1-1-2020

Perceived barriers to healthcare utilization among Jordanian families: A family centered approach

Abeer M. Shaheen

Khaldoun M. Hamdan

Maha Alkaid Albqoor

Diana H. Arabiat
Edith Cowan University

10.1016/j.apnr.2020.151313
This is an Author's Accepted Manuscript of:
Shaheen, A. M., Hamdan, K. M., Albqoor, M., & Arabiat, D. H. (2020). Perceived barriers to healthcare utilization among Jordanian families: A family Centred approach. Applied Nursing Research, 54, Article 151313.
https://doi.org/10.1016/j.apnr.2020.151313

Shaheen, A. M., Hamdan, K. M., Albqoor, M., & Arabiat, D. H. (2020). Perceived barriers to healthcare utilization among Jordanian families: A family Centred approach. Applied Nursing Research, 54, Article 151313. https://doi.org/10.1016/j.apnr.2020.151313

Perceived barriers to healthcare utilization among Jordanian families: A family centered approach

A B S T R A C T

Aim: This study aimed to understand the barriers to health services utilization by Jordanian families. *Background:* Access to quality healthcare services is a significant issue facing healthcare systems. Healthcare systems must identify and apply measures to overcome barriers that face utilizing health services and thus increase clients' satisfaction.

Methods: A cross-sectional qualitative research design was used in this study. Semi-structured interviews were conducted with twenty-five families to elicit the model of health services barriers.

Results: The analysis of the family interviews led to four main themes related to health services barriers: service system, structural/physical barriers, equipment and medication, and staff competency. This study would in- crease awareness about underserved populations that avoid seeking medical care.

Conclusion: Public health efforts are required to increase awareness about the importance of contacting the healthcare system as early as possible. However, public health policy may require developing new initiatives that reduce these perceived barriers, such as enhancing communication skills among healthcare workers, increasing supervision and inspection of healthcare quality, and enhancing patient engagement by using phone calls and messages as appointment reminders and careful follow-up.

Keywords:

Family-centred approach Healthcare utilization Perceived barriers Qualitative research

Shaheen, A. M., Hamdan, K. M., Albqoor, M., & Arabiat, D. H. (2020). Perceived barriers to healthcare utilization among Jordanian families: A family Centred approach. Applied Nursing Research, 54, Article 151313. https://doi.org/10.1016/j.apnr.2020.151313

1. Introduction

Equal access to high-quality healthcare is an important challenge for healthcare systems worldwide and throughout Arab countries. Populations in Arab countries in general and in Jordan specifically continue to face difficulties utilizing the range of available health services (Kronfol, 2012). As measured by the World Economic forum's Global Competitive Index, Jordan showed a decline in health outcomes over the past decade compared to some countries. This reflects the pressure placed on the health system due to hosting more than 1.4 million Syrian refugees. Furthermore, Jordan faces many challenges related to health. It has the world's highest rates of noncommunicable diseases. Adding to that the fact that most healthcare institutions in Jordan are not accredited to international standards (Jordan 2025, 2015). Improving the quality and cost of care in the healthcare system are national priorities (The Higher Health Council, 2015).

2. Background

Some barriers to health service utilization are due to the service system, such as appointments, availability of services, health insurance, and bureaucratic procedures. A study examined patient's satisfaction with access to treatment in public and private healthcare sectors in London, Britain found that clients were dissatisfied with the time taken to schedule appointments (Owusu-Frimpong, Nwankwo, & Dason, 2010). Limited availability of services is also considered a reason that forced some patients to avoid local health services (Liu, Bellamy, & McCormick, 2007). Another study that assessed clients' satisfaction with primary healthcare in Tehran found that continuity of care, the humanness of staff, comprehensiveness of care, provision of health educational materials, and effectiveness of services were significant to patients' satisfaction (Sohrabi & Albalushi, 2011). Health insurance coverage increases patients' satisfaction with health services (Jang, Kim, & Chiriboga, 2005). There is a substantial effect of health in- surance on the utilization of care.

