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BRIEF COMMUNICATION

Refugee Oral Health: A Global Survey of Current Policies and Practices

Elham Kateeb[1] · **Marc Sintes**[2] · **Sean Taylor**[2]

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Background

As of February 2021, there were 26 million refugees globally. Although refugees are defined and protected in international law [1], they are still a highly vulnerable population. Many have experienced physical and psychological trauma because of war, injuries, sexual violence, and gender-based violence [2].

The health and well-being of refugees occurs in complex and constantly evolving environments. Even refugees who obtain legal status in their host countries and undergo the process of acculturation are likely to be subjected to significant stress, suffer from racism and discrimination, and experience language and cultural barriers [2].

Oral diseases are neglected public health problems affecting over 3.5 billion people globally [3]. Oral health is a determinant of general health and quality of life and well-being. Oral diseases, while mostly preventable, cause pain and dysfunction that change the way people eat, speak, and interact with others [4]. There is a clear social gradient to oral diseases, particularly due to poor access to care. Therefore, underserved populations such as refugees bear the highest burden of these diseases and their consequences [5]. Oral diseases pose a big threat to the health and wellbeing of refugees [6–8]. Studies have indicated a high prevalence of oral disease and unmet oral healthcare needs in refugee populations, often exceeding the levels of disease and unmet care needs experienced by disadvantaged communities of the host country [7–11]. Most commonly, refugees experience high levels of dental caries, periodontal disease, oral lesions and traumatic dental injuries [7, 8, 11]. There is also evidence that refugees are less likely to access oral healthcare, and their first contact with a care provider will often be to seek pain relief [11].

Barriers to oral health care among refugees (Fig. 1) vary within and between countries due to diverse policies related to oral health and the varying legal status of refugees [12–14]. This brief report describes the current policies related to refugee oral health care in different countries and the dental services offered in these settings. This survey collected data from National Dental Associations (NDAs) with the aim of understanding access to oral health care, availability and affordability of oral health services, and current policies related to refugee oral health in different countries. Survey data was also used to develop an advocacy guide to help governmental and non-governmental organizations working in oral healthcare provision to promote oral health among refugees [15]. The guide raises awareness about the burden of oral diseases among refugees and provides a step by step plan to advocate for better oral health in this vulnerable population [15].

Methods

FDI World Dental Federation (FDI) surveyed 193 professional and national dental associations in 136 countries between June 2019 and August 2019 to investigate current policies and activities related to refugee oral health. The survey asked about activities related to oral health promotion, oral health care provision, and the organizations responsible for these tasks. Specifically, the survey asked about access to general healthcare and the organization responsible for providing healthcare to refugees, access to and funding of oral health care, dental screening on arrival for refugees, the type of services available and referral pathways, relevant national policies, and the role of respondent organizations in promoting oral health for refugees.

In addition, some demographic and economic data were collected about the respondent countries, including Health System Efficiency index (HSE), country demographics, the estimated number of refugees in the country and number

✉ Elham Kateeb
ekateeb@staff.alquds.edu; elhame20@gmail.com

[1] Oral Health Research and Promotion Unit, College of Dentistry, Al-Quds University, University Main St, P.O Box 89, Jerusalem, Palestine

[2] Education and Public Health Department, FDI World Dental Federation FDI, Geneva, Switzerland

