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The Perceived Barriers of Access to Health Care Among a Group of Non-camp Syrian Refugees in Jordan

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Abstract

The aims of this study were to identify the most needed health care services, accessibility of various health care services, and barriers to access as perceived by a group of Syrian refugees living in non-camp settings in Jordan and to compare accessibility among different groups. The study was conducted in the Amman, Irbid, Karak, and Maan governorates of Jordan. This is a cross-sectional, analytical, observational study using convenience and snowball sampling for data collection. A structured questionnaire was included in an ongoing needs assessment of a Jordanian nongovernment organization in April 2014, with a total of 196 surveys conducted. In addition to the prevalent acute and communicable diseases, chronic diseases and dental problems were common. Preventive and primary health care were more accessible than advanced services. Structural and financial barriers hindered access. The specific survey location and governorate were associated with a difference in reported access. Registration status, health provider, duration, and out-of-pocket payment did not affect accessibility. The capacities of health facilities at different levels should be increased. Enhanced information sharing among health providers can improve identification of needs and gaps.

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Keywords

urban refugees, health services accessibility, health needs, barriers to access, Syria

The health care provision for displaced populations is increasingly becoming more challenging, with evolving characteristics of the conflicts and displacements. Urbanization of displaced populations,¹ the need for different levels of health care among displaced people from conflict-affected middle-income countries,^{2,3} and protracted displacements due to long-lasting conflicts¹ are among the developments that require rethinking the provision of health care for refugees. With all the complexities surrounding the issue, it is important to understand the health needs, access, and barriers to access among displaced populations in order to plan appropriate interventions.

This article sets out to determine perceived access and some barriers to access to health care among a group of non-camp Syrian refugees in Jordan—a population that reflects said trends in the nature of conflicts and displacements. Of the refugees, 82% live outside the camps;⁴ specialized health care services are required to respond to health needs of Syrians in addition to primary health care;⁵ and the refugees are likely to stay in Jordan for a long time as the war in Syria enters its fourth year with no end in sight. The findings are intended to be informative for the humanitarian response to the crisis and contribute to the scarce literature on the issue.

This article raises the following questions:

1. What are the most needed health care services identified by participant Syrian refugees?
2. Do participants perceive barriers to access to various types of health care services?
3. What are the financial, structural, and cognitive barriers among respondents who perceive having a barrier to health care access?
4. Are there any differences among groups of respondents in terms of perceived access?

A number of structural and social barriers limit access to health services among refugees. Most common barriers in the literature include affordability, lack of insurance, transportation, working hours of facilities, and wait time.^{6–8} Factors that also may hinder access to health care include child care, appointment availability, language, acculturation, health beliefs, expectations of health facilities, stigma,^{6,7} lack of trust, fear of deportation, perceived discrimination, adaptation to a new health system, low prioritization of health care,^{9,10} lack of quality, lack of adequate health personnel and medication, lack of health awareness in the population, cost of medication and specialized services,⁸ and refugee status.¹¹ Recognizing mental illness¹² and somatization¹³ were identified barriers

to requesting mental health care. Reproductive health care was hindered due to cost, lack of knowledge, unavailability, and embarrassment.¹⁴

Doocy and colleagues conducted cross-sectional surveys in Jordan and Syria to understand the chronic medical conditions and disability among Iraqi refugees.¹⁵ The perceived accessibility of services in general was around 60% in both countries. The access rate fell for chronic disease management. Mental health care was found to be inaccessible for the majority of the Iraqi and Syrian refugees in other studies.^{16,14}

This study used the health care access barriers (HCAB) model as a theoretical framework to understand the factors affecting access to health care.¹⁷ The model provides a practical framework for the categorization, analysis, and reporting of the barriers to access to health care. Barriers, which are supposed to be measurable and modifiable, are classified as financial, structural, or cognitive barriers in this model. The categorized barriers, individually or jointly, may lead to decreased screening, late presentation to care, and lack of treatment, which act as intermediary factors causing poor health outcomes and health disparities.

Although the HCAB model cannot explain all the determinants of health disparities—which interact and overlap in a complex way—because it focuses only on modifiable barriers, it provides a practical tool by allowing classification of barriers and relevant interventions to reduce disparities.

Background

Jordan, although not a signatory of the 1951 Convention relating to the Status of Refugees, has been hosting about 2 million Palestinian refugees and an estimated 750,000 to 1 million Iraqi refugees since political unrest started in Syria on March 2011.¹⁸

Of the 594,596 registered Syrian refugees displaced by the civil war at the time of the study, 81.9% were residing in urban and rural areas around the country.¹⁹ In terms of distribution in governorates, Amman hosts the largest urban refugee population (26.2%), followed by the northern border governorate of Irbid (23.2%). Of the 12 governorates in Jordan, this study was conducted in four governorates; in addition to Amman and Irbid, the southern governorates of Karak and Maan were included. These two governorates were hosting 1.6% and 1.1% of the Syrian refugees, respectively.¹⁹

Without receiving official refugee status, Syrians entering Jordan are registered by the United Nations High Commissioner for Refugees (UNHCR) as asylum seekers, which grants protection for a maximum of six months.²⁰ Refugees are also required by the Jordanian Ministry of Interior to obtain a service card from the police station in the place of residence. Since March 2012, the Jordanian Ministry of Health (MoH) has provided free access to primary and secondary care for refugees in public health care centers and governmental hospitals who present a valid UNHCR registration and Ministry of Interior

service card with the same residence as the health facility approached.^{21,22,5} Once registration expires, refugees can continue to stay in Jordan, but they are required to pay the foreigner's fee in governmental facilities, except for vaccination. Alternatively, they can use various UNHCR-supported nongovernment (NGO) clinics providing different levels of health care specifically for Syrian refugees or private health providers. NGO clinics can refer their patients to public hospitals if needed, and the cost is sponsored by the UNHCR. Referral from referral public health centers or NGO clinics is required for hospital visits other than emergencies, and access to tertiary-level care in government facilities is only possible with approval from the UNHCR's Exceptional Care Committee (ECC).²¹

It is important for all providers to understand the health needs among non-camp refugees to address them comprehensively. Identifying access barriers to health care is essential to improving equity in access by removing these barriers.

