carried out projects in the field of intercultural mediation. From 2009 to 2012, cultural mediators were incorporated into public services, including healthcare settings, with the purpose to assist in the resolution of conflicts (88).

In 2015, ACM partnered with universities, creating the Intercultural Mediation Higher Education Network, with the aim to foster both cultural mediation education and research on the former project's outcomes (89). In this regard, findings of a qualitative study on the outcomes of intercultural mediation in healthcare contexts underscore: the need to invest in cultural mediators' specific education and formal professional recognition; the role of cultural mediators as neutral and promoting agents of cultural awareness among healthcare professionals; the importance of integrating cultural mediators in healthcare teams (88).

In 2021, a nation-wide online training program on cultural competence was carried out among primary healthcare professionals. The program "Health in Equality" provided comprehensive training in several areas, for example: concepts on cultural competence; ethnic/racial minorities, migration, and culture; global mobility and refugees; sex and gender; spirituality and religion; mental health and well-being; reproductive and sexual health; sexual orientation, gender identities, and expressions. The program results showed high levels of satisfaction with the training, as well as increased knowledge and skills on individual and cultural diversity among the participants. Although these findings may contribute to reducing feelings of discrimination and increasing cultural awareness among the trainees, a follow-up on the implementation of the acquired cultural skills in the daily practice is warranted (90).

1.5 THEORETICAL FRAMEWORK

The concept of *access* to health care in the literature is not a homogeneous one, as it encompasses diverse definitions. These build on different theories, that whether view access as the attributes of the health services, of users, of both, or the relationship between the supply and demand for health care (91).

Levesque's Conceptual Framework for Heath Care Access analyzes health care access as a product of the relationship between five dimensions of accessibility of services and five abilities of persons, illustrating the complex interactions that generate access. This multidimensional approach and the holistic view of access stand for the comprehensive nature of the theory (Figure 10).



Figure 10. Levesque's framework of access to health care

Adapted from: Patient-centred access to health care: conceptualizing access at the interface of health systems and populations, Levesque et al., 2013 (p. 5)

1.5.1 Dimensions of accessibility of services and abilities of persons

According to the framework, each dimension of accessibility of services corresponds to an ability of persons. There are five dimensions and five abilities that are defined as follows (92):

- Approachability, is the means by which healthcare services make themselves known among the whole spectrum of people in need of care, therefore allowing their identification and use. It includes determinants such as transparency, outreach, information, and screening. This dimension relates to people's *ability to perceive* the need for care, which is influenced by health literacy and health beliefs.
- Acceptability is mainly related to services' cultural and social characteristics that determine people's acceptance or rejection of the health care that is provided. It is influenced by determinants like culture, gender, and norms. Factors such as personal and social values, autonomy, knowledge about health care options and rights, culture, and gender determine people's *ability to seek* care.
- -Availability and accommodation relate to the existence of services with attributes that enable them to be physically reached and in an expeditious way. It depends on factors such as geographic distribution, opening hours, and appointment mechanisms. Conditions that allow people to physically reach healthcare services, such as personal mobility, availability of transports, and the possibility to receive care during working hours, influence people's *ability to reach*.
- -Affordability derives from the direct prices and expenses related to obtaining healthcare services whereas the *ability to pay* depends on people's capacity to generate income without incurring health care expenses that jeopardize their livelihoods.
- -Appropriateness is defined as the fit between services and users' health needs (92). It is determined by factors such as technical and interpersonal quality as well as adequacy in the type of services that are provided and the way they are delivered. Ability to engage refers to the involvement and participation of people in their care, which includes making decisions in health in an informed manner.

1.6 AIM OF THE STUDY AND OBJECTIVES

As mentioned above, health care access by vulnerable populations such as refugees is hindered by a number of obstacles in the host countries. The additional burden brought upon health systems by the COVID-19 pandemic resulted in a widening of inequalities (44). Portugal's reception of refugees under the European programs of relocation and resettlement is relatively recent, and there are no national publications that address health care access in this particular group of migrants. Additionally, the detrimental impact of the COVID-19 pandemic on this vulnerable population, calls on the need to characterize health care access during the pandemic, in order to devise strategies that ensure equity.

Through an approach focused on refugees' perspectives, this research intends to explore the different dimensions that influence and determine refugees' health care access during the COVID-19 pandemic in Lisbon, Portugal, in order to identify barriers to health care access. Therefore, the research question of this study is:

What are the main difficulties in health care access by refugees in Lisbon during the COVID-19 pandemic?

There are three main objectives of this research:

- 1. Describe the sociodemographic and migration profile of refugees assisted by the community intervention association CRESCER;
- 2. Describe healthcare services- and COVID-19-related characteristics of refugees assisted by the community intervention association CRESCER;
- 3. Explore the dimensions of accessibility of services and corresponding abilities of persons in generating health care access during the COVID-19 pandemic, from the perspective of refugees.

1.6.1 Positioning of the study within the Sustainable Development Goals (SDGs)

In 2015, the UN 2030 Agenda for Sustainable Development defined a set of 17 goals and 169 targets to be implemented by member-states, with the aim to transform the world by ending poverty and inequality, protecting the planet, and ensuring that people can live in peace, with prosperity, in a spirit of global partnership (93).

Research plays a pivotal role in attaining the SDGs as it contributes to societal problems solving through knowledge production, and thus informs and assists policy makers in the decision-making process (94).

This study relates to the SDG 3 "Good Health and Well-being" and SDG 10 "Reduce inequalities within and among countries" (93) (Figure 11).



Figure 11. Sustainable Development Goals related to the study

To attain these objectives, efforts are required to foster health inclusiveness and equality in access to health care, by ensuring that the most vulnerable are not left behind (93). Levelling up inequalities in health care access is not possible without addressing the social determinants of health or taking into consideration the specificities of vulnerable populations. In this study, identified sociodemographic profile of refugees and assessment of potential hindrances to health care access during the COVID-19 pandemic may provide useful preliminary information on the social and living conditions of refugees in Lisbon, as well as knowledge on the *status quo* of health care access among this vulnerable population, thus contributing to the development of customized solutions to their specific health care needs.

2. MATERIALS AND METHODS

2.1 STUDY DESIGN AND SETTING

An exploratory, descriptive, cross-sectional, and quantitative study was conducted for the purpose of saving time and resources (95).

The study was conducted in collaboration with the community intervention association CRESCER, upon authorization (Annex 1), within the scope of the organization's projects "É UMA VIDA" and "NO Border".

Recruitment of participants took place between late April and November 2022. CRESCER's professionals contacted potential participants during the social support appointments at the association's headquarters or during the technical teams' weekly home visits.

Data were collected via a structured questionnaire, which was administered through face-to-face interviews with this thesis' author and took place between May and November 2022. Interviews were conducted at the home of the "É UMA VIDA" project beneficiaries or at CRESCER's headquarters in the case of the "NO Border" project recipients. In all cases, the place of the interview was chosen taking into consideration the participant's convenience, by paralleling with the context of CRESCER's contact with the participant in each project.

2.2 PARTICIPANTS, RECRUITMENT, AND DATA COLLECTION

The target population were adult refugees as per the definition of the United Nations Convention relating to the Status of Refugees (7). Participation in the study required the fulfillment of the eligibility criteria, which consisted in being a refugee, aged 18 or more, living in Lisbon, with a length of stay in Portugal of at least 12 months, and receiving assistance from the community intervention association CRESCER.

Individuals were excluded from the study if there was no interpretation available for their languages.

Since this was an exploratory study, a non-probabilistic convenience sample was used. This sampling method has several advantages within this context, namely the easier opportunity of contact and recruitment of potential participants, as well as a higher probability of response (95), which were conveyed by the regular contact of the refugees with CRESCER association. In addition, it was the most cost-effective method to address the study's objectives within a short period of time.

Following the identification of refugees who fulfilled the eligibility criteria, CRESCER's professionals contacted potential participants in order to take part in the study. Eligible and interested beneficiaries of "É UMA VIDA" project were asked to authorize this thesis author's home visits, using a written form. The former provided participants with the presentation of the research team and a summary of information about the study (Annex 2). The authorization for the home visit was deemed given when signed by the household representative.

Following the contact with the eligible participants, a date and hour were scheduled for the interviews according to the convenience of the participant, and whenever possible after CRESCER technical teams' visits/appointments.

The questionnaire was applied face-to-face by this thesis' author and was preceded by an oral presentation of the research team and study, followed by the application of the informed consent, procedures of which are detailed elsewhere.

Whenever the participant didn't speak Portuguese or English (the languages spoken by this thesis' author), a cultural mediator from CRESCER who was fluent in the native language of the participant was solicited to assist with the interpretation of the interview. Cultural mediators involved in the study were previously asked to sign a confidentiality agreement (Annex 3).

2.3 ETHICAL CONSIDERATIONS

This study's protocol was approved by the Ethics Committee of the Instituto de Higiene e Medicina Tropical of Universidade Nova de Lisboa and guided by the ethical principles of the World Medical Association Declaration of Helsinki (96). A declaration of authorization from CRESCER's Executive Director was also obtained, in order to conduct the study in collaboration with the association (Annex 1).

The participation in this study was of voluntary nature and the application of the questionnaire was subject to previous informed consent. The informed consent provided participants with information about the objectives and methods of the study, and the confidentiality of the data (access restricted to the research team in accordance with the General Data Protection Regulation) (97). Additionally, it informed about the participant's freedom not to participate in the research without incurring any consequence or loss (Annex 4). The informed consent was translated from Portuguese to English, Arabic, and French by the research team, and to Kurdish by a cultural

mediator from CRESCER, in order to allow a comprehensive understanding of the information.

Whenever the participant was illiterate, the informed consent was read by the cultural mediator in the participant's language, in the presence of a witness (usually a family member). Although all participants signed or marked the informed consent irrespective of their education level, a dedicated space for fingerprints had been reserved for participants unable to sign or mark the document.

Participants' privacy, in the case of the "NO Border" project, was ensured by conducting the interviews in a separate room at CRESCER's headquarters.

All the material of this research is in the guard of the research team in a secure place and saved in anonymity. The data that was collected on paper was stored in a database which was used exclusively for the purposes of the study (principle of purpose limitation), with restricted access by username and password. The data will not be transferred to third parties and will be protected against non-authorized processing, alterations, or loss, warranting its security in safekeeping with the research team (principle of integrity and confidentiality). Only data that was in line with the research's purpose was processed (principle of minimization) (97). The research data will be kept for a period of five years after the collection date.

