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Access to Healthcare Services and Essential Medicines in GREEK Migrant Camps: an Online Cross-Sectional Study

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Abstract

During the last years, Greece has become the entry point of a high number of migrants and asylum seekers. The aim of this study was to assess the access to selected fields of primary healthcare, to emergency medical care, secondary healthcare and essential medicines among populations living in reception, temporary accommodation, and detention centres (migrant camps) in Greece. An online cross-sectional survey was conducted based on a self-administered questionnaire. Participants included indviduals working or volunteering in migrant camps in Greece. 64 individuals participated in this study. The most common health problem among people residing in migrant camps was mental health conditions. The access to each field of primary healthcare was assessed as minimum to non-existent by most of the participants. 47.2% assessed the access to emergency medical care as minimum/non-satisfactory, while 60.8% assessed the access to secondary healthcare as minimum to non-existent. Most participants assessed the access to all the medicines categories as minimum or moderate. Access to both primary and secondary health was given a lower grade in the East-Aegean islands compared to the mainland. Major health inequalities among populations residing in Greek migrant camps were highlighted in this study. A change in the current migration policies of Greece and the European Union is urgently needed.

Keywords Access to healthcare · Access to medicines · Asylum seekers, · Greece · Migrants

Introduction

During the last two decades, the numbers of forcibly displaced populations have dramatically increased worldwide, from 33.9 million in 1997 to 65.6 million0 in 2016 and 82.4 million in 2020. The most common causes of such population movements are the long-term conflicts and violence in countries such as Syria, Afghanistan, Iraq, South Sudan, and Sudan [1] [2]. From 2014 onwards, a significantly increased number of forcibly displaced populations have been risking their lives in their effort to reach the south European coasts, while European countries face a phenomenon with political, social, humanitarian, and public health implications [3]. Only in 2015, 857.363 immigrants and asylum seekers reached Greece [4]. To respond to these numbers,

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the first accommodation centres, also called "hotspots", were created in Greek islands in the same year [5]. People entering Greece were first routed to reception and identification centres. Following the required identification and registration procedures, those eligible for asylum were moved to temporary accommodation centres in the mainland. From there, refugees could resume their journey in Europe, most often to countries such as Germany, Austria, and Sweden [6] [7] [8]. However, several international developments, including the EU-Turkey deal, the (partial) border closure and fence building by several countries, led to the confinement of thousands of people in overcrowded centres, which were initially built to accommodate a much lower number of people only temporarily [6] [9] [10].

The National Healthcare Service (NHS) in Greece was already exhausted from the several years of economic crisis and strong austerity measures preceding the increased influx of migrants. The arrival of immigrants and their needs for healthcare provision only highlighted the existing gaps in healthcare [7] [8] [11]. As a result, several Non-Governmental Organisations (NGOs) offered healthcare and

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humanitarian assistance to the incoming populations, along with the local authorities [7].

Greece was not prepared to bear the increased burden on the NHS imposed by the large number of incoming populations seeking asylum, in combination with the ongoing effects of the economic crisis [8]. According to the World Health Organisation (WHO), immigrants' and refugees' health is generally complicated and affected by numerous factors in the countries of origin and destination, as well as during the journey [12]. Immigrants and refugees usually undertake dangerous journeys leaving their country of origin, and those who do arrive in Greece must often live under poor conditions [13]. The aim of the present study was to assess the level of access to selected fields of primary healthcare services, to emergency medical care, secondary healthcare services and essential medicines, as published by the WHO [14], among populations residing in reception and identification, temporary accommodation, and detention centres (further referred to as migrant camps) in Greece.

Methods

Study Design, Participants, and Procedure

This was a cross-sectional study. The referent population included healthcare and non-healthcare professionals working or volunteering in at least one migrant camp in an island or the mainland of Greece. Inclusion criteria were English language literacy, working or volunteering experience in a migrant camp in Greece, willingness to complete the questionnaire and agreement with the terms of use of provided data.