Methodology

Data Collection

This is a cross-sectional, analytical observational study using a mix of convenience and snowball sampling for data collection.

Jordan Health Aid Society (JHAS) is a Jordanian NGO providing all levels health care to camp and non-camp Syrian refugees throughout Jordan. JHAS has been carrying out needs assessments among Syrian refugees living outside the camps throughout Jordan since January 2012. The team of seven trained surveyors conducts assessments designed to understand the refugees' situation and needs and to create awareness about services provided by JHAS. The research used convenience sampling as the governorates and the neighborhoods were selected by JHAS for their regular survey and the research questions were added to the questionnaire. The assessments are conducted in either JHAS clinics and medical mobile units (MMUs) or home visits. Snowball sampling is used in home visits, in which the Syrian family first visited in the selected neighborhood was asked about nearby Syrian households upon completion of the assessment. Subsequently, each visited family is asked to identify other Syrian refugees that they know in the neighborhood.

The needs assessment did not specifically focus on health care access, so a quantitative structured questionnaire with questions related to health care needs, access, and barriers to access was included as a sub-component to the assessment. The questionnaire was designed in English. The questions were then translated into Arabic by a translator and back into English by two different translators to ensure a correct translation.

The assessment team was trained in the questionnaire before they started the survey. The respondents were told to respond on behalf of their family—for

those who are registered, defined as the people registered as a family with UNHCR, and for those who are not registered, defined as the immediate family currently residing with the respondent. Data were compiled over a period of three weeks in April 2014. The pilot study was run for 62 questionnaires, which were included in the study.

Data Analysis

The data were entered into a Microsoft Access database and transferred to a Microsoft Excel spreadsheet. SPSS Version 20.0 was used for the descriptive statistics and a chi-square test was carried out for the analytical analysis.

Ethical Considerations

The study was reviewed by the Ethics Research Committee of the University of Oviedo and received its approval. The questionnaire was conducted as part of the JHAS needs assessment after approval from the NGO. The surveyors introduced themselves, explained the objectives of the survey, stated the voluntary nature of participation, and took respondents' verbal consent for the interview.

Results

A total of 196 surveys were completed in four governorates of Jordan in April 2014. More than half were conducted in Irbid (51.5%), followed by 19.9% in Amman, 18.9% in Karak, and 9.7% in Maan. (The research surveys from Irbid, all filled out in home visits, were separated from the needs assessment forms after data collection, thus they are not included in data analysis for registration status, health provider, hometown, duration, or out-of-pocket payment.) Most of the data were collected through home visits (83.6%), with 13.8% conducted in MMUs and only 5 questionnaires (2.5%) completed in a clinic. The families interviewed originated from the following governorates in Syria: Damascus (39.8%), Hums (30.7%), Daraa (26.1%), Hama (2.3%), and Jolan (1.1%). Half of the families' registrations with the UNHCR had expired, whereas 40% still held a valid registration paper at the time of the survey. In addition, 7.4% of refugees were not registered with authorities and 2.1% held a temporary application card.

More than half of respondents were in their second year in Jordan (51.6%). Those who had entered the country less than a year earlier accounted for 34.1%, and 14.3% had been there for more than two years.

The government facilities were found to be the most preferred health care providers when respondents were asked where they go when they are ill and need health care services, with 40.4% of the refugees reporting using PHCs and 33.7% reporting using government hospitals [AQ1]. In addition, 14.6% of the

families reported using private clinics as their health providers, and 4.5% used multiple services, including community-based organizations, private clinics, and PHCs. Community-based organizations, MMUs, NGO clinics, and other clinics were mentioned to a much lesser extent.

Most refugees (44.9%) reported accessing health services for free. Another 25.8% have been spending a small amount and 29.2% reported spending large amounts of money for health care.

The Need for Health Care Services

The refugees were asked about the types of health care needs they have had since arriving in Jordan. Primary health care for acute diseases for adults and children were the most common services, needed by more than half of the refugees, followed by vaccination and dental services, each selected by 40.3% of respondents. More than one third of the refugees reported the need for primary health care for chronic diseases (36.7%) and almost one third of the families have needed obstetric and gynecological care (32.7%). One fourth of respondents have needed emergency medical care. Specialist care and surgery were both reported as a need by 13.2% of the families. Twenty-five respondents (12.8%) needed family planning. Similarly, 12.8% reported a need for inpatient hospital care. Mental care was the least reported need, at 9.7%. Figure 1 lists the distribution of health care needs among refugees.

Accessibility of Health Services

All the interviewees were asked if they think they could access each health care service if they needed it. The responses “yes, very easily” and “yes, easily” were considered as having access, with “yes, but hardly” or “no” categorized as having barriers to access. “No response” and “I don’t know” answers were classified together.