Shaheen, A. M., Hamdan, K. M., Albqoor, M., & Arabiat, D. H. (2020). Perceived barriers to healthcare utilization among Jordanian families: A family Centred approach. Applied Nursing Research, 54, Article 151313. https://doi.org/10.1016/j.apnr.2020.151313

It was found that uninsured status leads to a 40% reduction in emergency department visits and a 61% reduction in inpatient hospital admissions (Anderson, Dobkin, & Gross, 2012). The amount of time a patient waits to be seen by a health care provider affects health services utilization. Healthcare institutions and providers should apply measures that reduce waiting time and ensuring patient satisfaction (Umar, Oche, & Umar, 2011). Waiting time has been identified as a major barrier among those who experienced difficulties obtaining care. Patients reported adverse effects of waiting for health- care services, including worrying, stress, and pain (Carrière & Sanmartin, 2010). The commonest reason for the long waiting time reported in previous literature was the large numbers of patients with few healthcare workers (Oche & Adamu, 2013).

Transportation from and to medical facilities is a geographical barrier that affects access to healthcare services. A national study in Jordan that examined the role of substandard care and delays in ma- ternal deaths found that there was a problem of access for women in the study. Twelve women (15.8%) failed to get transportation at appro- priate times. Families in this study reported that this was due to fi- nancial problems (50%), living in a remote area far away from regular transportation (33.3%), and transportation became available only after 30 min after midnight (16.6%) (Okour, Khader, Amarin, Jaddou, & Gharaibeh, 2012). The distance of the healthcare facility is another geographical barrier that affects health service utilization. One study that examined the relationship between distance and the utilization of healthcare services by a group of elderly residents in rural Vermont, United States of America confirmed that increased distance from a provider does reduce utilization (Nemet & Bailey, 2000). Traveling distance and traveling time was reported by patients as a reason for skipping inpatient care among patients living in Critical Access Hospital service areas (Liu et al., 2007).

Clients considered the general cleanliness/appearance of the facility as a high priority in the delivery of care (Delia, Hall, Prinz, & Billings, 2004). A national study that was conducted in Germany and included a random sample of 1000 persons, assessed factors that may

Shaheen, A. M., Hamdan, K. M., Albqoor, M., & Arabiat, D. H. (2020). Perceived barriers to healthcare utilization among Jordanian families: A family Centred approach. Applied Nursing Research, 54, Article 151313. https://doi.org/10.1016/j.apnr.2020.151313

influence the choice of hospital, including “distance to hospital,” “friendly staff,” “staff-to-patient ratio,” “cleanliness,” “nosocomial infection rate,” “own experiences,” “friend's opinion,” and “facility's reputation in public media.” This study found that general cleanliness and friendly staff proved to be the most important issues for the patients (Vonberg, Sander, & Gastmeier, 2008). It was also found that the appearance of the environment, physical cleanliness, and staff behavior were the main factors that influenced the patients' perceptions of cleanliness in medical facilities (Whitehead, May, & Agahi, 2007).

The expertise of the healthcare providers and their characteristics and communication with patients are key factors that affect health service utilization. A study conducted in London, Britain found that patients were dissatisfied because they were not receiving attention from doctors (Owusu-Frimpong et al., 2010). Another study that measured patients' satisfaction with the quality of health services at primary healthcare clinics revealed that 87% of the patients considered that the time for communication between physicians and patients was not enough. Moreover, patients in this study r negatively rated the quality of the communication relationship between physicians and patients (Majeed Alhashem, Alquraini, & Chowdhury, 2011). Okour et al. found that there were 11 maternal deaths (14.5%) in hospitals were due to several factors including the lack of experience or specialists (Okour et al., 2012). Another study that was conducted in outpatient departments and health centers in New York City found that provider continuity and the personal interaction between patients and physicians are of high priority to patients' satisfaction (Delia et al., 2004). Lack of specialty care in local services and doctors were most frequently mentioned as reasons why patients avoid local Critical Access Hospitals (Liu et al., 2007). A study assessed healthcare utilization measured by the number of hospital visits, and satisfaction with healthcare service, using a sample of 230 older Korean Americans, found that having health insurance and having greater trust in medical care increased patients' satisfaction. Jang et

Shaheen, A. M., Hamdan, K. M., Albqoor, M., & Arabiat, D. H. (2020). Perceived barriers to healthcare utilization among Jordanian families: A family Centred approach. Applied Nursing Research, 54, Article 151313. https://doi.org/10.1016/j.apnr.2020.151313

al. found that the experience of disrespect or dis- crimination in medical settings significantly reduced patients' satisfaction with services (Jang et al., 2005).