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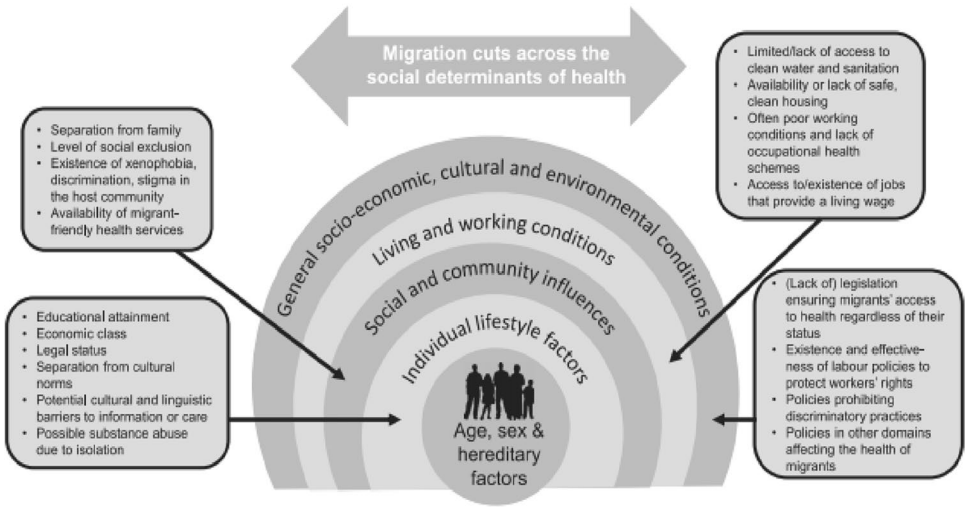

Fig. 1 Social determinants of health in migrants [7]

of dentists registered in the country. HSE was taken from the World Health Organization's ranking for 191 countries which uses a composite index of five health system indicators (health, health inequality, responsiveness-level, responsiveness-distribution, and fair-financing) [16]. The nine survey questions and their responses are presented in Table 1.

Data for questions 1 to 8 were collected at a country level (n = 74), when more than one answer received from the same country, a follow up email was sent to the NDAs to agree on the most accurate answer. Answers for question 9 were reported at the individual organization level (n = 108), thus, in few cases more than one organization in the same country reported their activities related to refugee oral health. The data collected were anonymous and did not include any personal data. The participation in the survey was voluntary and the research ethics committee at Al-Quds University checked all aspects of the current study.

Descriptive statistics were generated for each question as frequencies and percentages. Bivariable statistical analysis was conducted at a country level (n = 74) using Person's Chi Square to understand what country level factors influenced activities and policies related to refugee oral health in that country. Significance level was set to 0.05.

Results

One hundred and eight responses in total were received representing 74 countries, from Europe (n = 30), Africa (n = 18), Asia–Pacific including the Middle East (n = 16) and the Americas (n = 8) (Fig. 2). Two responses did not indicate the country. Most countries that have a high influx of refugees such as Turkey, Jordan, State of Palestine, Lebanon, and Uganda responded to this survey. Respondent countries characteristics are found in Table 2.

The results found that United Nations High Commissioner for Refugees (UNHCR) was clearly the main agency responsible for the healthcare of refugees (16 countries out of 73), especially in countries with low HSE ($x^2 = 52.9$, $p = 0.006$), and in Africa, ($x^2 = 68.9$, p. 0.001). Seventeen countries out of 73 reported that local governmental authorities and institutions are the ones responsible for refugees healthcare services. UNHCR, through its public health programs, work with governments and partners to provide emergency health services for refugees, improve local health services and include refugees in national health systems and plans [17]. Despite UNHCR usually acknowledging the burden of oral disease among refugees in its annual reports [17] and it is the main responsible agency in countries that have shortage in dental manpower ($x^2 = 52.0$, $p = 0.008$); there are still no established UNHCR programs that provide oral health care to refugees.

Among respondent countries, access to general healthcare services for refugees was free in 28% (n = 30), subsidized in 15% (n = 16) and paid at full cost in 7% of countries (n = 8). As expected, countries with higher HSE index had more free and subsidized healthcare services, ($x^2 = 24.9$, $p = 0.05$).

In this sample, costs of oral health care services were paid by host governments in 21% (n = 23) of respondent countries, (mainly in high HSE countries and in Europe) and by international non-governmental organizations in 11% (n = 12) of respondent countries (mainly in low HSE countries and in Africa), (HSE: $x^2 = 44.6$, $p = 0.007$, Region: $x^2 = 42.3$, $p = 0.012$).