Figure 2 illustrates access and barriers to health care services as perceived by all respondents and by respondents who reported a need for each service. Of respondents, 60.2% perceived primary health care for acute diseases in adults as accessible. The rate went up to 76.9% among those who reported having a need for this care. Primary health care for acute diseases in children was perceived as accessible by 58.6% overall and by 71.2% among those who have needed care. Similarly, access to vaccination services was perceived as more accessible by those who reported the need than by all (86.1% and 56.1%, respectively). In addition, 50.5% of interviewed families thought emergency services were accessible, compared to 79.6% among those who reported having a need for emergency care. Although 42.8% responded positively when asked about access to dental care, 62.0% of those needing dental care found it accessible. Overall, 37.8% believed they could access primary health care for chronic conditions if

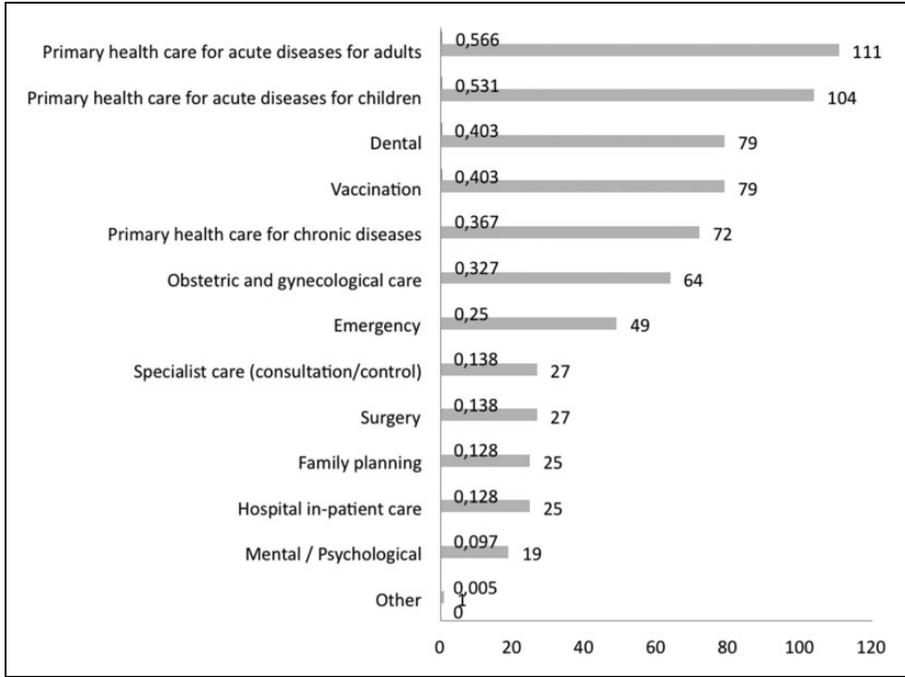


Figure 1. The most needed health care needs reported by respondents (n = 196).

they ever needed it. Among those who had chronic diseases and needed PHC, the rate was 48.6%. For obstetric and gynecological services, perceived accessibility was 33.1% for all and 56.3% for those reporting need. Only 31.1% of respondents thought family planning would be accessible, but 88.0% of those who need family planning reported access. Those who reported a need for specialist care were twice as likely to report access compared with total respondents (44.4% and 22.0%, respectively). Inpatient hospital care accessibility reports were similar between total respondents (21.9%) and those in need (28.0%). Overall, mental health was found accessible by 21.4% of participants and by 47.4% of respondents who reported need. Surgery was similarly perceived as more accessible by those reporting need (29.6%) than overall (18.8%).

Barriers to access were reported the most for inpatient hospital care, by 34.6% of respondents. The inaccessibility rate was almost twice as high among those who have needed inpatient care (68.0%). In addition, 33.7% of interviewees thought they would face barriers to access a specialist for consultation or control, with the rate at 31.7% for surgical care. Among those who needed said services, the rate of reported barriers was higher, standing at 40.7% for specialist care and 66.7% for surgical care. For chronic disease management,