The data were collected using an online self-administered questionnaire. Data collection lasted from 20 September 2019 up to and including the 30 April 2020. The self-administered questionnaire was uploaded on a survey platform (SurveyMonkey Inc., San Mateo, California, USA), which could be accessed by the participants through a link. It was not possible to estimate the total number of individuals working/volunteering in migrant camps in Greece. Therefore, convenience sampling was used to approach the sample of this study. Specific organisations (governmental and non-governmental) active in providing healthcare services in Greek migrant camps and individuals from the network of the researchers were contacted and asked to participate and further forward the questionnaire to their networks. The online questionnaire was also distributed through social media, and particularly to groups popular among individuals offering healthcare and/or non-healthcare-related services to migrant/refugee populations in Greece.

Instruments and Outcomes

First, a pilot qualitative study was conducted, to identify the major healthcare fields with problematic access in Greek migrant camps. This included three in-depth interviews with three individuals with working/volunteering experience in Greek migrant camps. Interviews were conducted in Greek and included open-end questions, concerning the main barriers and inequalities that were identified in the literature. After transcription of the interviews and content analysis, four fields were identified, the access to which would be studied in the questionnaire: primary healthcare, secondary healthcare, emergency healthcare, and essential medicines. For primary healthcare, eight fields were identified: access to physician, paediatrician, dentist, midwife, family planning and contraception services, antenatal and perinatal care, neonatal care, and psychologist. Furthermore, five main barriers to primary healthcare were highlighted: understaffing, lack of satisfactory facilities, language/lack of translator, cultural barriers, and lack of knowledge regarding procedures. Additionally, 5 main barriers to secondary healthcare emerged: language/lack of translator, cultural barriers, lack of knowledge regarding procedures, location-inability to reach the secondary healthcare facility and long waiting times.

The questions of the questionnaire were first written in Greek. Translation and back-translation followed to ensure accuracy. Content validity was evaluated by an experts panel that evaluated the questionnaire, based on its clarity, completeness, accuracy, relevance, neutrality, and specificity.

The questionnaire consisted of seven sections and contained 49 closed-ended questions. The first section included socio-demographic questions and one question regarding the most common health problem inside the camp. The second section included questions regarding access to the identified fields of primary healthcare. The available answers were based on a 5-point Likert scale. Additionally, the choice "Not applicable" was available for participants with no knowledge/experience in the respective area. The third section included questions regarding the most common barriers to respective primary healthcare fields. The next section included questions regarding access to emergency medical care (5-point Likert scale and "Not applicable" option, as described above) and the average waiting time after calling for an ambulance. The fifth section included questions regarding access to secondary healthcare (5-point Likert scale and "Not applicable" option, as described above), the most common barriers (possibility to choose more than one answers and/or choose "Other" and use the free-text field, as described



above) and the waiting time for identification as "vulnerable" and transfer to a specialised medical care facility, according to the respective needs. The following section concerned access to essential medicines (5-point Likert scale and "Not applicable" option, as described above), as published by the World Health Organisation [14]. In the last section, participants were asked to grade access to primary and secondary healthcare services, respectively, from 1 to 10 (Supplementary file 1).

Statistical Analysis

Continuous variables with normal distribution are presented as mean ± standard deviation (SD) while continuous variables with not normal distribution as median (IQR). All types of access were evaluated based on a 5-point Liker scale ("no access", "minimum/non-satisfactory", "moderate", "satisfactory", "full access").

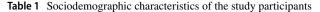
Results

Sample Characteristics and Most Common Health Problems in Migrant Camps

The online survey was visited 97 times and was completed by 64 individuals, who participated in the study and filled in either the whole or part of the questionnaire. The sociodemographic characteristics of the sample are presented in Table 1. The mean age was 38.6 ± 12.9 years. Most of the participants (40.6%) belonged to the age group of 31-40 years, and almost half of them had Greek nationality (46.9%). Most worked in a Reception and Identification or a Temporary Accommodation Centre (42.2% and 53.1%, respectively). The majority of participants (73.4%) worked at an NGO, while 88.2% of the participants working at a Governmental Organisation (GO) had Greek nationality. Respondents were distributed between the mainland (53.1%) and East-Aegean islands (46.9%). More than half of the sample (60.9%) had healthcare-related roles. Mental health conditions emerged as the most common health problem among people residing in migrant camps (56.3%). Communicable diseases were the next most prevalent response (29.7%). Non-communicable diseases followed (7.8%), while 4.7% of the respondents stated that the did not know.