2.4 VARIABLES AND MEASUREMENT INSTRUMENT

The instrument of data collection was a structured 38-item questionnaire, designed by the research team, based on existing questionnaires, and administered via face-to-face interview. This type of instrument was selected for the convenience of data collection and analysis (95). The questionnaire was translated from Portuguese into English, and Arabic by the research team, and interpreted into the other languages of the refugees in the sample (i.e., Kurdish and French), with the collaboration of CRESCER's cultural mediators.

The questionnaire was structured in two domains for content organization and analysis facilitation purposes: 1) sociodemographic-, migration-, healthcare services-, and COVID-19-related variables and 2) dimensions of access to healthcare, including those of accessibility of services and abilities of persons. The questionnaire referred to the period between the beginning of the COVID-19 pandemic in Portugal (March 2020) and the moment of the interview (Annex 5).

2.4.1 First domain: Sociodemographic-, Migration-, Health care-, and COVID-19-related variables

The first domain included sociodemographic-, migration-, healthcare services-, and COVID-19-related variables, which were extracted from established public health surveys and studies. Variables' description and references are shown in Table II.

TABLE II. 1st domain: sociodemographic-, migration-, healthcare services-, and COVID-19-related variables

VARIABLE	VARIABLE TYPE	ANSWER CATEGORIES/DESCRIPTORS	REF.
		SOCIODEMOGRAPHIC DETAILS	
GENDER	Categorical, nominal	female, male, other, decline to answer	-
AGE	Quantitative, discrete	years, decline to answer	-
HIGHEST EDUCATIONAL ATTAINMENT	Categorical, ordinal	no formal education, primary school, secondary school, post-secondary/tertiary school or above, decline to answer	(98)
MARITAL STATUS	Categorical, nominal	single, married/consensual union, divorced/separated, widowed, decline to answer	(81)
RELIGION	Categorical, nominal	Islam, Christianity, Judaism, no religion, other, decline to answer	(81)
EMPLOYMENT STATUS	Categorical, nominal	employed, student, retired, housekeeper, unemployed, other, decline to answer	(81)
NUMBER OF PEOPLE IN HOUSEHOLD	Quantitative, discrete	number of people, decline to answer	(98)
PERCEIVED HOUSEHOLD INCOME	Qualitative, ordinal	easily, fairly easily, with some difficulty, with great difficulty, don't know, decline to answer	(99)
		MIGRATION DETAILS	
COUNTRY OF ORIGIN	Categorical, nominal	country of origin, decline to answer	(100) (46)
INTEGRATION IN THE REFUGEE RECEPTION PROGRAM	Categorical, nominal	yes, no, don't know, decline to answer	-
LENGTH OF STAY IN PORTUGAL (MO)	Quantitative, discrete	number of months, don't know, decline to answer	(81)

TABLE II. 1st domain: sociodemographic-, migration-, healthcare services-, and COVID-19-related variables (cont.)

VARIABLE	VARIABLE TYPE	ANSWER CATEGORIES/DESCRIPTORS	REF.
NATIVE LANGUAGE	Qualitative, nominal	language spoken, decline to answer	(101)
PERCEIVED PROFICIENCY IN PORTUGUESE	Qualitative, ordinal	very well, well, not well, not at all, decline to answer	(102)
		HEALTHCARE SERVICES	
REGISTRATION IN A PRIMARY CARE CENTER	Categorical, nominal	yes, no, decline to answer	(83)
HEALTHCARE UTILIZATION	Categorical, nominal	yes, no, decline to answer	
		COVID-19 INFORMATION	
POSITIVE TEST TO SARS-COV2	Categorical, nominal	yes, no, never been tested, decline to answer	(103) (46)
HOSPITALIZATION DUE TO COVID-19	Categorical, nominal	yes, no, not applicable (never been tested / never tested positive), decline to answer	(104)
VACCINATION AGAINST COVID-19	Categorical, nominal	yes, all doses required, yes, but not all doses required, no, decline to answer	-
PREVENTIVE MEASURES SARS-CoV-2	Categorical, nominal	washing your hands for 20 secs with soap and water, use sanitizers, wear face mask when in closed public spaces, keep social distance, taking over the counter medicines, change diet, other, not applicable (did not practice any protective measures), decline to answer	(105)

2.4.2 Second domain: Dimensions of accessibility of services and abilities of persons

As mentioned in the literature review, Levesque's theory on health care access (92) refers to two main components: accessibility of services and abilities of persons. Each of these components is comprised of a set of dimensions that interact with each other in order to generate access. As shown above, in Figure 10, each dimension in the accessibility of services corresponds to an ability of persons. Drawing on Levesque's framework, variables from established public health surveys were selected, with the intent of representing determinants of all health care access dimensions among refugees during the COVID-19 pandemic, albeit with a focus on the abilities of persons, as follows:

-Approachability. The determinant *information* was used to explore this dimension, namely if services were able to convey information about COVID-19, taking into account audiences from diverse cultural backgrounds. By making information culturally adequate and available in different languages, recipients are able to identify and use healthcare services according to their health needs. For example, clear information in several languages about COVID-19 testing procedures could contribute to increasing the testing adherence of refugees not proficient in Portuguese or English.

-Ability to perceive. This ability was analyzed through the determinants health literacy and health beliefs, which influence the individual concepts of ill health and the realization of the need for care. The variables "source of information about COVID-19", "knowledge of symptoms of COVID-19", and "asymptomatic spread of COVID-19", were used to assess health literacy, while the variable "prevention of COVID-19 by eating spicy food" to analyze health beliefs, and the "need for health care during the pandemic" to explore both.

-Acceptability. The variable "cultural competence in health care provided" was used to explore this dimension. For health care to be accepted, it is necessary that the provision of services is culturally adequate in order to engage users in seeking care. Likewise,

healthcare professionals need to be equipped with skills that stimulate cultural awareness when delivering care to people from different backgrounds.

-Ability to seek. The variables "sought health care every time needed" and "reasons for not seeking health care during the pandemic" intended to assess the determinants of autonomy, personal and social values, and individual rights. Ascertaining the motives for which people in need of care don't seek it, allows the identification of an array of barriers to the self-determination of choice to seek health care. The variables "type of healthcare providers sought during the pandemic" and "type of healthcare services sought during the pandemic" were used to explore users' knowledge about different health care modalities. Additionally, "knowledge about line SNS 24" (Portuguese national health system phone and online platform) was particularly important during the pandemic. This phone line was mandated as the primary point of contact of the population with the health system, alongside providing advice and guidance on COVID-19 preventive measures, symptoms, contacts, testing, quarantine, and referral for medical observation when necessary, hence awareness of its' existence was essential to access at least some aspects of healthcare services.

-Availability and accommodation. With the establishment of public health measures (such as social distancing) and with the need to avoid health system saturation during the pandemic, healthcare services were required to diversify the ways of providing care, by swiftly investing in remote or virtual modalities of contact with users. Thus, the variable "get medical advice by email/phone" was chosen to assess healthcare services' availability of alternatives to in-person provision of services.

-Ability to reach. This ability was analyzed through the variable "travel to healthcare facility" which explores the easiness with which people can get to the healthcare unit in case of need. It is determined by the concept of personal mobility and availability of transport (92). Another important determinant to reach health care is occupational flexibility, which was assessed by "medical appointment/perform exams during working hours".

-Affordability. The variable "pay for healthcare services" intends to assess the direct costs of services, namely if refugees were required to pay for any healthcare services.

-Ability to pay. This ability translates to the economic capability to pay for health care without incurring expenses that endanger the supply of basic needs (92). It was analyzed through the variable "could not afford medical examination/treatment".

-Appropriateness. The determinant adequacy of care was assessed by "interpreting service", particularly if health care was provided taking into account the specific linguistic needs of refugees. The variable "discussion of treatment options/side effects" was used in order to assess the technical and interpersonal quality of care, namely if healthcare professionals provided holistic information about treatment options and involved refugees in treatment decisions.

-Ability to engage. The variables "vaccination against COVID-19" and "preventive measures SARS-CoV-2" were used to analyze the determinant *adherence*, namely if refugees were involved in COVID-19 precautionary actions.

The classification of variables into the dimensions they best reflect was done according to the categorization used in the literature and the research team's interpretation of the framework. The exact variables chosen for this study, along with their sources and categorization into access dimensions, are shown in Table III.

MATERIALS AND METHODS

TABLE III. 2nd domain: dimensions of accessibility of services and abilities of persons

VARIABLE	ACCESS COMPONENT	DIMENSION	VARIABLE TYPE	ANSWER CATEGORIES/DESCRIPTORS	REF.
ACCESS TO INFORMATION ABOUT COVID- 19 IN UNDERSTANDABLE LANGUAGE	ACCESSIBILITY OF SERVICES	Approachability	Categorical, nominal	yes, no, decline to answer	-
SOURCE OF INFORMATION ON COVID-19	ABILITIES OF PERSONS	To perceive	Categorical, nominal	news from country of origin, news from country where I live (PT), social media, friends or family, place of worship, healthcare professionals, non-governmental organizations, other, decline to answer	(81) (106) (46)
KNOWLEDGE OF SYMPTOMS OF COVID-19	ABILITIES OF PERSONS	To perceive	Categorical, nominal	fever or chills, difficulty breathing or cough, fatigue, muscle or body aches, new loss of taste or smell, sore throat, congestion or runny nose, nausea or vomiting, diarrhea, constipation, bleeding, decline to answer (true, false, don't know)	(106) (107)
ASYMPTOMATIC SPREAD OF COVID-19	ABILITIES OF PERSONS	To perceive	Categorical, nominal	true, false, don´t know, decline to answer	(106)
PREVENTION OF COVID-19 BY EATING SPICY FOOD	ABILITIES OF PERSONS	To perceive	Categorical, nominal	true, false, don't know, decline to answer	(106) (98)
NEEDED HEALTH CARE DURING THE PANDEMIC	ABILITIES OF PERSONS	To perceive	Categorical, nominal	yes, no, decline to answer	(101)
CULTURAL COMPETENCE IN HEALTH CARE PROVIDED	ACCESSIBILITY OF SERVICES	Acceptability	Categorical, nominal	always, sometimes, rarely, never, not applicable (did not receive health care), decline to answer	(108)
SOUGHT HEALTH CARE DURING THE PANDEMIC	ABILITIES OF PERSONS	To seek	Categorical, nominal	yes, no, not applicable (did not need health care), decline to answer	(101)

MATERIALS AND METHODS

TABLE III. 2nd domain: dimensions of accessibility of services and abilities of persons (cont.)