Among respondent countries, five countries (4.6%) confirmed that there is an obligatory oral health screening for refugees when they first arrive. Three of these countries had high HSE and three had higher dentists to population ratio. However, these differences were not statistically significant. Among those five countries, two countries, New Zealand and Iran, refer people with oral disease or conditions identified

Table 1 Activities and policies related to refugee oral health in a sample of FDI member states

Survey Questions (n = number of respondent countries for each question)	Answers Frequency (%)
1. What is the main agency or organitation responsable for the healthcare of refugees in your country? (n = 73)	
•UNHCR	16 (14.8)
•IOM	4 (3.7)
•WHO	2 (1.9)
•UNRWA	2 (1.9)
•International charities	2 (1.9)
•Local charities	14 (13)
•Refugee Council	1 (0.9)
•Other	17 (15.7)
•Don't know	15 (13.9)
2. In general, what kind of access to healthcare do refugees have? (n = 72)	
•Free healthcare	30 (27.8)
•Susidized	16 (14.8)
•Full cost	8 (7.4)
•Don't know	18 (16.7)
3. How is the dental care mainly funded for citizens in your country? (n = 73)	
•Government-funded healthcare services	26 (24.1)
•Private healthcare insurance	8 (7.4)
•Out of pocket	29 (26.9)
•Other	10 (9.3)
Don't know	1 (0.9)
4. How is the dental care mainly funded for refugees in your country? (n = 73)	
•Government	23 (21.3)
•International NGOs	12 (11.1)
•Local NGOs	4 (3.7)
•Volunteers	5 (4.6)
•Out of Pocket	8 (7.4)
•Other	9 (8.3)
•Don't know	12 (11.1)
5. Is there an obligatory oral health screening for refugees when they first arrive in your country? (n = 74)	
•Yes	5 (4.6)
•No	55 (50.9)
•Don't know	14 (13)
6. If a condiction is identified during the oral health screening (obligatory or optional), is there a referral system to dentists in place? (n = 68)	
•Yes	23 (21.3)
•No	25 (23.1)
•Don't know	20 (18.5)
7. What type of dental services are offered to refugees when they first arrive? (Check all that apply)	
•Emergnecy care (n = 73)	34 (46.6)
•Theraputic care (n = 73)	10 (13.6)
•Preventive care (n = 74)	7 (9.5)
•None (n = 73)	18 (24.6)
•Don't know (n = 74)	10 (13.5)
8. Are there national policies or guidelines addressing any of the following issues in your country? (Check all that apply)	
•Policies related to general health (n = 74)	25 (33.7)
•Policies related to dental health (n = 74)	9 (12.2)
•Policies related to volunteering organizations working with refugees (n = 74)	15 (20.2)
•No special policies related to refugees (n = 74)	19 (25.7)
•Don't know (n = 74)	14 (18.9)
•Others (n = 74)	2 (2.7)
9. Are you or your National Dental Association involved in the following aspects regarding the oral health of refugees? (Check all that apply)	
•Policy develeopment (n = 100)	9 (9.0)
•Providing care (n = 101)	21 (20.7)
•Oral health promotional activities (n = 101)	24 (23.7)
•Advocacy (n = 101)	17 (16.8)
•None (n = 101)	47 (46.5)
•Other (n = 101)	6 (5.9)
•Don't know (n = 101)	3 (2.9)

through screening for further treatment. While screening for oral health upon arrival shows awareness of oral health's importance for refugees' wellbeing, failure to provide adequate referral services renders it ineffective [18]. In general, 23 countries (21.3%) reported referring refugee patients to dentists for more definitive treatment during obligatory or voluntary screening for oral health issues.

Among countries that provide some types of dental services to refugees when they first arrive, emergency oral health care was the main type of care offered by 34 countries, followed by therapeutic care offered by ten countries and preventive care offered by seven countries, Table 1. Providing emergency and therapeutic oral health care is necessary, but insufficient. Oral diseases prevention and oral health promotion activities should be integrated into all health promotion activities offered to refugees. In 24.6% of our respondent countries, no oral health care was provided at all.