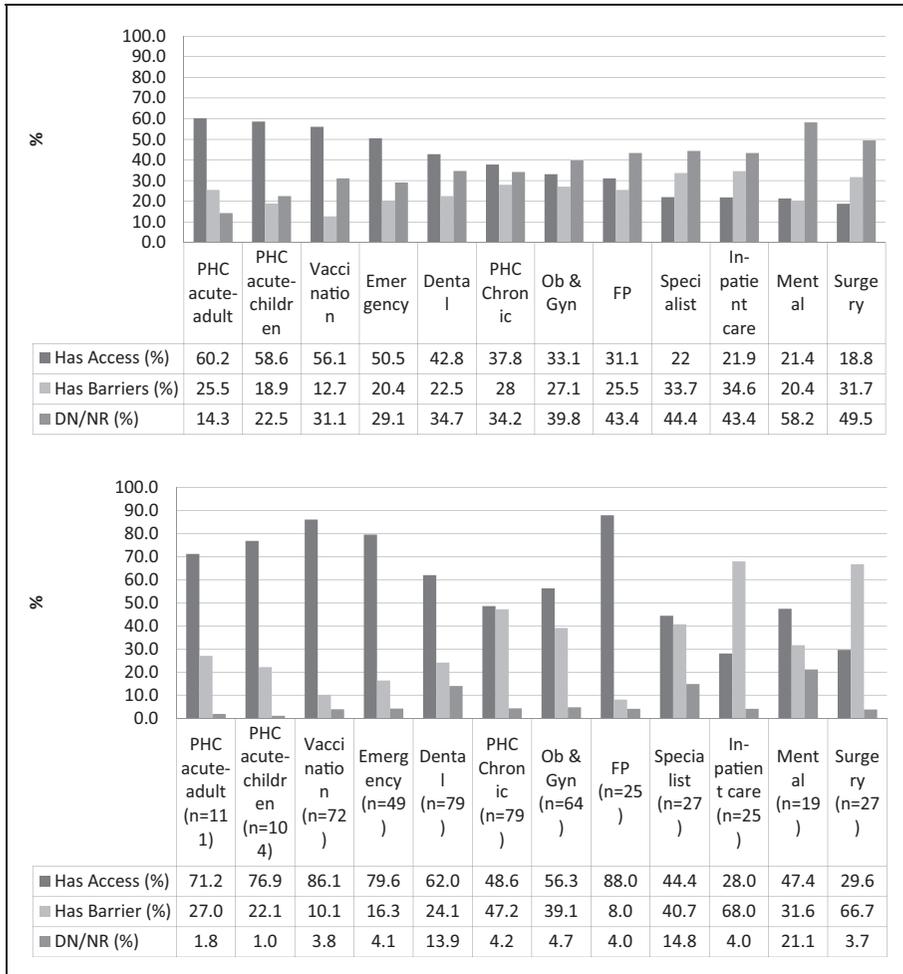


Figure 2. Top: The accessibility of health care services reported by all respondents (n = 196). Bottom: The accessibility of health care services reported by respondents who also reported a need for each service. (DN: “I don’t know.” NR: No response.)

28.0% believed there would be barriers to accessing primary health care; 47.2% of families with a need to access these services perceived the services as inaccessible. Although 27.1% of all respondents said barriers would exist to access obstetric and gynecological care, the rate was 39.1% among those reporting need. Family planning was seen as inaccessible by 25.5% of interviewees, with only 8.0% of those who reported need perceiving barriers in comparison. The barriers reported for vaccination and emergency services were also lower among the group who reported a need than among general respondents.

Table 1. Barriers to Health Care Access Among Respondents Who Reported Problems With Access (n = 103).

Barriers	Yes	No	DK/NR ^a
Financial barriers			
High cost of the medical service (%)	50.5	41.7	7.8
High cost of the medicine (%)	51.5	42.7	5.8
High cost of transportation (%)	65.0	30.1	4.9
Structural barriers			
Long distance to health facilities (%)	60.2	33.0	6.8
Long waiting time in facilities (%)	66.0	30.1	3.9
Late appointment date for consultations or tests (%)	63.1	28.2	8.8
Working hours of facilities (%)	42.7	48.5	8.8
Long procedures to use services (consultation/treatment) (%)	60.2	31.1	8.8
Need to go to facilities several times for tests, etc. (%)	52.4	40.8	6.8
Multiple locations for tests or doctors (%)	42.7	50.5	6.8
Complex referral system (%)	48.5	45.6	5.8
Rejection by facilities/health personnel (%)	37.9	52.4	9.7
Lack of equipment in facilities (%)	24.3	65.0	10.7
Lack of specialist physicians (%)	37.9	52.4	9.7
Cognitive barriers			
Don't know where to go (%)	28.2	61.2	10.7
Do not trust doctors/services (%)	29.1	64.1	6.8
Prefer medicine without consultation (%)	24.3	68.9	6.8
Discrimination by health personnel (%)	40.8	50.5	8.8

^aDK: "I don't Know." NR: No Response.

Barriers to Access to Health Care

As shown in Table 1, of respondents who perceived having barriers to access, more people reported having financial barriers than those who reported having no financial barriers. The high cost of transportation (65.0%) was the most reported financial barrier. The high cost of medicine and medical service was similarly reported as a barrier by half of respondents. In terms of structural barriers, long waiting times in facilities (66.0%), late appointment dates (63.1), long procedures to use services (60.2%), and long distance to health facilities (60.2%) were the most commonly reported barriers. Almost half the respondents perceived multiple visits to facilities and complex referral system as barriers, whereas visiting multiple locations for tests or doctors was reported by 42.7%. Working hours of the health facilities were a barrier for 42.7% of

interviewed refugees. Lack of specialist doctors in visited centers were reported by 37.9%, as in reports of rejection by providers. [AQ2] Lack of medical equipment (24.3%) was the least reported structural barrier. Cognitive barriers were not common compared with other barriers. Discrimination by health personnel was the most frequently reported cognitive barrier (40.8%), and 29.1% of refugees did not trust the doctors or services provided. Not knowing where to seek care was a problem for 28.2% of respondents. In addition, 24.3% preferred to take medicine for treatment without consultation with doctors.

Analysis of Access

A chi-square test was used to compare differences in reports of access by visit type, governorate, hometown, registration status, time spent in Jordan, health care provider, and out-of-pocket payment for medical expenses. Table 2 illustrates the results of the analysis. Access was defined as the lack of a barrier, which was identified as responding “yes, but hardly” or “no” to at least one of the services in question.

The refugees interviewed in a health facility, either MMUs or a clinic, reported significantly more access than families surveyed during home visits, $X^2(1, N = 194) = 7.703, p < 0.05$.

There was a significant difference in access to care between respondents from different governorates, $X^2(2, N = 195) = 20.259, p < 0.05$. Although the majority of respondents perceived barriers to access to the services accessible in Amman (65.6%) and Irbid (63.4%), 71.4% of refugees in the southern governorates reported access.

The hometown of respondents was not associated with a difference in access, $X^2(2, N = 84) = 0.890, p = 0.637$. Among people from Daraa, 65.7% reported access, followed by 59.5% of people from Humsi and 52.1% of people from Damascus. Hamaa and Jolan were excluded from the analysis because very few residents were from these governorates.

Although refugees holding a valid registration with the UNHCR had slightly better access than those whose registration has expired (57.9% and 51.1%), the difference was not statistically significant. The time spent in Jordan did not cause any significant difference in reported accessibility. Access was reported by 58.1% of refugees who had been in Jordan for less than a year, by 57.4% of those in their second year, and by 53.8% of those who had been there longer than two years.