VARIABLE	ACCESS COMPONENT	DIMENSION	VARIABLE TYPE	ANSWER CATEGORIES/DESCRIPTORS	REF.
REASON FOR NOT SEEKING HEALTH CARE DURING THE PANDEMIC	ABILITIES OF PERSONS	To seek	Categorical, nominal	my health problem was not serious, didn't know what to do, didn't know where to go, didn't have means of transportation, couldn't make an appointment, appointment cancelled/postponed, fear of discrimination, fear of denunciation due to legal situation, couldn't afford health care, didn't know if entitled to healthcare, language difficulties, don't trust healthcare professionals, fear of getting COVID-19, preferred to seek traditional medicine from country of origin, other, not applicable, decline to answer	(46) (81)
TYPE OF HEALTHCARE PROVIDERS SOUGHT DURING THE PANDEMIC	ABILITIES OF PERSONS	To seek	Categorical, nominal	family medicine doctor, pharmacist, nurse, hospital specialist doctor, dentist, emergency room, psychological and counselling services, traditional healer, not applicable (did not seek health care), decline to answer	(108) (109)
TYPE OF HEALTH SERVICES SOUGHT DURING THE PANDEMIC	ABILITIES OF PERSONS	To seek	Categorical, nominal	primary care center, public hospital, private clinic/hospital, non-governmental organization, other, don't know, decline to answer	(108) (110)
KNOWLEDGE ABOUT LINE SNS24	ABILITIES OF PERSONS	To seek	Categorical, nominal	yes, no, decline to answer	-
GET MEDICAL ADVICE BY EMAIL/PHONE	ACCESSIBILITY OF SERVICES	Availability/ Accommodation	Categorical, nominal	very easy, somewhat easy, somewhat difficult, very difficult, not applicable (never contacted them by phone/email), decline to answer	(108)
TRAVEL TO HEALTHCARE FACILITY	ABILITIES OF PERSONS	To reach	Categorical, nominal	very easy, somewhat easy, somewhat difficult, very difficult, don't know, not applicable (never used healthcare services), decline to answer	(108)

MATERIALS AND METHODS

TABLE III. 2nd domain: dimensions of accessibility of services and abilities of persons (cont.)

VARIABLE	ACCESS COMPONENT	DIMENSION	VARIABLE TYPE	ANSWER CATEGORIES/DESCRIPTORS	REF.
MEDICAL APPOINTMENT/PERFORM EXAMS DURING WORKING HOURS	ABILITIES OF PERSONS	To reach	Categorical, nominal	yes, no, don't know (never needed health care during working hours), not applicable (don't work), decline to answer	(111)
PAY FOR HEALTHCARE SERVICES	ACCESSIBILITY OF SERVICES	Affordability	Categorical, nominal	yes, no, not applicable (did not need/receive health care), decline to answer	(108)
COULD NOT AFFORD MEDICAL EXAMINATION/TREATMENT	ABILITIES OF PERSONS	То рау	Categorical, nominal	yes, no, not applicable (did not need medical examination /treatment), decline to answer	(104) (108)
INTERPRETING SERVICE	ACCESSIBILITY OF SERVICES	Appropriateness	Categorical, nominal	yes, no, not applicable (never received health care/ did not need interpretation), decline to answer	-
DISCUSSION OF TREATMENT OPTIONS/SIDE EFFECTS	ACCESSIBILITY OF SERVICES	Appropriateness	Categorical, nominal	always, sometimes, rarely, never, not applicable (did not receive health care), decline to answer	(108)
VACCINATION AGAINST COVID-19	ABILITIES OF PERSONS	To engage	Categorical, nominal	yes, all doses required, yes, but not all doses required, no, decline to answer	-
PREVENTIVE MEASURES SARS-COV2	ABILITIES OF PERSONS	To engage	Categorical, nominal	washing your hands for 20 secs with soap and water, use sanitizers, wear face mask when in closed public spaces, keep social distance, taking over the counter medicines, change diet, other, not applicable (did not practice any protective measures), decline to answer	(105)

2.5 DATA ANALYSIS

Data obtained in this research was summarized using descriptive statistics. The most suitable descriptive statistics were chosen depending on the variable's type, as follows: frequencies and proportions were computed for nominal and ordinal variables; the mean and standard deviation (SD), or the median and interquartile range, were used for quantitative variables, according to the coefficient of variation (CV). The CV is a relative measure of dispersion, that is expressed as a percentage, and represents the ratio between the standard deviation and the mean (112). The mean and SD were used whenever the variable was not dispersed (CV less than 50%), and the median and interquartile range were the preferred statistics whenever the variable was dispersed (CV greater than 50%). Data was entered into an SPSS database and analyzed using the IBM®SPSS® Statistics version 28.

3. RESULTS AND DISCUSSION

3.1 RESULTS

3.1.1 1st domain: sociodemographic-, migration-, health care-, and covid-19-related variables

A total of 36 refugee participants were included in the study (members of 12 families and eight individual participants). As previously stated, the interviews took place at the most suitable location for the participant. A total of 19 beneficiaries of the project "É UMA VIDA" were interviewed at their respective homes and 15 beneficiaries of the project "NO Border" at CRESCER's headquarters, except for two who were interviewed at Associação Portuguesa de Esclerose Múltipla (with which CRESCER association has a cooperation agreement), due to the greater proximity to the participants' homes.

A total of four cultural mediators collaborated in the study interpreting into Arabic, Kurdish, and French, and assisted with the interpretation of 21 interviews. Articulation with this thesis' author was mainly in English, except for one cultural mediator who spoke fluent Portuguese. The questions were then interpreted into the native language of the participant.

The mean age of the participants was 35 years (SD 10.24 years), with over half being male (n=20, 55.6%) (Figure 12).

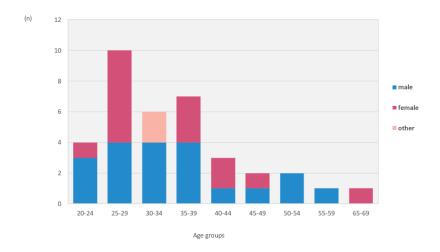


Figure 12. Age group distribution disaggregated by gender of participants

As shown in Figure 13, of the 36 participants, 26 (72.2%) were married and the majority had an Islamic religious background (n=25, 69.4%).

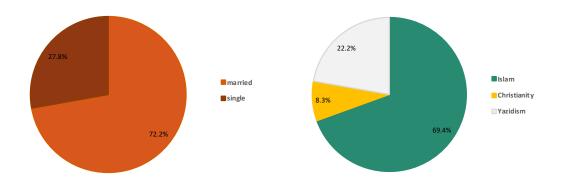


Figure 13. Marital status and religion of participants

The participants were from seven countries across the Middle East, Asia and Africa (mainly Afghanistan, Iraq and Syria) (Figure 14) and had all been integrated in the government's Refugee Reception Program. The median length of their stay in Portugal was 17 months by the time the questionnaire was applied.

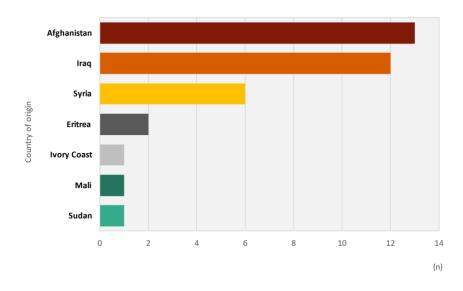


Figure 14. Countries of origin of the participants

Most participants had at least a secondary school education (n=25, 69.4%) (Figure 15). The majority of participants were not verbally proficient in Portuguese (n=23, 63.9%) and nine (25%) were proficient in English. In six interviews where the house representatives were fluent in English, they acted as an interpreter for the other family member(s) included in the study.

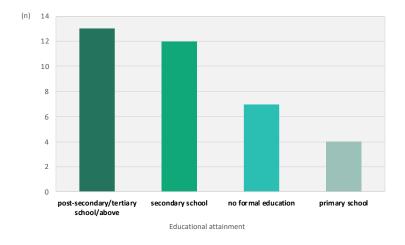


Figure 15. Educational attainment of participants

Concerning employment, the great majority of participants were unemployed (n=28, 77.8%), including nine (25%) housekeepers. With a median of four persons living in the same dwelling, all of the participants expressed some degree of difficulty making ends meet, of which 19 (52.8%) admitted making a living with great difficulty (Figure 16).

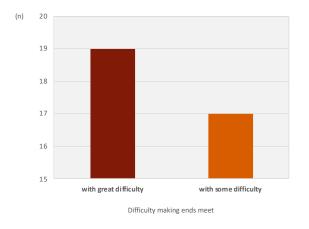


Figure 16. Participant's difficulty making ends meet

All 36 participants were registered in a primary healthcare center and, during the pandemic, 34 (94.4%) used healthcare services. Regarding infection with SARS-CoV-2, only two participants were never tested, while the majority of participants never tested positive (n=21, 58.3%), and a total of 13 (36.1%) tested positive. Among the latter, only one was admitted to the hospital due to severe COVID-19. Demographic characteristics and information regarding COVID-19 are shown in Table IV.

Table IV. 1st domain: sociodemographic-, migration-, healthcare services-, and COVID-19-related variables