Access to Primary Healthcare

The majority assessed the access to a physician, paediatrician, midwife, psychologist, and antenatal and perinatal care as minimum/non-satisfactory (50.9%, 42.1%, 33.3%, 42.1% and 42.1%, respectively), while access to a psychologist was assessed as minimum or non-existent by 64.9%



	N	%
Gender		,
Female	47	73.4
Male	15	23.4
Not reported	2	3.1
Age groups		
21–30	18	28.1
31–40	26	40.6
31–50	7	10.9
51–60	5	7.8
≥61	7	10.9
Not reported	1	1.6
Nationality		
Greek	30	46.9
British	10	15.6
American	5	7.8
Dutch	4	6.3
Swiss	3	4.7
Italian	2	3.1
Other	10	15.6
Area	10	10.0
Mainland	34	53.1
East Aegean Island*	30	46.9
Type of organisation	30	70.7
Non-Governmental Organisation	47	73.4
Governmental Organisation *	17	26.6
Type of organisation vs. nationality	17	20.0
Non-Governmental Organisation		
Greek	15	31.9
Other	32	68.1
Governmental Organisation	32	00.1
Greek	15	88.2
Other	2	11.8
Type of migrant/refugee camp	2	11.0
Temporary Accommodation Centre	34	53.1
Reception and Identification Centre	27	42.2
Detention Centre	3	4.7
Role	3	4.7
Healthcare-related roles	3	60.9
Physician/Medical Doctor	16	25.0
Nurse or Midwife	13	20.3
Psychologist	5	7.8
Paramedic	1	1.6
Osteopath	1	1.6
Epidemiologist	1	1.6
Pharmacist Pharmacist	1	1.6
Medical student	1	1.6
Non-healthcare-related roles	25	39.1
General assistant/coordinator	25 6	39.1 9.4
Social worker	2	3.1
Other	2 17	26.6



Table 1 (continued)

	N	%
Years of experience		
0–5	37	57.8
6–10	11	17.2
11–20	8	12.5
> 20	8	12.5
First time working in a migrant/refugee camp		
Yes	43	67.2
No	21	32.8

^{*}Also including the United Nations High Commissioner for Refugees (UNHCR)

of the respondents. Most stated that there was no access to a dentist, family planning and contraception advice services and neonatal care (50.9%, 36.8% and 43.9%, respectively). Regarding the main barriers to primary healthcare, the most common ones for all fields were understaffing (ranging from 49.1 to 75.4%) and lack of satisfactory facilities (ranging from 31.6 to 59.6%) (Table 2). With

a total of 49 respondents, the median grading of primary healthcare services was 5 (IQR 3–7).

Access to Emergency Medical Care and Secondary Healthcare

A total of 47.2% of the respondents assessed the access to emergency medical care as minimum/non-satisfactory. The average waiting time after calling for an ambulance was more than 30 min according to 61.5% of the respondents (Table 3). The access to secondary healthcare was minimum or non-existent for 60.8% of the respondents, with the most common barriers being location/inability to reach the secondary healthcare facility (60.8%), language/lack of translator and long waiting times (56.9) (Table 3). As regards to the waiting time for identification as "vulnerable", 27.5% and 29.4%, stated that this was less than 6 months and 6–12 months, respectively (Table3). With a total of 49 respondents, the median grading of access to secondary healthcare was 3 (IQR 2–6).