Issues related to medications and equipment are also essential to the utilization of health services. Lack of access to essential treatment was reported as a reason for being dissatisfied with health services (Owusu- Frimpong et al., 2010). Okour et al., linked inadequately equipped emergency obstetric care at hospitals and a lack of beds to maternal deaths (Okour et al., 2012). Lack of drugs and supplies, poor information provision, long waiting time, poor cleanliness, lack of privacy, and inadequate visiting hours are significant associated factors with patients' dissatisfaction with health services (Assefa & Mosse, 2011). A study examined barriers encountered in initial access to healthcare in Brazil. The limited availability of health centers, doctors, and drugs has led to longer waiting times (Garcia-Subirats et al., 2014).

There is a lack of qualitative studies that examined the perceived barriers to healthcare utilization among Arab families. Therefore, the purpose of this study was to identify and analyze barriers to accessing and utilization of healthcare services in Jordan using a broader family- centered approach.

3. Methods

3.1. Study aims

This study aimed to understand the barriers to using health services by Jordanian families.

3.2. Design

The study used a cross-sectional qualitative research design.

3.3. Sampling and recruitment

A purposive sample of twenty-five Jordanian families was recruited using snowball sampling from an urban and metropolitan area in Jordan (Marpsat & Razafindratsima, 2010). Participants were invited to participate in the study using

Shaheen, A. M., Hamdan, K. M., Albqoor, M., & Arabiat, D. H. (2020). Perceived barriers to healthcare utilization among Jordanian families: A family Centred approach. Applied Nursing Research, 54, Article 151313. https://doi.org/10.1016/j.apnr.2020.151313

fliers in public places and the personal social network of the research team. Family in this study was defined as members related by marriage, blood or adoption, living together, or those who share a close relationship (citation). In this study, the family was the unit of analysis. Inclusion criteria for the families were who identified themselves as Jordanian, able to speak and understand Arabic and have the willingness to be part of a family group interview. Two research assistants conducted all of the interviews. These research assistants had previous experience in conducting research interviews. They also had the necessary home visiting and communication skills that were essential to establish trust with the families. Each interview lasted from one to two hours. Twenty-five families participated in family group interviews.

3.4. *Data collection and setting*

Ethical approval was obtained before data collection from the Institutional Review Board of the (Institution name was deleted to promote blind review, no assigned number). The interviews were conducted at a convenient location chosen by the participants. Most of the interviews were conducted at the participants' homes. A total of 25 families that included 107 family members participated in the inter- views in person. Semi-structured family group interviews were con- ducted. The interview questions were designed to explore barriers to using healthcare services. Permission was obtained from families to tape-record each interview. All interviews were audiotaped and transcribed. The interviews were conducted in Arabic (the native language of families). Then, the resulting themes and the verbatim quotations used in the findings were translated into English. After that, back-translation into the Arabic language was done by another independent researcher to ensure the accuracy of the translation (Babcock & Gove, 1993; Brislin, 1970). The family interview approach allows the opportunity to explore family shared experiences related to health service use (Chesla, 1995). Also, this approach promotes the acknowledgment of multiple

Shaheen, A. M., Hamdan, K. M., Albqoor, M., & Arabiat, D. H. (2020). Perceived barriers to healthcare utilization among Jordanian families: A family Centred approach. Applied Nursing Research, 54, Article 151313. https://doi.org/10.1016/j.apnr.2020.151313

voices within families; these voices can be related to other family members (Hartrick & Lindsey, 1995).