VARIABLE	FREQUENCY (n)	%
Employment status		
unemployed	19	52.8
housekeeper	9	25.0
employed	8	22.2
Number of people in household (Median, IQR)		
	4	4
Integration Refugee Reception Program (yes)		
	36	100
Native language		
Arabic	10	27.8
Kurdish	10	27.8
Dari	8	22.2
Pashto	5	13.9
Tigrinya	2	5.6
French	1	2.8
Portuguese verbal proficiency		
not at all	2	5.6
not well	21	58.3
well	12	33.3
very well	1	2.8
Primary Care Center registration (yes)		
	36	100
Length of stay in Portugal, months (Median, IQR)		
	17	45
Healthcare services utilization (yes)		
Healthcare services utilization (yes)	34	94.4
***	34	94.4
Healthcare services utilization (yes) Test positive to coronavirus no	34	
Test positive to coronavirus		58.3
Test positive to coronavirus no yes	21	94.4 58.3 36.1 5.6
Test positive to coronavirus no	21 13	58.3 36.1
Test positive to coronavirus no yes never been tested	21 13	58.3 36.1 5.6
Test positive to coronavirus no yes never been tested Admission to hospital due to COVID19	21 13 2	58.3 36.1 5.6
Test positive to coronavirus no yes never been tested Admission to hospital due to COVID19 no yes	21 13 2	58.3 36.1 5.6 33.3
Test positive to coronavirus no yes never been tested Admission to hospital due to COVID19 no yes never been tested/never tested positive	21 13 2 12 1	58.3 36.1 5.6 33.3 2.8
Test positive to coronavirus no yes never been tested Admission to hospital due to COVID19 no	21 13 2 12 1	58.3 36.1 5.6 33.3 2.8
Test positive to coronavirus no yes never been tested Admission to hospital due to COVID19 no yes never been tested/never tested positive Vaccination against COVID-19	21 13 2 12 1 23	58.3 36.1 5.6 33.3 2.8 63.9
Test positive to coronavirus no yes never been tested Admission to hospital due to COVID19 no yes never been tested/never tested positive Vaccination against COVID-19 no	21 13 2 12 1 23	58.3 36.1 5.6 33.3 2.8 63.9 2.8 69.4
Test positive to coronavirus no yes never been tested Admission to hospital due to COVID19 no yes never been tested/never tested positive Vaccination against COVID-19 no yes, but not all doses required yes, all doses required	21 13 2 12 1 23	58.3 36.1 5.6 33.3 2.8 63.9 2.8 69.4
Test positive to coronavirus no yes never been tested Admission to hospital due to COVID19 no yes never been tested/never tested positive Vaccination against COVID-19 no yes, but not all doses required yes, all doses required COVID-19 Preventive measures	21 13 2 12 1 23	58.3 36.1 5.6 33.3 2.8 63.9 2.8 69.4
Test positive to coronavirus no yes never been tested Admission to hospital due to COVID19 no yes never been tested/never tested positive Vaccination against COVID-19 no yes, but not all doses required yes, all doses required COVID-19 Preventive measures wore face mask	21 13 2 12 1 23 1 25 10	58.3 36.1 5.6 33.3 2.8 63.9 2.8 69.4 27.8
Test positive to coronavirus no yes never been tested Admission to hospital due to COVID19 no yes never been tested/never tested positive Vaccination against COVID-19 no yes, but not all doses required yes, all doses required COVID-19 Preventive measures wore face mask used sanitizers	21 13 2 12 1 23 1 25 10	58.3 36.1 5.6 33.3 2.8 63.9 2.8 69.4 27.8
Test positive to coronavirus no yes never been tested Admission to hospital due to COVID19 no yes never been tested/never tested positive Vaccination against COVID-19 no yes, but not all doses required yes, all doses required COVID-19 Preventive measures wore face mask used sanitizers washed hands for 20 secs	21 13 2 12 1 23 1 25 10	58.3 36.1 5.6 33.3 2.8 63.9 2.8 69.4 27.8 100 97.2 91.7
Test positive to coronavirus no yes never been tested Admission to hospital due to COVID19 no yes never been tested/never tested positive Vaccination against COVID-19 no yes, but not all doses required yes, all doses required COVID-19 Preventive measures wore face mask used sanitizers washed hands for 20 secs kept social distance	21 13 2 12 1 23 1 25 10	58.3 36.1 5.6 33.3 2.8 63.9 2.8 69.4 27.8 100 97.2 91.7 83.3
Test positive to coronavirus no yes never been tested Admission to hospital due to COVID19 no yes never been tested/never tested positive Vaccination against COVID-19 no yes, but not all doses required yes, all doses required COVID-19 Preventive measures wore face mask used sanitizers washed hands for 20 secs kept social distance didn't touch my face	21 13 2 12 1 23 1 25 10	58.3 36.1 5.6 33.3 2.8 63.9 2.8 69.4 27.8 100 97.2 91.7 83.3 36.1
Test positive to coronavirus no yes never been tested Admission to hospital due to COVID19 no yes never been tested/never tested positive Vaccination against COVID-19 no yes, but not all doses required	21 13 2 12 1 23 1 25 10 36 35 33 30 13	58.3 36.1 5.6 33.3 2.8 63.9 2.8 69.4 27.8

$3.1.2\ 2^{nd}$ domain: dimensions of accessibility of services and abilities of persons

Approachability and Ability to perceive

Table V presents participant responses related to the corresponding dimensions of *approachability* and *ability to perceive*. In this study, 25% of the participants stated not to have had access to information about COVID-19 in a language they understood. Almost a third of the participants relied on social media and family/friends to obtain information (n=11, 30.5%).

Almost all participants (n=35, 97.2%) needed some kind of health care during the pandemic. The large majority of participants (over 86%) were able to identify the most common symptoms of COVID-19 (113) and three of the less common symptoms (over 69%). The remainder of the less common symptoms (i.e., nausea or vomiting and diarrhea) had mixed results. False symptoms, although correctly identified by most responders (n=22, 61.1% and n=26, 72.2%), showed higher percentages of "I don't know". The majority of participants (n=21, 58.4%) did not believe or know that an asymptomatic person could spread the virus and up to one sixth (n=6, 16.7%) had the misconception that COVID-19 can be prevented by eating spicy food.

TABLE V. Approachability and Ability to perceive results

DIMENSION/QUESTION			RESPONSES N=36
			n (%)
APPROACHABILITY			
Did you have access to information about COVID-19 in a	language (tongue) v	ou understand?	
no	0.000		9 (25)
yes			27 (75)
,			
ABILITY TO PERCEIVE			
During the pandemic, what was your <u>main</u> source of info answer only)	rmation about COV	ID-19? (choose one	
news from the country where I currently live (PT)			10 (27.8)
non-governmental organizations			9 (25)
social media			8 (22.2)
news from my country of origin			5 (13.9)
friends or family			3 (8.3)
other			1 (2.8)
During the pandemic, did you ever need health			
care for any reason?			
no			1 (2.8)
yes			35 (97.2)
	Correct answers	Incorrect answers	I don't knov
	n (%)	n (%)	n (%)
The following are possible signs of COVID-19: (select true, false or don't know)			
fever or chills (true)	31 (86.1)	2 (5.6)	3 (8.3)
difficulty breathing or cough (true)	32 (88.9)	4 (11.1)	0 (0.0)
fatigue (true)	32 (88.9)	1 (2.8)	3 (8.3)
muscle or body aches (true)	31 (86.1)	3 (8.3)	2 (5.6)
new loss of taste or smell (true)	35 (97.2)	1 (2.8)	0 (0.0)
sore throat (true)	31 (86.1)	3 (8.3)	2 (5.6)
congestion or runny nose (true)	25 (69.4)	7 (19.4)	4 (11.1)
nausea or vomiting (true)	16 (44.4)	14 (38.9)	6 (16.7)
diarrhea (true)	14 (38.9)	12 (33.3)	10 (27.8)
constipation (false)	22 (61.1)	6 (16.7)	8 (22.2)
bleeding (false*)	26 (72.2)	3 (8.3)	7 (19.4)
A person who is not sick and who does not show			
symptoms of COVID-19 cannot spread the virus: (false)	15 (41.7)	15 (41.7)	6 (16.7)
COVID-19 can be prevented by eating spicy food:			

^{*}considered false as not contemplated in most symptoms lists, although some patients may present with bleeding

6 (16.7)

19 (52.8)

(false)

11 (30.6)

Acceptability and Ability to seek

As shown in Table VI, when receiving health care, 58.8% of the participants felt like healthcare professionals didn't always show respect towards their culture, including 17.6% who rarely or never felt respected.

More than half of the participants (n=22, 62.9%) didn't seek health care every time they needed it. Of the mentioned reasons for not seeking health care, most were related to the difficulty of getting a medical appointment, whether due to a long waiting list (n=16, 72.7%) or because the appointment got cancelled/postponed (n=6, 27.3%). Language difficulties were pointed out by 13 (59.1%) respondents and 12 (54.5%) considered their health problem not to be serious enough to justify seeking health care. A total of 10 (45.4%) respondents didn't know what to do or where to go for health care.

The main healthcare providers sought by the participants during the pandemic were the family doctor (n=23, 69.7%), the pharmacist (n=19, 57.6%), the hospital specialist doctor (n=17, 51.5%) and the emergency room (n=17, 51.5%). Only six (18.2%) sought counselling services. Regarding health services, most participants relied on the public sector, namely primary care centers (n=27, 81.8%) and public hospitals to get health care (n=26, 78.8%). Half of the participants (n=18, 50%) were unaware there was a national health hotline (linha SNS24).

TABLE VI. Acceptability and Ability to seek results

DIMENSION/QUESTION			RESPC N=	
	always	sometimes	rarely	never
	n (%)	n (%)	n (%)	n (%)
ACCEPTABILITY				
When receiving HC during the pandemic, did you feel that HC professionals were understanding and respectful of your culture?	14 (41.2)	14 (41.2)	5 (14.7)	1 (2.9)
			n (%)
ABILITY TO SEEK				
During the pandemic, did you seek health care every time you needed	d it?			
no			22 (6	2.9)
yes			13 (3	7.1)
If you did not always seek health care whenever you needed it, please	e indicate w	hy		
couldn't make an appointment because of long waiting list			16 (7	2.7)
language difficulties			13 (5	9.1)
my health problem was not serious			12 (5	4.5)
didn't know what to do			7 (3:	1.8)
appointment got cancelled/postponed			6 (2	7.3)
couldn't afford health care			6 (2	7.3)
fear of getting COVID-19			6 (2	7.3)
preferred to seek traditional/alternative medicine from my country of	origin		6 (2	7.3)
don't trust healthcare professionals			4 (1	3.2)
didn't know where to go			3 (1	3.6)
fear of discrimination			3 (1	3.6)
didn't know if I was entitled to health care			3 (1	3.6)
didn't have means of transportation			2 (9	.1)
fear of denunciation due to my legal situation			0 (0	.0)
other			2 (9	.1)
During the pandemic, which healthcare providers did you seek? (selection)	ct all that ap	ply)		
family medicine doctor			23 (6	9.7)
pharmacist			19 (5	7.6)
hospital specialist doctor			17 (5	1.5)
emergency room			17 (5	1.5)
dentist			14 (4	2.4)
nurse			7 (2:	1.2)
psychological & counselling services			6 (1	3.2)
traditional healer			1 (3	.0)
During the pandemic, which health services did you seek?				
primary care center			27 (8	1.8)
public hospital			26 (7	8.8)
private clinic/hospital			7 (2:	1.2)
non-governmental organization			5 (1	5.2)
other			1 (3	.0)
Do you know what is the health line SNS24 (linha SNS24)?				
no			18 (50)
yes			18 (50)

Availability and accommodation and Ability to reach

Table VII presents the results of the dimensions *availability and accommodation* and the *ability to reach*. Of the 26 respondents who contacted the healthcare center by phone or email, half (n=13, 50%) found it was very difficult to get medical advice through those channels of communication. When considering the physical mobility to the health center, most participants reported that it was very easy (n=17, 51.5%) or somewhat easy (n=9, 27.3%) to get to the primary care center or hospital. As most of the participants were unemployed and some were housekeepers (n=28, 77.8%), only four out of the six who worked and needed care during work hours had the occupational flexibility to go to a medical appointment or perform an exam.