Forty-nine countries out of 74 indicated that they had some type of national policy related to refugee health in place. While 53.9% of countries had policies devoted to refugees' general health or organizations working for refugees'

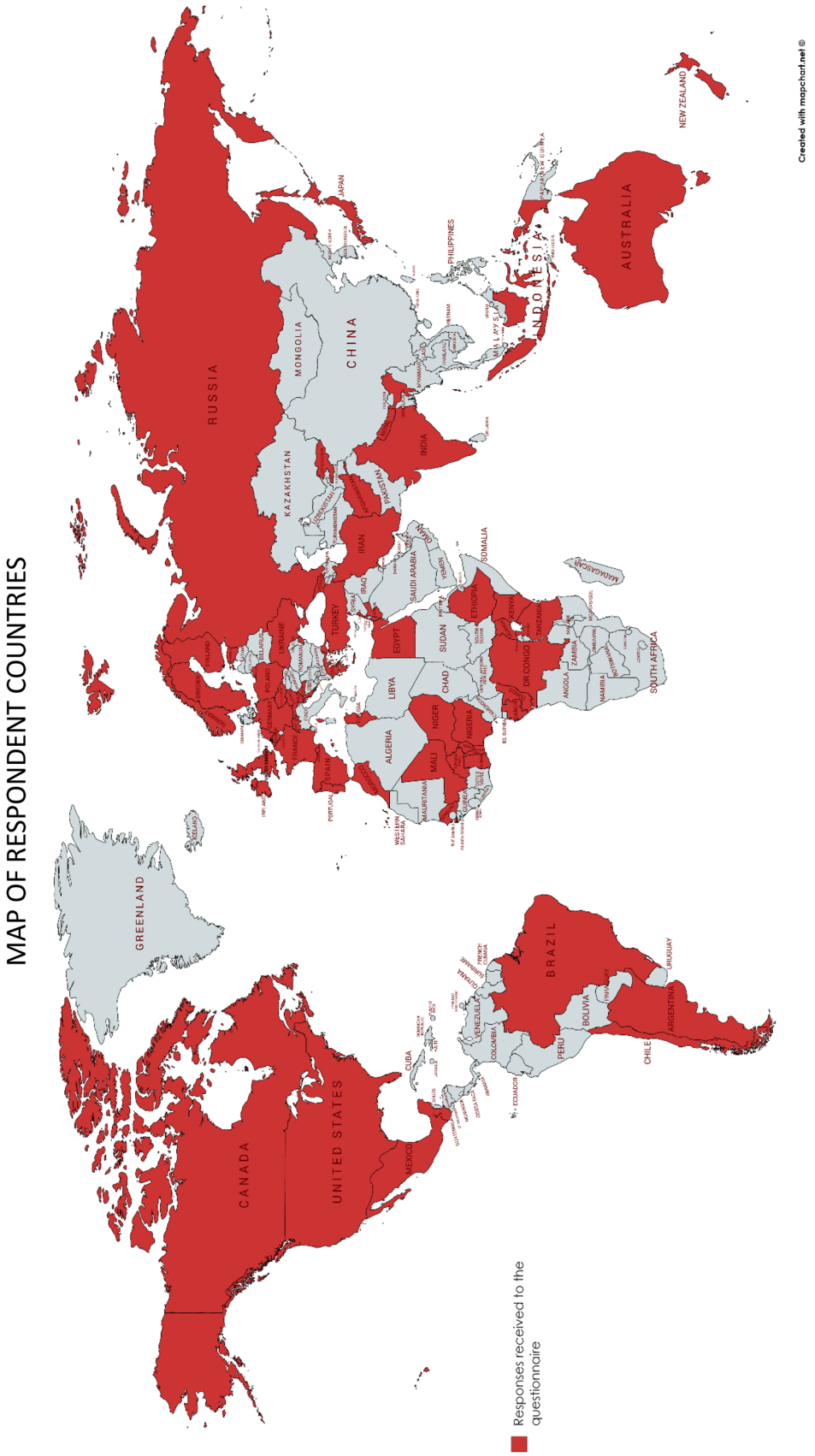

Fig. 2 Map for respondent countries

Table 2 Respondent countries characteristics

Country characteristics	Number of respondents countries (%)
Geographic location	
Americas	8 (10.8)
Europe	30 (40.5)
Asia–Pacific including the Middle East	16 (21.6)
Africa	18 (24.3)
No information	2 (2.7)
Total	74 (100%)
Population	
< 10,000,000	24 (33.3)
10,000,000–49,999,999	27 (37.5)
50,000,000 +	21 (29.2)
No information	2 (2.8)
Health System Efficiency Index	
< 0.500	14 (19.4)
0.500–0.799	26 (36.1)
0.800 +	30 (41.7)
No information	2 (2.8)
Current estimate of refugees in country	
< 10,000	23 (31.9)
10,000–99,999	20 (27.8)
100,000 +	25 (34.7)
Missing	4 (5.6)
No information	2 (2.8)
Number of dentist registered	
< 1000	17 (23.6)
1000–9999	27 (37.5)
10,000 +	26 (36.1)
No information	2 (2.8)

health, only 12.2% of these policies was related to oral health.

Interestingly, estimates of host countries' population and refugees hosted in those countries did not influence any of the policies or activities assessed in this survey.

Almost 46% of respondent NDAs' representatives indicated that they play a role in refugee oral health. These activities were mainly promoting oral health (23.7%), providing oral health care (20.7%), lobbying and advocacy for better oral health care for refugees (16.8%) and some policy development activities (9%). This minimal involvement of the NDAs and other national organizations is due to the fact that they most often are excluded from any refugee response plan by governments and international organizations. Other NDAs stated that their focus is on supporting underserved populations among their citizens. Detailed answers to the survey questions are presented in Table 1.

Conclusion

When it comes to policies and activities related to oral health for refugees, the current findings showed that oral health for refugees is a low priority. The main actors for oral health in host countries, national dental associations and their affiliated professional organizations, are minimally involved in promoting oral health in this vulnerable population.