Table 2 Access to primary healthcare fields and common barriers to these fields (N=57)

Access to primary healthcare fields

	1 ,						
	No acce		nimum/non- isfactory	Moderate	Satisfactory	Full access	N/A
Physician	1 (1.8%)) 29	(50.9%)	17 (29.8%)	9 (15.8%)	1 (1.8%)	0
Paediatrician	12 (21.1	%) 24	(42.1%)	11 (19.3%)	5 (8.8%)	1 (1.8%)	4 (7.0%)
Dentist	29 (50.9	9%) 22	(38.6%)	3 (5.3%)	2 (3.5%)	1 (1.8%)	0
Midwife	16 (28.1	%) 19	(33.3%)	15 (26.3%)	4 (7.0%)	1 (1.8%)	2 (3.5%)
Family planning & Contrace tion advice	ep- 21 (36.8	20	(35.1%)	9 (15.8%)	2 (3.5%)	0	5 (8.8%)
Antenatal & Perinatal Care	13 (22.8	3%) 24	(42.1%)	10 (17.5%)	1 (1.8%)	1 (1.8%)	8 (14%)
Neonatal care	25 (43.9	9%) 20	(35.1%)	4 (7.0%)	2 (3.5%)	0	6 (10.5%)
Psychologist	13 (22.8	3%) 24	(42.1%)	9 (15.8%)	7 (12.3%)	3 (5.3%)	1 (1.8%)
	Most common	barriers*					
	Understaffing	Lack of Satisfactory facilities	Language/ Lack of trans lator	Cultural barriers s-	Lack of knowledg regarding proce- dures	e I do not know	Other
Physician	41 (71.9%)	34 (59.6%)	22 (38.6%)	11 (19.3%)	9 (15.8%)	0	4 (7.0%)
Paediatrician	43 (75.4%)	19 (33.3%)	13 (22.8%)	5 (8.8%)	5 (8.8%)	3 (5.3%)	8 (14.0%)
Dentist	42 (73.7%)	20 (35.1%)	7 (12.3%)	1 (1.8%)	4 (7.0%)	5 (8.8%)	7 (12.3%)
Midwife	42 (73.7%)	20 (35.1%)	16 (28.1%)	8 (14.0%)	1 (1.8%)	4 (7.0%)	4 (7.0%)
Family planning & Contraception advice	28 (49.1%)	18 (31.6%)	10 (17.5%)	14 (24.6%)	6 (10.5%)	9 (15.8%)	5 (8.8%)
Antenatal & Perinatal Care	35 (61.4%%)	22 (38.6%)	11 (19.3%)	8 (14.0%)	5 (8.8%)	11 (19.3%)	5 (8.8%)
Neonatal care	33 (57.9%)	19 (33.3%)	6 (10.5%)	3 (5.3%)	3 (5.3%)	13 (22.8%)	5 (8.8%)
Psychologist		22 (38.6%)	21(36.8%)	12 (21.1%)	12 (21.1%)	3 (5.3%)	3 (5.3%)

^{*}Participants could choose more than one answers

N/A not Applicable



Table 3 Access to emergency medical care, ambulance waiting times, access to secondary healthcare, most common barriers to secondary healthcare and waiting time for identification as "vulnerable" and transfer according to respective needs

	N	%
Access to emergency medical care (N = 53)		'
No access	0	0.0%
Minimum/non-satisfactory	25	47.2%
Moderate	13	24.5%
Satisfactory	12	22.6%
Full access	2	3.8%
N/A	1	1.9%
Ambulance waiting times $(N=52)$		
5 min or less	0	0.0%
5—15 min	2	3.8%
15—30 min	12	23.1%
30—45 min	14	26.9%
More than 45 min	18	34.6%
N/A	6	11.5%
Access to secondary healthcare (N=51)		
No access	6	11.8%
Minimum/non-satisfactory	25	49.0%
Moderate	11	21.6%
Satisfactory	6	11.8%
Full access	2	3.9%
N/A	1	2.0%
Most common barriers to access secondary healthcare (N	N = 51)
Location, inability to reach the secondary healthcare facility	31	60.8%
Language/lack of translator	29	56.9%
Long waiting time	28	54.9%
Lack of knowledge regarding procedures	12	23.5%
Cultural barriers	10	19.6%
Other	6	11.8%
I do not know	2	3.9%
Waiting time for identification as "vulnerable" and transfing to respective needs $(N=51)$	er acc	ord-
Less than 6 months	14	27.5%
6–12 months	15	29.4%
More than 12 months	4	7.8%
N/A	18	35.3%

N/A not applicable

Access to Essential Medicines

For each category of medicines, access was assessed as minimum by most of the respondents (ranging from 26.0 to 54.0%), except for solutions correcting water, electrolyte and acid-base disturbances, the access to which was assessed as moderate by the majority (28.0%). Non-existent access was the highest for medicines for mental and behavioural disorders (34.0%), vitamins and minerals

(24.0%), vaccines (24.0%) and ophthalmological preparations (20%) (Table 4).