TABLE VII. Availability and accommodation and Ability to reach results

DIMENSION/QUESTION			RESPO N=3	
	Very easy n (%)	Somewhat easy n (%)	Somewhat difficult n (%)	Very difficult n (%)
AVAILABILITY AND ACCOMMODATION				
How easy would it be for you to get medical advice from your healthcare center over the phone/email?	4 (15.4)	7 (26.9)	2 (7.7)	13 (50)
ABILITY TO REACH				
When you need immediate care how easy is it for you to get to the primary care center/hospital?	17 (51.5)	9 (27.3)	4 (12.1)	3 (9.1)
			n (%	%)
In case of need, are you able to go to a medical appoint exams during working hours?	ntment/perform	medical		
yes			4 (11	1)
no			2 (5	•
don't know			2 (5.	.6)
N/A (don't work)			28 (7	7.8)

Affordability and Ability to pay

When it comes to the direct costs of health care, over half of the participants (n=19, 54.5%) reported to have paid for health care (including medication). A total of 13 (39.4%) respondents experienced times when they couldn't afford a medical examination or treatment. The results of the dimension *affordability* and the *ability to pay* are shown in Table VIII.

TABLE VIII. Affordability and Ability to pay results

AFFORDABILITY	n (%)
AFFORDABILITY	
During the pandemic, did you have to pay for any health care services? no yes	15 (44.1) 19 (55.9)
ABILITY TO PAY	
During the pandemic, were there times when you could not afford a medical examination or treatment?	
no	20 (60.6)
yes	13 (39.4)

Appropriateness and Ability to engage

Table IX reports the dimensions *appropriateness* and the *ability to engage*. Over a third of the participants (n=11, 35.5%) were not offered an interpreting service when receiving health care and for the ones who were, interpretation was provided by the association CRESCER or a family member proficient in English.

A total of 22 (64.7%) participants reported that when receiving health care during the pandemic, healthcare professionals did not discuss with them treatment options or treatment side effects. Most participants (n=35, 97.2%) had received vaccination against COVID-19, of which 25 (69.4%) had an incomplete vaccination schedule. In what concerns COVID-19 preventive measures, all the participants wore face masks and the large majority (n=30, 83,3%) used sanitizers, washed their hands for 20 seconds, and kept social distance. Around 30% of participants changed their diet or took over the count medicines in order to protect themselves from SARS-CoV-2 infection.

TABLE IX. Appropriateness and Ability to engage results

DIMENSION/QUESTION			RESPON: N=36	
			n (%)	
APPROPRIATENESS				
When receiving health care were you ever offered an i	nterpreting servic	ce?		
no			11 (35.	5)
yes			20 (64.	5)
	always	sometimes	rarely	neve
	n (%)	n (%)	n (%)	n (%)
When receiving health care during the pandemic,				
have healthcare professionals discussed with you				
your different treatment options, including				
possible side effects?	12 (35.3)	11 (32.4)	3 (8.8)	8 (23.5)
ADULTY TO ENCACE			n (%)
ABILITY TO ENGAGE				
Were you vaccinated against COVID-19?				
no			1 (2.8)	•
yes, but not all doses required			25 (69	-
yes, all doses required			10 (27	.8)
COVID-19 Preventive measures			26/40	0)
wore face mask			36 (10	•
used sanitizers			35 (97	•
washed hands for 20 secs		33 (91.7)		
kept social distance			30 (83	
didn't touch my face			13 (36	•
changed my diet			7 (19.	•
took over the counter medicines			4 (11.	
other preventive measures			1 (2.8	3)

3.2 DISCUSSION

This research intended to describe the sociodemographic, migration and COVID-19 characteristics of refugees living in Lisbon, and to describe the dimensions of health care access by refugees during the COVID-19 pandemic in consistence with Levesque's Patient-Centered Framework.

A total of 36 refugees participated in this study, with a mean age of 35 years, and over half were male (n=20). The participants were from seven countries across Middle East, Asia and Africa, had all been integrated in the government's Refugee Reception Program, and had a median length of stay in Portugal of 17 months. Of the 36 participants, 26 were married, with a median of four persons living in the same dwelling, and the majority had an Islamic religious background (n=25). Most participants had at least a secondary school education (n=25). The majority of participants were not verbally proficient in Portuguese (n=23) or English (n=27). The large majority of participants were unemployed (n=28) and all expressed some degree of difficulty making ends meet. All participants were registered in a primary healthcare center and, during the pandemic, 34 used healthcare services. The majority of participants never tested positive for SARS-CoV-2 (n=21), and one was admitted to hospital due to severe COVID-19.

Sociodemographic data on refugees and asylum seekers resettled in Portugal is dispersed and often incomplete. Bearing in mind the nature of the convenience sampling method (which is not intended to represent the whole population) it was decided to compare, in a descriptive way, the socioeconomic characteristics of refugees in the sample, with official data.

According to available national data from the last five years (which corresponds to the longest length of stay of this study's participants), the sociodemographic distribution of refugees was overall similar to that in this study's sample. For example, most refugees - including children - were male (around 68% in 2018, around 60% in 2020 and 52% in 2021 compared to 55.6% in the sample) (60,114). Additionally, the most representative

age group among adult refugees (over 18) was 19-39 years (89% in 2018, 78% in 2019, 76% in 2020 and 66% in 2021) (60), similarly to the age distribution of the study (in which n=27, 75% aged 21-38 years). The most frequent countries of origin of the participants in this study (Syria, Iraq, Eritrea, and since 2021, Afghanistan) are also among the main five countries of origin of refugees and asylum-seekers in Portugal in the last five years (114). National data concerning the educational attainment of refugees is very limited. In 2021, the educational level of refugees arriving in Portugal was unknown up to a 40%, including Afghan refugees who were the most prevalent group arriving in the country. For those whose educational level was known, there was a higher prevalence of primary school attainment, in contrast to this research, where the majority had at least a secondary school education (60). Regarding employment, in 2020 and 2021 around 40% of the refugees were still unemployed at the end of the integration program, whilst in this study, unemployment reaches almost an astounding 78%. Similarly to the findings of this research, in 2021, there were high percentages of registration of newly arrived refugees in the NHS, namely over 80% in all programmed entry mechanisms (except for the Afghans, which was 69.4%) (60).

Approachability and Ability to perceive

When considering healthcare services' approachability, especially in public health emergencies such as the COVID-19 pandemic, it is essential that services devise strategies of communication in which information is available, clear, and adequate to the audience it serves, so that preventive and control measures can be promptly and efficiently followed. Inclusive communication in health care should take into consideration not only the different cultural backgrounds of the recipients (namely by making information culturally adequate and available in different languages) but also ensure that it reaches the intended public in a timely manner, so that services can be identified by users. Although several entities such as the Directorate-General of Health, NGOs, IOM, and particularly ACM publicized multilingual information about COVID-19, in this study 25% of the participants stated not to have had access to information about COVID-19 in an understandable language. Studies in countries such as the U.K.

and Brazil similarly showed that there was an insufficient communication effectiveness with asylum seekers, due to a lack of culturally and linguistically adequate information about the pandemic (115).

Ability to perceive need for care is highly influenced by health literacy, knowledge and beliefs about health (92). The main sources of information on COVID-19 chosen by the participants were of informal nature, such as social media and friends/family, which accounted for almost a third of the responses. This finding is in line with other studies, which outline the role of social media as a source of information about COVID-19 (46,116,117). Factors such as age, language proficiency, education, economic resources, and length of stay in the country, may all have played a part in the choice of the information source. Healthcare services that are not approachable, by not conveying culturally and linguistically appropriate information, can negatively interact with people's ability to perceive, by the lack of access to reliable information. People may then turn to sources of information that are easy, readily available, and free of language barriers like social media, as outlined in a systematic review on the use of social media during the pandemic by ethnic minorities and migrants (including refugees) (117). Social media channels may be in turn a vehicle for health misinformation particularly during public health emergencies, such as the pandemic of COVID-19, with negative impacts on people's health behavior, such as enhancing vaccine hesitancy and the use of unproven treatments (117–119).

In this study, the majority of participants were knowledgeable about the most common symptoms of COVID-19, which can be partially explained by the high level of education of the participants, and the timing of the study (circa two years of pandemic). Nevertheless, unawareness about the asymptomatic transmission of the virus was also common, and there were up to one sixth of respondents with the misconception that COVID-19 can be prevented by eating spicy food. The literature on the levels of knowledge about transmission and symptoms of COVID-19 among forcibly displaced people is heterogeneous, but tendentially shows that lower levels of knowledge and health literacy are more likely in refugees with low educational attainment and vice versa (98,106,116,120,121). Other factors that probably played a role in knowledge levels are

the different settings of the studies (camps versus urban resettlements), timing of the studies/time elapsed since the beginning of the pandemic (and thus production of knowledge about the novel virus), and language proficiency.

Acceptability and Ability to seek

When receiving health care, most participants of this study felt like healthcare professionals didn't always show understanding and respect towards their culture, including almost a fifth, who rarely or never felt culturally respected. This finding elicits a lack of cultural competence, which is defined as the ability of systems to provide care to patients with diverse values, beliefs and behaviors, including tailoring delivery to meet patients' social, cultural, and linguistic needs (122). Lack of cultural competence in the provision of healthcare services compromises its acceptability by users (123). Cultural and religious differences between participants and their healthcare providers may have played a role in this dimension, as most refugees were of Islamic background, in contrast with the predominant Christian-embedded culture of the host country. There is a scarcity of data in the literature on refugees' input on cultural competence in the healthcare setting (124). Findings of the qualitative arm of a European study on healthcare of migrants and refugees highlighted the self-reported cultural competence inadequacy of healthcare providers in all ten participating countries (Portugal not included) (125). Similarly, studies with healthcare professionals in Portugal acknowledge the cultural challenges in providing care to migrants, including the lack of cultural competence training (126) and the need to incorporate cultural mediators in healthcare services (127,128). Healthcare professionals' unawareness and unpreparedness regarding certain aspects of the culture of refugees and other migrants, may lead to feelings of rejection and imperil health care access through the avoidance of healthcare providers (50) thus endangering acceptability. Additionally, lack of respect towards the culture of migrants and refugees in the form of discrimination or xenophobia is also a well-known barrier to health care (52,84,123), further compromising access. Results from a training program on cultural and individual diversity for primary healthcare providers in Portugal during the COVID-19 pandemic, which included themes such as ethnic/racial minorities, global motility and refugees, sex

and gender, spirituality and religion among others, showed an improvement on cultural diversity awareness, knowledge and skills, and contributed to reducing feelings of discrimination among healthcare professionals (90).