This brief report provides advocates for refugee oral health with a snapshot of the current activities and policies related to oral health among this vulnerable population. It is the first study to tackle this important issue and its data can be used to support advocacy initiatives to promote oral health and oral healthcare among refugees. Although the study used convenience sampling, 74 out of 136 countries represented by an FDI member dental association (response rate of 54.4%) completed the survey with variation in demographic, geographic and economic status that suggests a good representation of FDI member states.

Data presented here should open our eyes to the double dilemma of refugee oral health, a neglected health issue in a vulnerable population. Advocates for refugee oral health need to use the momentum of oral health advocacy that has been building in recent years to push oral health onto the agenda of all organizations working with refugees.

The recent inclusion of oral health in the Universal Health Coverage (UHC) agenda [19], the establishment of the Lancet Commission on Oral Health [20], the release of the FDI Vision 2030 report [21] and the recent approval of resolutions promoting oral health by the World Health Organization (WHO) Executive Board [22] are all great opportunities to promote better oral health in this vulnerable population. NDAs and international organizations need to unite and collaborate with health agencies working on the ground in refugee camps to implement effective oral health promotional programs, including preventive and therapeutic care. **Raising awareness about this issue,** establishing a screening and referral system upon arrival and empowering community oral health workers to get engaged in these promotional programs are some examples of interventions that can be implemented in refugee settings [15]. Success stories, best practices and a step-by-step roadmap to advocate for better oral health among refugees were presented in the FDI Refugee Oral Health Advocacy Guide [15] and can be used to inform and inspire such initiatives.

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