Differences Based on the Location of the Camp and the Type of Organisation

The median grades of both primary and secondary health-care services was lower in East-Aegean islands (3 and 2, respectively) compared to the mainland (6 and 5, respectively). Similarly, the median grades of both primary and secondary healthcare services were lower from respondents working at an NGO (4 and 2.5, respectively), compared to a GO (7 and 6, respectively) (Supplementary Table 1).

Discussion

This study aimed to assess the access to selected categories of healthcare and to essential medicines, among populations residing in migrant camps in Greece. Most respondents assessed access to each studied field of primary healthcare as minimum/non-satisfactory, or non-existent. Similar findings were made for access to emergency medical care and secondary healthcare, with most of the respondents assessing them as minimum/non-satisfactory. Access to essential medicines also appeared problematic, with most of the respondents assessing it as minimum or moderate for each medicine category.

This study's results highlighted mental health conditions as the most common health problem among people residing in Greek migrant camps. This is not a surprising finding, as 3–4% of adult populations affected by emergencies will experience a severe and 15–20% a mild/moderate mental disorder 12 months after the emergency [15]. High prevalence of mental health conditions has also been reported among individuals residing in the Calais and Moria migrant camps [16] [17], as well as refugees/asylum seekers residing in different countries outside their country of origin [18]. This finding underlines the urgent need of access to psychological services among migrant populations, during what has been described as a mental health crisis [19] [20]. Alarmingly, more than half of the respondents stated that access to a psychologist is either minimum or non-existent.

The herein reported low rates of access to selected fields of primary healthcare and the identified barriers to primary healthcare among migrants/refugees in Greece, have also been observed in other studies [6] [21], while socio-cultural differences and changes in the healthcare provisions over time have also been reported [22]. Of note, the overall grading of access to primary healthcare was lower in East-Aegean islands, compared to the mainland. These findings are in line with the results of a recent research, that reported significant understaffing in severely



Table 4 Access to essential medicines, as published by the World Health Organization (WHO 2017) (N = 50)

	No access	Minimum/non- satisfactory	Moderate	Satisfactory	Full access	N/A
Medicines for pain and palliative care	1 (2.0%)	21 (42.0%)	12 (24.0%)	9 (18.0%)	6 (12.0%)	1 (2.0%)
Anti-allergic and medicines used in anaphylaxis	3 (6.0%)	17 (34.0%)	9 (18.0%)	12 (24.0%)	6 (12.0%)	3 (6.0%)
Antibiotics	1 (2.0%)	17 (34.0%)	11 (22.0%)	16 (32.0%)	3 (6.0%)	2 (4.0%)
Cardiovascular medicines	3 (6.0%)	21 (42.0%)	16 (32.0%)	4 (8.0%)	3 (6.0%)	3 (6.0%)
Dermatological medicines (topical)*	4 (8.2%)	23 (46.9%)	12 (24.5%)	6 (12.2%)	2 (4.1%)	2 (4.1%)
Disinfectants and antiseptics	4 (8.0%)	19 (38.0%)	15 (30.0%)	5 (10.0%)	5 (10.0%)	2 (4.0%)
Gastrointestinal medicines	6 (12.0%)	17 (34.0%)	14 (28.0%)	7 (14.0%)	3 (6.0%)	3 (6.0%)
Vaccines	12 (24.0%)	13 (26.0%)	8 (16.0%)	11 (22.0%)	5 (10.0%)	1 (2.0%)
Ophthalmological preparations	10 (20.0%)	20 (40.0%)	10 (20.0%)	3 (6.0%)	2 (4.0%)	5 (10.0%)
Medicines for mental and behavioural disorders	17 (34.0%)	18 (36.0%)	8 (16.0%)	3(6.0%)	2 (4.0%)	2 (4.0%)
Medicines acting on the respiratory tract	3 (6.0%)	17 (34.0%)	16 (32.0%)	7(14.0%)	4 (8.0%)	3 (6.0%)
Solutions correcting water, electrolyte, and acid- base disturbances	7 (14.0%)	13 (26.0%)	14 (28.0%)	5 (10.0%)	5 (10.0%)	6 (12.0%)
Vitamins and minerals	12 (24.0%)	16 (32.0%)	12 (24.0%)	2 (4.0%)	3 (6.0%)	5 (10.0%)
Insulins and other medicines used for diabetes	1 (2.0%)	27 (54.0%)	13 (26.0%)	6 (12.0%)	1 (2.0%)	2 (4.0%)