Ability to seek care was also compromised in this research as most participants didn't seek health care every time they needed it. Structural barriers to health care such as long waiting times, cancellation or postponing of medical appointments, language difficulties, and unfamiliarity with the health system, were appointed by refugees as the main reasons for not seeking care, similarly to other studies on migrants and refugees' health care (49,81,100,125,129). It is unarguable that the COVID-19 pandemic put upon health care systems an overwhelming pressure limiting their capacity of response; particularly in Portugal, where patients' unmet needs for medical care in the first year of the pandemic were the second highest of the Organisation for Economic Co-operation and Development (OECD) countries, reaching to more than a third of the population and especially affecting people in the lowest quintile of income (130). Nevertheless, the chronicity of the same health care barriers encountered by migrants and refugees is attested by their presence long before the pandemic, both globally (123), and in several Portuguese studies among migrants (81,83,100), probably indicating that major interventions are required in reducing health systems inequalities.

Half of the participants were unaware about the existence of a national health hotline (linha SNS24). During the pandemic and particularly during lockdown, this phone line was mandated as the primary point of contact with the national health system, in order to alleviate pressure on health services. It acted as a source of information about preventive measures, provided case and contacts management, quarantine, isolation, and vaccination guidance, and when applicable, access to the respective certifications of work absence. Also of particular importance, it allowed free testing to people registered in the national health system, provided the initial management of people with COVID-19 symptoms and served as a referral system to healthcare providers according to the severity of symptoms (131). A non-COVID-19 line was also available in order to assess and direct people to medical consultation, if justified. Lack of awareness of refugees

about this telephone line may have impaired knowledge about health care options and modes of navigating the health system during the pandemic.

While the majority of healthcare providers sought by the participants were the family doctor, the pharmacist, the emergency room and the hospital specialist doctor, only a small percentage sought counselling services. These findings are in line with a systematic review of the underutilization and access to mental health services among refugees and asylum seekers in Europe (132). The distressing experiences faced by refugees act as risk factors for mental disease (33,133,134), doubling their chance to suffer from posttraumatic stress disorder and depression, when compared with economic migrants (132). The detrimental effect of the COVID-19 pandemic control measures on mental health, further accentuated this vulnerability in asylum-seekers (115), refugees and other migrants, through the increased perceptions of discrimination and unmet needs for medical care among others (135). The discrepancy between refugees' mental health needs and the actual mental care they receive, can be related to several factors rooted in the aforementioned barriers namely language difficulties, lack of timely appointments, unawareness regarding providers services (132,134,136) or constraints to virtual care access related to the pandemic (57). Additionally, cultural barriers, stigma associated with mental disease, and low self-perceptions on mental health are also important impediments to access, probably also contributing to the low rates of mental help-seeking among refugees (57).

Regarding health services, most participants relied on the public sector to get health care, which is probably explained by the economic insufficiency reported in the study.

Availability and accommodation and Ability to reach

During the pandemic, half of the respondents who contacted the healthcare center found it very difficult to get medical advice by phone or email. Restrictions on social contacts, especially during lockdowns, forced healthcare services into a fast transition to

alternative and non-face-to-face modalities of contact with users. In this study, there was limited *availability and accommodation* of services for refugees during the pandemic, as the offered means of obtaining a medical consultation were ineffective.

When considering the *ability to reach*, namely the physical mobility to the health center, most participants reported that it was easy to get to the primary care center or hospital. This is probably partially due to the fact that all of the respondents live in an urban setting, specifically in the country's capital, where tendentially there is a greater concentration of services and resources, including public transportation. As of November 2022, of the 1294 primary care units of the country, approximately 68% were concentrated in Porto and Lisbon regions (514 and 362 respectively) (137). Likewise, in 2021, most of the 107 country's public hospitals were located in Lisbon Metropolitan Area (24 hospitals) (138). In a study among immigrants living in Lisbon Metropolitan Area, the geographic proximity of the healthcare centers was found to be the main reason for their utilization (81). Another factor that may have facilitated responders' mobility was the use of public transportation for free, as refugees are attributed a gratuitous monthly travel pass during the monitoring phase of PMAR Lx.

The intent to assess the ability to reach through the occupational flexibility was limited in this study, as the great majority of responders were unemployed, and out of the few who were employed, not all needed health care.

Affordability and Ability to pay

Over half of the participants reported to have paid for health care, in spite of being exempt from user fees in the NHS. Nevertheless, *affordability* in this study was mainly related to paying for medication, as most responders mentioned expenses in the acquisition of pharmaceuticals and a minority sought dental care (which is mainly provided in the private sector). These findings are consistent with a study among immigrants in Portugal that showed greater difficulties for immigrants to acquire pharmaceuticals compared to

natives (86). The Portuguese NHS offers coverage of several, but limited services, namely medical appointments in primary care and specialized outpatient care, pharmaceuticals, and other services prescribed by physicians (139). Despite refugees' entitlement to user fees exemption, which enables them to receive the aforementioned services without costs, the NHS coverage for pharmaceuticals obeys a coinsurance scheme in which a parcel is paid for by the user (140). In 2022, pharmaceuticals and other medical goods constituted the main reason for OOP expenditures in OECD countries, due to a lesser extent of governments' coverage comparatively to inpatient/outpatient care. Moreover, in Portugal coverage for pharmaceuticals was below the average 59% of the OECD countries (141). Nevertheless, the extensive offer of generic medications should theoretically allow people with scarce economic resources to maintain their treatment at sometimes considerably lower costs. Concurrently, access to the government's cost-sharing in the acquisition of pharmaceuticals requires the presentation of a medical prescription (which is usually provided subsequentially to a medical appointment). A 2018 study in Portugal showed that migrants were more likely than natives to use medications without a prescription (142). Obstacles to medical appointments observed in this study, and therefore inability to obtain a prescription, may have also played a role in this dimension, by making refugees resource to over-thecounter pharmaceuticals (which are not covered by the NHS).

Dental care is mainly provided in the private sector as it has limited coverage in the NHS (140). In cases of oral cancer suspicion and in some situations of vulnerability, within which refugees are not included, NHS offers a dental pay check that covers for treatments free of charge (143).

Assessment of *ability to pay* showed that up to 40% of responders experienced times when they could not afford a medical examination/treatment, which can be contextualized in light of the high percentages of unemployment and difficulty in making ends meet reported by the participants. Costs associated with dental care, medical appointments or exams in the private sector (as an intent to cover health needs in a timely manner), and medications, were some of the appointed reasons for the inability to pay.

Appropriateness and Ability to engage

In terms of appropriateness and adequacy of services, over a third of the participants were not offered an interpreting service when receiving health care during the pandemic, regardless of the fact that the large majority were not proficient in Portuguese or English. In cases where interpretation was offered, it was mainly provided by the cultural mediators of the association CRESCER, which could partially be explained by the participants' median stay of 17 months in the country (when it's still taking place the monitoring phase of PMAR Lx). Lack of adequate linguistic communication between healthcare professionals and refugees leads to misunderstandings and misdiagnosis (50,129). In addition, it generates feelings of emotional distress, distrust, and perceptions of exclusion, and propels disconnection and underutilization of services by refugees (129,133). Although interpretation services provided by the CRESCER association may contribute to the fulfilment of refugees' linguistic needs when articulating with healthcare services during the monitoring phase of the PMAR Lx, devising long-term strategies to address this issue is warranted. With the intent to help bridging the communication gap between migrants and institutions, the High Commission for Migration provides a toll-free interpretation telephone service (144). Nevertheless, the line is not available 24/7 and it's not specific for health care purposes, making it unsuitable for emergency situations and prone to the inadequate interpretation of medical terminology.

Most participants reported that when receiving health care during the pandemic, healthcare professionals did not always discuss with them treatment options or treatment side effects. Poor technical and interpersonal quality of care contributes to restricting access (92). A review on primary care access among immigrants in Canada has shown that the lack of patient involvement in treatment decision-making, resulted in service dissatisfaction and eventually, change of healthcare providers (129). Conversely, a study with refugees and immigrants in Denmark during the pandemic, foregrounds the importance of the coproduction of health as means to deliver quality healthcare service to this vulnerable population, sustained by trustful relationships with healthcare

providers, which enhanced patient participation in decisions as well as their overall health care (145).

The large majority of participants were vaccinated against COVID-19 and adopted preventive measures against infection. This denotes significant participation in public health recommendations and therefore *ability to engage* in health care, in which the high level of education of the participants probably played a role. Although there was a high percentage of vaccination at the time of the study, most participants had an incomplete schedule. The findings on following precautions against SARS-CoV2 infection in this study were similar to a WHO worldwide survey of refugees and migrants on the self-reported impact of COVID-19 (46). In the latter, there was also a high adherence to measures (such as increased hand washing, social distancing and covering nose and mouth), although the ability to follow these precautions varied across regions, with refugees and migrants from the African and Southeast Asia showing higher non-compliance percentages due to the lack of living conditions (46).

3.3 STRENGTHS AND LIMITATIONS

To the extent of the authors' knowledge, this is the first study exploring health care access among refugees in Portugal during the COVID-19 pandemic. It also provided a platform for refugees' input on the subject, using a comprehensive framework on health care access, exploring both supply- and demand-side determinants, but with a description focused on refugees' abilities instead of services' accessibility dimensions. Most studies on access using the same framework explored the latter (108).

There are several limitations to this study. Despite the fact that the research was designed with the aim to holistically grasp all the dimensions of access contemplated in Levesque's theoretical framework, the study could not address all of the underlying determinants of access that characterize the complexity of the subject at hand. This complexity extends to the methodology of characterizing the dimensions and abilities of the framework. The process of allocating a variable and corresponding question to a specific dimension or ability of the framework is challenging, as some questions may be used to address more than a dimension or ability (108). In this study, variables were extracted from the literature and categorized in correspondence to the most commonly reported dimension/ability or according to the consensus between the authors.

The small sample size in this study can limit the generalization of the findings. In the same way, the non-probabilistic sampling and its centrality in just one refugee reception organization, for purposes of saving time and resources, may have resulted in a selection bias (95). However, since this was an exploratory study, it aimed to gain a better understanding and perceive initial information about healthcare access among refugees in Lisbon, rather than representing the refugee population in Portugal as a whole. Finally, the questionnaire refers to a timeline of more than two years which may have compromised the memory of the studied events and led to a recall bias (95).