The health care provider and out-of-pocket payment for medical services were not associated with access. Accessibility was reported by 52.2% of people who used governmental health services by means of PHCs and hospitals. Access was 63.2% for refugees using non-governmental health care providers, including private clinics, NGOs, community-based organizations, and others. Although 42.3% of refugees spending large amount of money reported

Table 2. Analysis of Reported Accessibility to Care Between Different Groups.

Groups	Total n (%)	Has access	Has barriers	Pearson's 2-sided	Value
Number	196				
Visit type (n = 194)					
Clinic & MMU combined	32 (16.5)	22 (11.3)	10 (5.2)	.007*	7.703
Home Visit	162 (83.5)	68 (35.1)	94 (48.5)		
Governorate (n = 195)					
Amman	38 (19.5)	13 (6.7)	25 (12.8)	.000*	20.259
Irbid	101 (51.8)	37 (19.0)	64 (32.8)		
Karak & Maan combined	56 (28.7)	40 (20.5)	16 (8.2)		
Hometown (n = 84)					
Damascus	35 (18.9)	21 (10.8)	14 (7.2)	.637	.890
Daraa	23 (11.9)	12 (6.2)	11 (5.7)		
Hums	26 (13.4)	17 (8.8)	9 (4.6)		
Registration status (n = 85)					
Registered	38 (44.7)	22 (25.9)	16 (18.8)	.662	.395
Registration expired	47 (55.3)	24 (28.2)	23 (27.1)		
Duration (n = 91)					
< 1 year	31 (34.1)	18 (19.8)	13 (14.3)	1.000	.070
> 1 year < 2 year	47 (51.6)	27 (29.7)	20 (22.0)		
> 2 year	13 (14.3)	7 (7.7)	6 (6.6)		
Health provider (n=88)					
Governmental	69 (78.4)	36 (40.9)	33 (37.5)	.445	.725
Nongovernmental	19 (21.6)	12 (13.6)	7 (8.0)		
Out-of-pocket payment (n = 88)					
Free	40 (45.5)	23 (26.1)	17 (19.3)	.311	2.445
Small amount	22 (25.0)	14 (15.9)	8 (9.1)		
Large amount	26 (29.5)	11 (12.5)	15 (17.0)		

access, compared to 57.5% of those using free services and 63.6% of those spending small amounts of money, the difference was statistically insignificant.

Discussion

This study set out to identify perceived barriers to access to health care services among a group of Syrian refugees living in non-camp settings in Jordan. We had four specific questions to be answered.

What are the Most Needed Health Care Services Identified by Participant Syrian Refugees?

The findings show that surveyed Syrian refugees have the needs expected from a country in transition. The majority of refugees need primary health care for acute diseases, whereas a large number require chronic disease management at the primary health care level. The high level of reporting a need for primary health care for acute diseases is understandable because the frequency of acute illnesses is higher in any context. Living conditions, including overcrowding, lack of proper shelter, and sanitation, may increase the spread of communicable diseases, in addition to conditions during displacement. The need for primary health care for chronic diseases is reflective of the disease burden in Syria, a middle-income country with a long life expectancy.²³

A telephone survey conducted by JHAS and the UNHCR with a representative sample across Jordan in March 2014 reported that the main reasons for care seeking were acute illnesses (60.1%) and chronic conditions (27.9%).²² The joint assessment conducted in five northern governorates, including Irbid, found that hypertension and diabetes were among the most diagnosed 10 conditions along with infectious diseases, musculoskeletal strain, abdominal pains, and injuries.²⁴ The increasing burden of chronic diseases as middle-income countries are involved in the conflicts has been mentioned in the literature as one of the challenges facing humanitarian actors.^{2,25,15,26,27}

The high need for vaccination may be an indication of the proportion of children under five years old. The immunization rate was high before the war in Syria, so it can be assumed that people are aware of the importance of and need for immunization. The high need for dental care may be a result of problems caused by eating habits or irregular tooth-brushing due to lack of access to non-food items.

The findings showed a high need for obstetric and gynecological care. A joint assessment in governmental health facilities in northern governorates also found that obstetrics and gynecology were one of the main specialties used by the Syrians.²⁴ The birth rate and obstetric and gynecological complaints were higher among Syrian refugees than non-Syrian patients. Considering the reports of sexual violence in Syria and possible low reporting due to cultural reasons, such as shame, honor, and stigma, the specialty of obstetrics and gynecology deserves attention.²⁸ [AQ3] Related to reproductive health, the need for family planning was very low. According to the United Nations Population Fund, among 68% of women at reproductive age who did not want pregnancy, 47% were using contraceptives in Syria in 2009, so there is awareness of family planning.²⁹ A high percentage of unmarried women among respondent families and the high percentage of female-headed households may contribute to the low need. Embarrassment may also lower the reporting.

Surprisingly, the reported need for mental health is very low. A high prevalence of psychological problems have been documented among Syrian refugees

in Jordan by an assessment.³⁰ Even before the uprising began, major depressive disorder was the second cause of the disability-adjusted life year (DALY).³¹ Recognition of mental problems may be a reason for low need reporting.⁹ Somatism may divert perceived needs from mental to physical needs. Stress-related back pain was mentioned as a health problem in an assessment conducted by International Rescue Committee (IRC) in an assessment in the southern and central governorates.²⁸ It is important that health care providers at the primary health care level are well-trained to diagnose psychological symptoms. Even if they detect symptoms, refugees may be unwilling to express their need because of the stigma around mental illnesses.¹⁶ Mental health issues were brought up in focus group discussions in the IRC, in both Maan and Karak, which probably best reflects the mental state because it is easier for refugees to talk about a stigmatized issue in general rather than admit having problems themselves.²⁸

Do Participants Perceive Barriers to Access to Various Types of Health Care Services?