N/A not Applicable

overpopulated migrant camps on Greek islands, with some camps even operating with no doctors or midwifes on-site [23].

Secondary healthcare provision to individuals residing in migrant camps is a more complicated process, as it is highly regulated by the Greek law and is provided in healthcare facilities outside the camp. Almost 2/3 of the respondents assessed the access to secondary healthcare as minimum to non-existent. Although quantitative data are not available on this topic, the struggles of asylum seekers, immigrants, and refugees in accessing healthcare services in Greece have been thoroughly described and justify this study's observations. Bureaucracy, austerity, understaffing, gaps in laws and regulations and changes in immigration policies over the years, have left vulnerable individuals, asylum seekers, unaccompanied children and children born in Greece from parents with irregular status having no access to public health services and treatment for chronic illnesses [24] [25]. The most common barriers to secondary healthcare in this study have also been identified in literature focusing on the refugee populations in Greece [7] [8]. It comes as no surprise that access to secondary healthcare was given a lower grade from participants in East-Aegean islands, compared to the mainland. Healthcare services on Greek islands had already been significantly compromised due to the longlasting austerity [26] and only deteriorated following the large influx of asylum seekers and the creation of migrant camps [8] [23] [27]. Important to note is the fact that Greek islands host a disproportionate number of asylum seekers, compared to the mainland [23].

Interestingly, access to both primary and secondary healthcare were given a lower grade from participants working at NGOs, compared to GOs. This finding may reveal the increased struggles NGOs face to provide healthcare in migrant camps. Several NGOs have reported difficulties in the creation and maintenance of registrations in Greece, referring to the high costs, increased bureaucracy, and inability to provide and maintain expensive high-quality healthcare [7]. Of note, most participants working at a GO had a Greek nationality. It can be assumed that many of them had experience working under governmental projects and may have given higher grades due to their long-term customisation and adjustment within the Greek NHS.

Another concerning finding of this study relates to the access to emergency medical care, which was assessed as minimum by almost half of the of the respondents, while more than half stated that the average waiting time after calling an ambulance exceeded 30 min. Although no quantitative data are available in the literature to the best of our knowledge, the Emergency Medical Service in Greece has been deeply affected by the long austerity, a problem that is more prominent in rural areas and islands [28] and supports this study's observations.

The access to essential medicines was not satisfactory, as assessed by the majority of this study's participants. Higher percentages for no access were recorded for medicines for mental and behavioural disorders, vitamins and minerals, ophthalmological preparations, and vaccines. To the best of our knowledge, there are no quantitative data on this topic, and considering the number of individual medicines



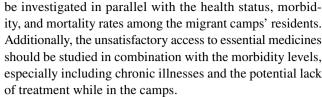
^{*}N = 49

included in each category, it is difficult to compare our results with those of other sources. Nevertheless, unvaccinated individuals have been identified in refugee camps in Turkey [29]. As there is a high variability among the incoming populations, regarding the country of origin and age, the vaccination status of migrants is often insufficient, based on the vaccination policies in the countries of destination [30] [31] [32]. This fact further highlights the need for full access to essential vaccines, especially considering the living conditions in overpopulated camps and the resulting easy transmission of vaccine-preventable diseases. The inefficient access to medicines for mental and behavioural disorders and the reported high prevalence of mental health disorders is another alarming observation of this study.