3.4 IMPLICATIONS FOR FUTURE RESEARCH

Identified population characteristics and barriers to health care access in this research, may inform future studies on the health care needs of refugees in Portugal, as well as how health services could be improved to meet those needs. Findings in this research

also shed light on persistent challenges that require the devising of strategies and policies that ultimately reduce inequalities in health care access. However, more knowledge regarding the specificities of the refugee population in Portugal is required, in order to tailor interventions aimed at facilitating access to health care.

Studies with larger samples, involving more refugee hosting entities, and in different geographic locations of the country, would allow for better representativeness of the refugee population in Portugal, thus providing a more comprehensive understanding of health care access. Likewise, to better understand the complexity of health care access, especially among vulnerable populations who are in greater need of care, it is also necessary to explore the perceptions and experiences of both refugees and healthcare providers. Qualitative studies could allow for an in-depth insight into the specificities and needs of both access agents, therefore enabling useful, context-specific strategies.

4. FINAL CONSIDERATIONS

Access to health care is a complex concept, in which several dimensions on the supply side and demand side play a role. Improvement of health care access by refugees requires a comprehensive approach, that entails addressing the complexities and specificities of their vulnerability. This research suggests that old challenges are still to be overcome and that the COVID-19 pandemic posed an additional burden on health systems, which may have enhanced previous barriers such as long waiting times, cancellation, or postponing of medical appointments, language difficulties, and unfamiliarity with the health system. Straining of healthcare services by the pandemic, also led to alternative means of inperson care, which seemed particularly inefficient for refugees. As such, although all participants in this research were registered in the NHS, there were constraints in several dimensions of access.

Multiculturalism requires that healthcare services convey inclusive communication. This is particularly important in public health emergencies, in which linguistically and culturally adequate information is the cornerstone that ensures that the information reaches all segments of the population, allowing measures to be promptly followed. Additionally, the lack of cultural competence of healthcare services is a major hindrance to quality health care access, signaling the need to equip healthcare professionals with the necessary knowledge and skills on cultural awareness, through training programs and its integration into the academic curricula. Likewise, more investment in the inclusion of cultural mediators in healthcare settings is warranted, to help bridge the communicational gap between refugees and healthcare professionals. Economic difficulties, alongside the high percentage of unemployment verified in this study, call out the need to improve refugees' social determinants, thus contributing to reducing inequalities in health. Another key aspect of access, relates to the availability and dissemination of counselling services, considering the increased risk of mental diseases in the refugee population.

Finally, access to quality health care entails not only the provision of services that value refugees' cultural context, but that also comprehensively address their vulnerability, enable the mutual involvement of both caregivers and refugees in the care process, and propel the empowerment of refugees in their own health.

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ANNEXES

Annex 1. CRESCER's Executive Director Declaration of Authorization to conduct the study in collaboration with the Association

DECLARAÇÃO DE AUTORIZAÇÃO

Eu, Américo Nave, na qualidade de Diretor Executivo da Associação de Intervenção Comunitária CRESCER, com sede no Bairro Quinta do Cabrinha 3 – E/F 1300-906 Lisboa, venho por este meio declarar a colaboração da nossa Associação com a equipa de investigação do Instituto de Higiene e Medicina Tropical da Universidade Nova de Lisboa constituída por Vanessa Andreia Portela dos Santos Costa, Professora Doutora Maria do Rosário Martins e Dra. Sousan Al Hamwi na realização do estudo: Acesso aos Cuidados de Saúde em Tempos de Covid-19: As Experiências dos Refugiados em Lisboa.

Autorizamos igualmente que a equipa de investigação acompanhe as equipas técnicas aquando da realização das visitas domiciliárias aos beneficiários do nosso projecto É UMA VIDA.

LISBOA. 20 /03 / 2022

Crescer na Maior

Associação de intervenção comunitário Nido-Ent. 499 599

AMERICO NAVEOS

Diretor Executivo

Associação CRESCER

AUTORIZAÇÃO PARA VISITA DOMICILIÁRIA

Caro Sr./Sra

Chamo-me Vanessa Portela e sou estudante do Mestrado de Saúde Pública e Desenvolvimento do Instituto de Higiene e Medicina Tropical da Universidade Nova de Lisboa. Em colaboração com a Associação CRESCER, eu e as minhas orientadoras Professora Doutora Maria do Rosário Martins e a Drª Sousan Al Hamwi pretendemos realizar um estudo de investigação intitulado "Acesso aos Cuidados de Saúde em Tempos de COVID-19: as Experiências dos Refugiados em Lisboa".

O estudo tem a finalidade de caracterizar o acesso aos cuidados de saúde pelos refugiados durante a pandemia, de forma a identificar possíveis barreiras a esse acesso. Para poder realizar o estudo, necessito da sua gentil colaboração em responder a um questionário de cerca de 20 minutos de duração.

Solicito assim a sua autorização para acompanhar a Equipa Técnica da Crescer numa visita domiciliária em data conveniente, para lhe apresentar o estudo, esclarecer eventuais dúvidas e se concordar, aplicar o questionário.

HOME VISIT AUTHORIZATION

Dear Sir/Madam

My name is Vanessa Portela and I am a Master's student of Public Health and Development of the Institute of Hygiene and Tropical Medicine of Nova University of Lisbon. In collaboration with the Association CRESCER, me and my advisers Prof. Maria do Rosário Martins and Dr^a Sousan Al Hamwi, intend to conduct a research study called "Access to Healthcare in Times of Covid-19: the Experiences of Refugees in Lisbon".

The purpose of the study is to describe healthcare access by refugees during the pandemic, in order to identify possible barriers to that access. To be able to carry out the study, I would need your kind collaboration in answering a questionnaire which takes around 20 minutes to reply.

Therefore, I ask for your permission to accompany the CRESCER team in one of their home visits in a suitable date, in order to present you the study, clarify any doubts and if you agree, to apply the questionnaire.

In case you authorize the home visit, kindly date and sign this document. Thank you Sincerely,
Vanessa Portela, Master's student of Public Health and Development of Public Health and Development of the Institute of Hygiene and Tropical Medicine of Nova University of Lisbon
I hereby authorize the researcher Vanessa Portela to accompany CRESCER Technical Team in a home visit in an agreed upon date, for the purposes of the above-mentioned research study
Name
Signature
Date:/2022

DECLARAÇÃO DE GARANTIA DE CONFIDENCIALIDADE - Tradutores		
DECLARAÇÃO DE GARANTIA DE CONFIDENCIALIDADE - Traductores		
Eu, de nacionalidadecom documento de		
identificação nº, abaixo assinado, na qualidade de tradutor na colheita		
dados no estudo Acesso aos Cuidados de Saúde em Tempos de Covid-19: As Experiências		
dos Refugiados em Lisboa, declaro a minha compreensão e compromisso de garantia de		
confidencialidade sobre toda a informação a que tiver acesso e a não divulgá-la por quaisquer		
meios no presente ou futuro.		
A minha função destina-se exclusivamente à tradução dos dados colhidos e não terei acesso ao		
tratamento dos mesmos.		
Data/ 2022		
(Assinatura do tradutor)		

CONFIDEN	TIALITY AGREEMENT – INTERPRETER/TRANSLATOR
While assisting the r	research team of the Institute of Hygiene and Tropical Medicine of Nova
University of Lisbon	with interpretation/translation of the questionnaire as part of the research
study Access to Heal	thcare in Times of Covid-19: The Experiences of Refugees in Lisbon,
Ι	, national from
	, bearer of the identity document/residence permit #
	, hereby agree to respect the confidentiality of the information I
interpret/translate, w	hich I will not communicate, publish or share by any means in the present
or in the future.	
My duty is exclusive analysis of data.	ely to interpret/translate the information and I will not have access to the
	Date/ 2022
_	
	(Interpreter/translator signature)

FORMULÁRIO DE INFORMAÇÃO E CONSENTIMENTO INFORMADO

Estudo: Acesso aos cuidados de saúde em tempos de COVID-19: as experiências dos Refugiados em Lisboa

Investigadora Principal: Vanessa Andreia Portela dos Santos Costa, estudante do mestrado em Saúde Pública e Desenvolvimento do Instituto de Higiene e Medicina Tropical da Universidade Nova de Lisboa

Contacto: a21001488@ihmt.unl.pt

Orientadora: Professora Doutora Maria do Rosário Martins, Unidade de Saúde Pública Internacional e Bioestatística - Instituto de Higiene e Medicina Tropical, Universidade Nova de

Lisboa. Contacto: mrfom@ihmt.unl.pt

Co-orientadora: Dra. Sousan Al Hamwi, Instituto de Saúde Pública da Universidade do Porto

Exmo (a) Sr(a)

Venho por este meio convidá-lo(a) a participar neste estudo que faz parte de uma tese para a obtenção do grau de Mestre em Saúde Pública e Desenvolvimento, pelo Instituto de Higiene e Medicina Tropical da Universidade Nova de Lisboa, sob a orientação da Professora Doutora Maria do Rosário Martins e Dra. Sousan Al Hamwi. O estudo tem como objectivo descrever o acesso aos cuidados de saúde pelos refugiados durante a pandemia COVID-19 em Lisboa, Portugal. A sua contribuição é assim fundamental para permitir a identificação de eventuais dificuldades e ajudar a melhorar o acesso aos cuidados de saúde.

Ser-lhe-á pedido para responder a um questionário sobre o tema, de cerca de 20 minutos de duração. Este projecto destina-se exclusivamente a fins académicos e os dados colhidos serão tratados de forma confidencial e anónima, ou seja, o acesso aos mesmos é restrito à equipa de investigação e a sua identidade nunca será tornada pública dado que não há registo de dados de identificação pessoal. Havendo necessidade de tradutor para a colheita de dados, este atesta por escrito o seu compromisso de confidencialidade e de não divulgação dos dados. Os resultados deste estudo poderão ser publicados em revistas científicas.

A participação neste estudo não tem nenhum risco ou dano para a sua saúde nem lhe será pedido que realize outro procedimento além de responder ao questionário. Não há lugar ao pagamento de despesas, compensações monetárias nem qualquer outro benefício directo.

A sua participação neste estudo é voluntária, ou seja, é livre de desistir até terminar de responder ao questionário sem que isso lhe cause qualquer tipo de prejuízo.

Desde já muito obrigada pela sua atenção e se tiver alguma dúvida não hesite em pedir esclarecimentos ao investigador principal.