A large number of refugees did not know if they would be able to access health care services if they needed them. The rate dropped when we examined the accessibility rate among respondents who reported the need for each service type. This decrease in uncertainty is somehow understandable, as people do not look for information on a particular service unless they need it. They may find it accessible or face some barriers once they request it. Nevertheless, the high rate of “I don’t know” requires further investigation into refugees’ access to health information, the lack of which is a barrier to health care.

Primary health care has been found to be more accessible than secondary and health care, as found among urban refugees in various settings in the literature.³² Although the need for surgery and inpatient hospital care was lower than for other services, the access barrier ratings for these services were the highest. Governmental hospitals, the main providers of surgery and specialized treatments, have been overburdened by the increasing number of Syrians. The number of Syrians surgically operated on in MoH facilities increased six-fold in three months from 105 in January 2013 to 622 in March 2013.³³ The increase in admission to the hospital was similarly high. In addition to overtaxing the facilities’ physical capacity, patients requesting tertiary health care need approval from the ECC of the UNHCR to access free services. The criteria to receive approval from the ECC include necessity and adequacy of the suggested treatment, financial vulnerability, feasibility of the treatment plan, prognosis, cost, and eligibility; clearly, not all the refugees who perceive the need would fit the criteria.²¹ Complex treatments and surgeries were also reported to be inaccessible in government facilities across Jordan and in unaffordable private medical care by IRC assessment.²⁸

Almost half of the refugees in need of primary health care for chronic diseases reported limited or no access. The public primary health care centers offer free medication for registered refugees when the residence of the refugee on the service card is the same as the area of the center, whereas NGO clinics provide medication for unregistered refugees. Despite the system established to provide continuous care for chronic conditions, the high barrier reported requires attention. IRC assessment in the south similarly reported barriers for chronic disease management.²⁸ The shortage in drugs, as reported in MoH facilities in the northern governorates and as mentioned by health workers during informal discussions, could be a reason for low accessibility, among other reasons. The UNHCR/JHAS survey, which reported a barrier rate of 24%, contradicted our findings.²² Although the UNHCR/JHAS survey can be assumed to have a better estimation in general, because it was conducted with a representative sample, more studies should be carried out to understand the potentially vulnerable groups or regions with higher barriers to access.

Barriers to access to specialists for consultation or control and to obstetric and gynecological care were considerably high. Although rates varied, depending on the governorate, the joint assessment demonstrated shortages in specialists in public health facilities.²⁴ Gynecology was among the specialties reported as unavailable.

The much lower unmet need for family planning, compared to the barrier reported among general respondents, is noteworthy. It is possible that respondents who can “admit” having a need for contraceptives can also manage to access it. Those who are embarrassed to report the need may also report less access or lack of knowledge on its accessibility because they do not want to talk about the issue.

Vaccination has the second-lowest barrier rate. Because the low immunization rate would increase the risk of epidemics in Jordan and therefore for its nationals, the Jordanian MoH does offer free vaccinations to all children in primary health care centers. Refugees can go to any center to open a vaccination file for an immunization schedule. The regular schedule ensures vaccination of children up to 18 months old, but catch-up vaccinations are available for children up to 5 years old.²² Mass vaccination campaigns have been conducted in partnership with MoH, UNICEF, and UNHCR to prevent measles and polio outbreaks.³⁴ Mass SMS messaging has been used to inform registered refugees of vaccination campaigns.³⁴

What are the Financial, Structural, and Cognitive Barriers Among Respondents Who Perceive Having a Barrier to Health Care Access?

Financial Barriers: The high cost of transportation is a major barrier. The transportation cost was also identified as a barrier in UNHCR/JHAS survey among urban Syrian refugees.²² It is also a common barrier found in the literature,

regardless of the host country.^{6,10} The high cost of medical service and medicine has been reported as a barrier by half of refugees. This is interesting, because the majority of respondents reported accessing health care free of charge. The primary health care services are also free in public facilities for registered refugees. The JHAS clinic in Irbid and MMUs in Maan twice a week and in Karak once a week provided free-of-charge consultation and medicine, even though the shortage of drugs was mentioned several times by health providers in informal discussions. Two UNHCR-supported clinics in Amman, JHAS Madina clinic and Caritas Hashimi clinic, charge subsidized prices for consultation, medicine, and other procedures to align with the public health system fees structure, but anecdotally a health worker in the clinic restated the complaints against the small fees.²¹ The refugees may have unrealistic expectations regarding money spending. However, the cost of medication can indeed be a barrier if the shortage of declared-free drugs is common and refugees are required to buy medicine from pharmacies. The complaints about cost may be related to the hope of receiving financial support or the fear of withdrawal of services upon complaint.

The high cost of transportation can, to an extent, be classified as a modifiable barrier. Reimbursement of transportation cost, which was observed in the field for some programs, can be expanded. Relocation or decentralization of health care centers can reduce the distance and transportation costs between houses and centers. Theoretically, the cost of medical services and medicine are modifiable barriers through further subsidization, although it may not be realistic given the gap in funding.

Structural Barriers: The high rate of long distances to health facilities, long waiting times in facilities, and late appointment dates for consultations or tests all suggest a shortage in facility capacity, which can be modifiable if the capacities of existing facilities are increased and peripheral facilities are built. Indeed, other publications suggest the public health care system is overstretched.³³ The joint assessment in five northern governorates found that 8.63% of all medical visitors to health care facilities were Syrian, whereas the rate went up to 9.59% in Irbid.²⁴ Assessment has found that government clinics faced shortages in equipment and specialists or high-level practitioners, which may increase the waiting time in facilities and cause late appointment dates. It is contrary to reports by our respondents, the majority of whom did not see any lack of equipment or specialist physicians as barriers. The discrepancy needs further investigation, as it may be caused by differences between governorates or the perception of refugees may not reflect actual gaps.