The significance of the current study lies in the collected quantitative data on an important and pressing matter that is mainly studied qualitatively in the literature. Our results revealed the overall inefficient healthcare coverage of individuals residing in overpopulated migrant camps in Greece. Attention needs to be given by Greek governments, which should acknowledge the urgency of comprehensive and inclusive laws and regulations on healthcare provision to vulnerable individuals, asylum seekers and refugees. Furthermore, the European Union needs to adjust its views and policies on the urgent matter of migration, realising that this phenomenon will persist for years to come, thus short-term emergency plans are no longer suitable for its management. It is obvious and largely acknowledged that the detention of migrants, asylum seekers and refugees in overpopulated camps is not sustainable. This becomes even more apparent, following the recent fire in the infamous Moria camp, which left thousands vulnerable in the face of no water supply, sewage system, proper hygiene, and medical care during the global COVID-19 pandemic [33].

The education of health professionals treating people in transit is critical and shall address health issues typical in populations residing in other parts of the world, as well as cultural differences, and managing special situations, such as post-traumatic stress disorder and human trafficking. Such education programmes are available in Australia, the USA and Canada [34–36]. Digital tools should also be considered, as they can provide an efficient and often costeffective way for people in transit to address some of their problems and potentially educate themselves on their rights. A smartphone-based, self-help app was created in the Arabic language and was evaluated in refugees with post-traumatic stress [37]. While digital tools can be a cost-effective and efficient way to assist the needs of populations in transit, attention should be given to the accessibility of such tools and digital literacy in the target population.

Further larger studies are needed to better describe, understand, and manage this complicated and multifactorial issue. The gaps in all levels and types of healthcare should



This study revealed some interesting findings regarding access to healthcare services and essential medicines among people residing in Greek migrant camps. However, it has the following limitations. The sample size was small, as the targeted population was hard to reach, and the often-busy schedule of potential participants made them less eager to fill in our questionnaire. The response rate of this online survey cannot be estimated since it is not possible to ascertain how many individuals might have seen the survey or its links but declined to participate. The selection bias is also acknowledged, as the individuals willing to participate are likely to have a more critical view on the access of migrants to healthcare and consider this as a significant problem. This online survey collected healthcare access information by individuals with healthcare-related and non-healthcare-related roles. It must be acknowledged that the former might be biased, as they are also partly assessing their own services. Additionally, the barriers described herein only relate to the healthcare services that are indeed available to migrants. The perspective of the affected individuals (migrants) could provide further views of barriers not addressed in this study's results. The questionnaire was only available in English, for convenience reasons, which might have inhibited some individuals from participating in the study and potentially lowered the number of the sample. Most respondents worked at NGOs, due to significant difficulties in getting in contact with the respective GOs. Also, the study's participants had different educational backgrounds, i.e., not all were medically trained. Finally, although a "Not applicable" option was always available, we cannot be sure that all respondents had full knowledge of the topic they were commenting on.

Conclusion

The results of this study revealed important health inequalities and lack of access to critical fields of healthcare and essential medicines among populations residing in migrant camps in Greece. Comprehensive changes in the migration policies and regulations are urgently needed in Greece and the European Union, along with the decongestion and improvement of living conditions in Greek migrant camps and the efficient staffing of medical care positions. Furthermore, efficient communication and collaboration between all bodies involved in the reception and accommodation of migrant populations is necessary.



Supplementary Information The online version contains supplementary material available at https://doi.org/10.1007/s10903-022-01425-6.

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Author Contributions EF, designed the survey, collected data, analyzed the data, drafted the original manuscript, and interpreted the results; MP, designed the survey, drafted the original manuscript, and interpreted the results, KG, Analyzed the data, drafted the original manuscript, and interpreted the results. All authors read and approved the final manuscript.

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Data Availability The data underlying this article cannot be shared publicly for the privacy of individuals that participated in the study. The data will be shared on reasonable request to the corresponding author.

Declarations

Conflict of interest NonE.

Ethical Approval This study was conducted according to the guidelines laid down in the Declaration of Helsinki. The study protocol and all procedures involving research study participants were approved by the institutional ethics committee of the European University of Cyprus. Potential participants were informed regarding the terms of use of the provided data by the researcher. Only following agreement with the terms of data use, could someone proceed to the questionnaire and participate in the study.

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