Vanessa Portela

Estudante Candidata ao grau de Mestre em Saúde Pública e Desenvolvimento pelo Instituto de Higiene e Medicina Tropical da Universidade Nova de Lisboa

DECLARAÇÃO DE CONSENTIMENTO INFORMADO

Declaro ter lido e compreendido este documento, tendo-me sido dada a oportunidade de fazer perguntas e esclarecer as minhas dúvidas. Confio na garantia de confidencialidade dos meus dados e que a minha identidade não será publicada. Entendo que a participação no estudo não me traz riscos nem benefícios directos. Percebo que tenho a possibilidade de desistir do estudo até terminar de responder ao questionário sem que isso me traga nenhum prejuízo.			
Pelo presente documento declaro que aceito de livre vontade participar no estudo.			
Data: / 2022			
Assinatura ou marca do participante:			
Assinatura do investigador:			
Se aplicável:			
Assinatura da testemunha:			
Impressão digital do participante:			

ESTE DOCUMENTO É COMPOSTO DE DUAS PÁGINAS E FEITO EM DUPLICADO: POR FAVOR ASSINE AS DUAS E GUARDE UMA PARA SI.

INFORMATION FORM AND INFORMED CONSENT

Study: Healthcare Access in times of COVID-19: the Experiences of Refugees in Lisbon

Principal Researcher: Vanessa Andreia Portela dos Santos Costa, master's degree student of Public Health and Development, Institute of Hygiene and Tropical Medicine of Nova University of Lisbon

Contact: a21001488@ihmt.unl.pt

Adviser: Maria do Rosário Martins, PhD, International Public Health and Biostatistics Unit -

Institute of Hygiene and Tropical Medicine of Nova University of Lisbon

Contact: mrfom@ihmt.unl.pt

Co-adviser: Dr. Sousan Al Hamwi, Institute of Public Health of University of Porto

Dear Sir

I hereby invite you to participate in this study, which is part of a thesis with a view to obtain a Master's degree in Public Health and Development, by the Institute of Hygiene and Tropical Medicine, Nova University of Lisbon, under the supervision of Professor Maria do Rosário Martins and Dr. Sousan Al Hamwi. The study aims to describe access to healthcare by refugees during the COVID-19 pandemic in Lisbon, Portugal. Your contribution is therefore essential to enable the identification of difficulties and help improving access to healthcare.

You will be asked to answer a questionnaire, which will take around 20 minutes. This project is exclusively for academic purposes and the collected data will be treated confidentially and anonymously, that is, access to the data is restricted to the research team and your identity will never be made public as there is no record of data with personal identification. If there is a need for an interpreter to collect information, the interpreter certifies in writing his commitment to confidentiality and non-disclosure of the data. The results of this study may be published in scientific journals.

Taking part in this study does not pose any risk or harm to your health, nor will you be asked to perform any procedure other than answering to the questionnaire. Participation in the study does not entitle to any paid expenses, monetary compensation or any other direct benefit.

Your participation in this study is voluntary, that is, you are free to withdraw until you finish answering the questionnaire, without it causing you any loss.

Thank you very much for your attention and if you have any questions, please do not hesitate to ask the principal researcher for clarification.

Vanessa Portela

Candidate student to the master's degree in Public Health and Development, Nova University of Lisbon

STATEMENT OF INFORMED CONSENT

I declare that I have read and understood this document, having been given the opportunity to ask questions and clarify my doubts. I trust in the guarantee of confidentiality of my data and that my identity will not be published. I understand that participating in the study does not bring me any direct risks or benefits. I realize that I have the possibility to withdraw from the study until I finish answering the questionnaire, without it causing me any loss. By this document I declare that I freely accept to participate in the study. Date: ____ / 2022 Participant's signature or mark: Researcher signature: If applicable: Witness signature: Participant's digital print:

THIS DOCUMENT COMPRISES TWO PAGES AND IS MADE IN DUPLICATE: PLEASE SIGN BOTH PAGES AND KEEP ONE FOR YOURSELF.

Annex 5. Questionnaire (English version) REFUGEES HEALTH CARE ACCESS SURVEY Date: ___ / ___ / 2022 **INFORMATION** Dear participant: The survey reports to the period comprised between the beginning of the COVID-19 pandemic in Portugal (March 2020) and today's date **SOCIODEMOGRAPHIC DETAILS** 1. Gender: male female other decline to answer 2. Age: years decline to answer 3. Highest educational attainment: primary school secondary school

post-secondary/tertiary school or above

	no formal education
	decline to answer
4. Marit	al status:
	single
	married/consensual union
	divorced/separated
	widowed
	decline to answer
5. Relig	ion:
	muslim
	christian
	judaic
	no religion
	other Please specify:
	decline to answer

6. Employment status:
employed
student
retired
housekeeper
unemployed
other Please specify:
decline to answer
7. Number of people in household (including yourself):
people
decline to answer
8. Considering your household's total monthly income, would you say that you are able to make ends meet?
easily
fairly easily
with some difficulty
with great difficulty
don't know
decline to answer

	MIGRATION DETAILS
9. Coun	try of origin:
_	decline to answer
10. Are	or were you ever integrated in the government's Refugee Reception Program:
	yes
	no
	don't know
	decline to answer
11. Leng	gth of stay in Portugal (months):
	months
	months
	don't know
	decline to answer

LANGUAGE
12. Native language:
decline to answer
13. How well do you speak Portuguese?
very well
well
not well
not at all
decline to answer
HEALTHCARE SERVICES
14. Are you registered in a Primary HealthCare Center?
☐ yes
□ no
decline to answer

(example	you use any healthcare services during the pandemic? s of healthcare services are: primary healthcare center, public hospital, private pital,pharmacy, dental services, non-governmental organization, etc.)
	yes
	no
	decline to answer
	COVID-19 INFORMATION
16. Did y	you ever test positive to coronavirus?
	yes
	no
	never been tested
	decline to answer
17. Were	you ever admitted to hospital due to COVID-19?
	yes
	no
	not applicable (never been tested / never tested positive)
	decline to answer

18. Wer	e you vaccinated against COVID-19?
	yes, all doses required
	yes, but not all doses required
	no
	decline to answer
40 D.m	
	ing the pandemic, what have you done to protect you and/or your family from onavirus?
	washing your hands for 20 seconds with soap and water
	use sanitizers
	wear face mask when in closed public spaces
	keep social distance
	not touching your face
	taking over the counter medicines
	change your diet
	other
	not applicable (did not practice any protective measures)
	The applicable (and the practice any protective measures)
	decline to answer

HEALTH ACCESS INFORMATION 20. Did you have access to the information you needed about COVID-19 in a language
(tongue) you understand?
☐ yes
no no
decline to answer
21. During the pandemic, what was your <u>main</u> source of information about COVID-19? (Choose one answer only)
news from my country of origin
news from the country where I currently live (Portugal)
social media
friends or family
place of worship
healthcare professionals
non-governmental organizations that support me
other Please specify
decline to answer

22. The following are possible signs of COVID-19: (select true or false)				
		true	false	don't know
	fever or chills			
	difficulty breathing or cough			
	fatigue			
	muscle or body aches			
	new loss of taste or smell			
	sore throat			
	congestion or runny nose			
	nausea or vomiting			
	diarrhea			
	constipation			
	bleeding			
	decline to answer		-4 00\/ID	40
	erson who is not sick and who does not show the virus:	symptoms	of COVID-	19 cannot
		true	false	don't know
	decline to answer			

24.	24. COVID-19 can be prevented by eating spicy food:				
			true	false	don't know
		decline to answer			
25.	Duri	ng the pandemic, did you ever need health ca	are for any rea	ason?	
		Voc			
	Ш	yes			
		No			
		dealing to answer			
	Ш	decline to answer			
26.	Duri	ng the pandemic, did you seek health care ev	verytime you ı	needed it	?
	П	yes			
	_				
	Ш	no			
		not applicable (did not need health care)			
] [
	Ш	decline to answer			

27. If you did not always seek health care whenever you needed it, please indicate why (select all that apply)
my health problem was not serious
didn't know what to do
didn't know where to go
didn't have means of transportation
couldn't make an appointment because of long waiting list
appointment cancelled/postponed
fear of discrimination
fear of denunciation due to my legal situation couldn't afford health care
didn't know if I was entitled to health care
☐ language difficulties
don't trust healthcare professionals
fear of getting COVID-19
preferred to seek traditional/alternative medicine from country of origin
other Please specify
not applicable (did not need health care / sought health care every time I needed it)
decline to answer

28. During the pandemic, which healthcare providers did you seek? (select all that apply)
family medicine doctor
☐ pharmacist
nurse
hospital specialist doctor
dentist
emergency room
psychological & counselling services
traditional healer
not applicable (did not seek health care)
decline to answer

29. During the pandemic, which health services did you seek?
primary care center
public hospital
private clinic/hospital
non-governmental organization
other please specify
don't know
not applicable (did not seek health care)
decline to answer
30. Do you know what is the health line SNS24 (linha SNS 24)?
yes
no no
decline to answer

31. When receiving health care during the pandemic, did you feel that healthcare professionals were understanding and respectful of your culture?		
	always	
	sometimes	
	rarely	
	never	
	not applicable (did not receive health care)	
	decline to answer	
	en you need immediate care how easy is it for you to get to the primary care nospital?	
	very easy	
	somewhat easy	
	somewhat difficult	
	very difficult	
	don't know	
	not applicable (never used health care services)	
	decline to answer	

33. In case of need, are you able to go to a medical appointment/perform medical exams during working hours?	
yes	
no	
don't know (never needed health care during working hours)	
not applicable (don't work)	
decline to answer	
34. How easy would it be for you to get medical advice from your healthcare center over the phone/email?	
over the phone/email?	
over the phone/email? very easy	
over the phone/email? very easy somewhat easy	
over the phone/email? very easy somewhat easy somewhat difficult	
over the phone/email? very easy somewhat easy somewhat difficult very difficult	

35. During the pandemic, did you have to pay for any health care services?		
	yes Where:	
	no	
	not applicable (did not need/receive health care)	
	decline to answer	
	ng the pandemic, were there times when you could not afford a medical tion or treatment?	
	yes	
	no	
	not applicable (did not need medical examination or treatment)	
	decline to answer	
37. Whe	n receiving health care were you ever offered an interpreting service?	
	yes	
	no	
	not applicable (never received health care / did not need interpretation)	
	decline to answer	

38. When receiving health care during the pandemic, have healthcare professionals discussed with you your different treatment options, including possible side effects?
always
sometimes
rarely
never
not applicable (did not receive health care)
decline to answer
END OF SURVEY
THANK YOU VERY MUCH FOR YOUR PARTICIPATION