A complex referral system was a barrier for many; multiple causes of this complexity may complicate any action to modify this barrier. For some refugees, the requirement for a referral by the primary health care center or the NGO clinics to be able to use the hospitals may be confusing. Each clinic may differ in referral procedures. The Irbid JHAS clinic requires the approval of the major doctor for referral, and the UNHCR then sponsors the cost of treatment in the

public hospital. Referrals to other NGO facilities providing services for special needs required a different referral form. On the other hand, the referral forms filled in by general practitioners in MMUs are sufficient to receive care in public hospitals in Maan and Karak. The requirement for ECC approval to use tertiary-level care may complicate the procedures. Overworked staff may not have the time or energy to explain the referral system to refugees.

Although less than half of respondents found rejection by facilities as a barrier, the high percentage requires consideration. The perception may be because of a lack of understanding of the system rather than the rejection of the right to health. The MoH hospitals require referral by the PHCs, so refugees trying to access to hospitals directly will be turned down. Registered refugees who do not show a valid UNHCR registration card and a service card from the Ministry of Interior proving residence in the same governorate as the health facility cannot receive free treatment in any level of the public health facilities, except for vaccination and emergency.²² Refugees with expired registration who go to public clinics will be rejected, but they can use NGO clinics. The reason for rejection may also be lack of knowledge of the system among health staff or their intentionally not following procedures. The reason needs to be investigated so that action can be taken to reduce this barrier; training of health workers may be a solution for the neglect. Discriminatory behavior is harder to change in the short term.

Cognitive Barriers: The cognitive barriers were the least reported barriers among all. One fourth of respondents identified lack of knowledge about where to seek health care as a barrier when asked, but the specific barrier questions were only given to respondents who reported having barriers to access in the previous question and not to the large percentage of respondents who answered that they do not know the accessibility of services. This large percentage, as mentioned in the previous section, related to the barrier of lack of information on services available, which will probably hinder access in case of need. Not knowing where to go for care has been reported by 4% of refugees who did not seek care when needed in March 2014.²² Barriers related to knowledge of services can be modifiable by increasing community awareness programs. Perceived discrimination by health personnel was the highest reported cognitive barrier. The high rate may be due to real discrimination or merely a misconception. In the first scenario, the increased workload due to the influx of refugees may irritate staff and lead to discrimination, together with the perceived prioritization of Syrian refugees over vulnerable Jordanians. Health care workers are not immune to the general hostility toward Syrians due to the negative effect of the influx in the Jordanian economy.³⁵ If the second scenario is followed, the rejection of care due to ineligibility or miscommunication about required procedures may be perceived as discrimination by refugees. The root cause of this perceived barrier should be identified to determine whether it is modifiable.

Are There Any Differences Among Groups of Respondents in Terms of Perceived Access?

The analysis of difference in access among different groups revealed the relative equity. The better access reported by respondents in health facilities compared to refugees visited in their homes is understandable, because the ones in facilities were accessing care at the time of survey. This shows they could access at least primary health care, which is a gate to enter the health care system.

The better access reported by refugees in Maan and Karak, as opposed to Irbid and Amman, may look interesting at first because more facilities—both public- and refugee-serving—are present in Amman and Irbid than Maan and Karak. The reason may be the high concentration of refugees in the first two governorates, which is the cause of overstressing services. The southern governorates can better absorb the low number of Syrian patients residing there, whereas the refugees comprise almost 10% of the MoH facility visits in Irbid. The location of the survey also may have affected the answers. Almost all Irbid and Amman surveys were carried out in home visits, whereas the Maan and Karak surveys were conducted in both MMUs and home visits. The difference may be a result of the rural-to-urban disparity than the governorate-based inequity. Home visits were conducted mostly in rural areas in Irbid and Amman, whereas more populated areas in Maan and Karak were visited. Another reason may be the lower socioeconomic level of refugees residing in the southern governorates. These refugees cited lower rent and living expenses as the main reason for settling there. We may assume that lower socioeconomic status compels refugees to prioritize basic needs other than health. Lower health literacy may also contribute to health care seeking. Anecdotally, one female in Karak had not reported vaccination as a need when it was cited, although she had a two-year-old unvaccinated daughter. She does not perceive any barrier to care because she does not perceive any need for care.

Surprisingly, registration status did not affect access reporting. Interlinked with registration status, there has not been a difference in access among refugees using governmental facilities versus non-governmental facilities. It is a positive sign for equity in health care access among refugees. The health care delivery system involving public health care facilities for registered refugees and the UNHCR-supported NGO clinics and MMUs serving refugees with expired registration may provide access to refugees, regardless of registration status. One important point is that the majority of respondents utilizing non-governmental facilities were using private clinics instead of NGO clinics, so access may not reflect the functionality of the system. The private clinic-goers may have a better financial situation and may be able to afford the expenses. **AQ4** This deduction may be supported by the fact that reported access did not differ when we compared respondents who reported accessing health care services for free, spending small amounts, and spending large amounts.

Adding on equity among the refugees, the time spent in Jordan was not associated with any difference in access. The access questions did not investigate past experiences, but rather asked whether refugees can access services if they need them. Newly arrived refugees may be guided by older refugees, so their adaptation to the system is easier and subsequently, they do not report higher barriers. The lack of difference in access based on hometown suggest that accessibility is not affected by expectations that arise from different backgrounds and there is no discrimination according to hometown.

Limitations

The sampling method is the most visible limitation of the study. By using a convenience sampling, due to time and resource constraints, we sacrificed the representativeness of the sample. So we cannot extrapolate the findings to Syrian refugees living outside the camps in Jordan. Nevertheless, the study gives an inside view of the perception of some refugees regarding health care access and can raise areas of investigation to explore related to the access question.

The quantitative nature of the survey, preferred because of the time constraint, may have prevented respondents from explaining their perception thoroughly. The respondents did not have the chance to report any need of services or barrier to access outside those listed in the questionnaire. The need for services involving sensitive issues, such as mental health or family planning, may have been assessed better in focus group discussions rather than by direct reporting.

Self-reporting may have resulted in overestimation or underestimation of needs as well as access. The recall bias may decrease reporting of needs, or people may report a need they do not actually have. It should be noted that the structural barriers mentioned by most of the respondents are highly subjective. A quantitative assessment of the distance, waiting time in facilities, and appointment dates should determine whether these values meet the minimum standards. If they are found to be below the standards, the burden can be addressed by increasing either the health professionals and/or the equipment, depending on the major deficiency. Nevertheless, self-reporting is useful because it is important to see how refugees, who are the receivers of the services, perceive health care services. The identified barriers should be investigated; they can be targeted, if confirmed to be real problems by other assessments, and refugees may be educated to lower unrealistic expectations or to fix miscommunication between providers and refugees.

With regard to registration status, we did not include unregistered refugees, who accounted for 7.4% of the surveyed households, because the number was too small to analyze statistically. The number of unregistered refugees is unknown, but informal conversations with charity workers and refugees in Karak and the IRC cross-sectoral assessment in South and Central Jordan

suggest that refugees who do not register, out of fear of the authorities, can hinder their access to basic health care.²⁸

The high access reporting in health facilities compared to home visits may be attributed to the motivation of respondents to report positively, because they knew the assessment team was from the same NGO providing care.

Conclusions and Recommendations

The aims of this study were to identify the perceived health care service needs, accessibility of services, and barriers to access among a group of Syrian refugees living outside the camps in four governorates of Jordan and to compare the differences in access among them.

This study has found that health care needs for non-communicable health problems such as chronic disease management and dental care are common, along with primary health care for acute diseases and immunization, as expected from a country in epidemiological transition, like Syria. The low need reporting for mental health may be caused more by a lack of recognizing symptoms and by stigmatization than by the real state of health care, considering other reports.

The second major finding of the study was that secondary and tertiary-level care were perceived as less accessible than preventive and primary health care, with the exception of primary health care for chronic diseases, which requires continuity of care. The capacities of higher-level facilities that deliver advanced and expensive treatments and are overburdened by the influx, along with complicated procedures to use these facilities, may be the underlying reason for the reported inaccessibility.

It was also shown that major barriers to access involved financial barriers, especially transportation, and structural barriers, including long waits, distance, appointment dates, and lengthy required procedures. Structural barriers suggest an overstretching of the health care system. Except for perceived discrimination, cognitive barriers did not contribute to inaccessibility.

Finally, the analysis of accessibility among different groups revealed considerable equity. It is encouraging that registration status, preferred health provider, and out-of-pocket payment did not affect access. Governorate of residence and whether the survey was conducted in a health facility or during a home visit were associated with difference in access, with the southern governorates and refugees in health facilities reporting better accessibility.

The findings of this study have a number of important implications. Bearing in mind the ethical questions of the higher-budget operations to meet the needs in higher-income settings, authorities should ensure access of urban Syrian refugees to health care at various levels. A functional chronic disease management system, involving adequate supply of affordable medication and tracking of patients, is essential for continuity of care.

The capacities of health facilities need to be expanded to accommodate non-camp Syrian refugees, with international support to the MoH. As the demographics and disease burden are similar in Jordan and Syria, the Jordanian facilities are equipped to respond to the needs as the burden on public health facilities impacts the access of Syrians and Jordanians alike; it is important to balance the services so the host community is not irritated by the prioritization of refugees. Increasing the number of health staff is part of upgrading facilities. Licensing Syrian doctors and health workers to work in private and NGO clinics can be practical. Syrian refugees may be more comfortable with Syrian health staff and Jordanian health professionals can be employed in upgraded public health facilities.

To increase awareness of available services, mass SMS messaging may be used. Mobile phones are commonly owned and most refugees reported their willingness to receive information via phone calls or SMS.³⁶ Although its effect on awareness has not been evaluated, SMS messaging has been used during mass vaccination campaigns.³⁴

Information sharing among all health care providers should be improved. Syrian Refugee Response Tracking, a web-based platform for better centralization, mapping, and analysis of humanitarian activities in Jordan, is an important initiative for information sharing.³⁷ Regular reports on this platform of the utilization rates of services and most common diagnoses from MoH facilities and NGO clinics would increase understanding of needs. MoH hospitals already record the nationalities of patients, so no additional data collection would be required for the reports.

This study has attempted to identify the perceptions of a number of urban Syrian refugees on access to services. More studies across Jordan with more representative samples need to be conducted in order to implement culturally appropriate improvements in the health care system and to identify gaps in services or miscommunication between providers and refugees. The surveys should also investigate refugees' living conditions and their impact on health status, because understanding other factors influencing health could help to prioritize and target relevant interventions. As the Syrian refugee crisis reflects the changing pattern of conflict-related displacements, with a high number of urban refugees in need of different levels of health care for a prolonged period of time, research on the health issues of this population would help humanitarian actors understand and, hopefully, adapt to the change in the future, in addition to implementing proper intervention for this crisis.

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