3.5. Data analysis

Thematic analysis was used to analyze the study data (Boyatzis, 2007). The guidelines developed by (Knafl & Ayres, 1996) were considered when analyzing the family data. Researchers considered practical issues related to interviewing families which include preparation for the interviews, interviewer/family interactions during the inter- views, and closing the interview (Whitehead, 2009). Thematic analysis was used to identify repetitive patterns in the data using (Boyatzis, 2007) approach. According to Boyatzis, a theme is "a pattern found in the information that at a minimum describes and organizes the possible observations and at maximum interprets the phenomenon" (Boyatzis, 2007, p.3) (Boyatzis, 2007). Three researchers conducted the analysis, compared, and discussed the emerged themes. Data were reduced to significant quotes that used to draw themes. Then, resulted themes were compared across transcripts to identify relationships. The analysis was guided by the family analysis approach described by Knafl and Ayres (1996). The analysis was guided by three questions: how are these findings mean in investigating the family's experience? Does the data represent family-level data? Do these data describe an individual perception of a family member that contributes to under- standing the shared family experience? The family interviews were written to conserve the individual points of view in addition to the family context. Individual and family themes were systematically compared to develop a shared model that describes barriers to using healthcare services for the Jordanian community. Examples of the questions used in the interview included: Are there any issues you and your family have experienced in accessing healthcare support and services?

4. Results

Demographic data are presented as a family case study. Twenty-five families from various geographic locations in Jordan participated in this study. One hundred and seven individuals

Shaheen, A. M., Hamdan, K. M., Albqoor, M., & Arabiat, D. H. (2020). Perceived barriers to healthcare utilization among Jordanian families: A family Centred approach. Applied Nursing Research, 54, Article 151313. https://doi.org/10.1016/j.apnr.2020.151313

participated in the interviews. Each family interview included two to three generation groups. Most participating families were from central regions in Jordan (Amman and Zarqa). Participated families reported having a wide range of health problems including acute and chronic conditions see Table 1. Analyzing the family interviews resulted in four main themes related to barriers of health services utilization: service system, structural/physical barriers, equipment and medication, and staff competency. Under each main theme, there were several subthemes (see Fig. 1). Illustrative quotes for the study findings were provided for each main theme.

Shaheen, A. M., Hamdan, K. M., Albqoor, M., & Arabiat, D. H. (2020). Perceived barriers to healthcare utilization among Jordanian families: A family Centred approach. Applied Nursing Research, 54, Article 151313. https://doi.org/10.1016/j.apnr.2020.151313

Table 1
Characteristic of participated families (N = 25).

Family case	Number of family members	Region	Adult reported health problems	Children reported health problems
1	7	Central	Allergies, asthma, flu	Fever, diarrhea, diaper rash
2	4	Central	Renal failure, allergy	Viral infections, chickenpox
3	2	Central	Hypertension, type 2 diabetes, flu, eczema	–
4	4	Central	Liver cirrhosis, cancer, type 2 diabetes, hypertension	Chickenpox, flu, allergy
5	6	South	Anemia	Chicken box, fever, diarrhea, vomiting
6	6	Central	–	Congenital heart disease, flu, diaper rashes, chickenpox, measles, head lice
7	12	Central	Hyperlipidemia, Hypertension, type 2 diabetes, arthritis, asthma, migraine	Allergy, asthma
8	5	Central	Esophageal reflux, helicobacter, flu, anemia, sinus infection, gastric ulcer	–
9	17	Central	Tonsillitis, appendicitis, Cholecystitis	Laryngitis, hernia, sinus infection, food allergy, developmental hip dislocation
10	3	Central	Pelvic infections, flu, gastritis	–
11	5	Central	Tonsillitis, obesity, flu	–
12	8	Central	Flue, heart disease, tonsillitis	Tonsillitis, colic pain, gastritis
13	4	Central	Flu, eczema	Tooth decay
14	5	Central	Heart disease, cholesterol, flu, gastric ulcer	–
15	2	Central	Flu	–
16	6	Central	Liver cirrhosis, uterus cancer, dm, Cholecystitis, disk, stroke,	Flu, viral infection, tonsillitis
17	10	Central	Stroke, hypertension, epilepsy, obesity, dm, hemorrhoid, warts.	–
18	3	South	Stroke, hypertension, type 2 diabetes	Pertussis
19	7	Central	Hypertension, type 2 diabetes, disk, cancer	Chickenpox, jaundice, measles, fever, tonsillitis
20	6	Central	Hypertension, type 2 diabetes, liver cirrhosis, esophageal cancer, prostatitis, heart disease	Tonsillitis, pneumonia, falling down
21	10	South	Type 2 diabetes, arthritis, cancer, kidney stone	Enuresis
22	5	Central	Irritable bowel syndrome, UTI, type 2 diabetes, cancer, hypertension, tonsillitis	Asthma, tonsillitis, allergy
23	11	Central	Liver cirrhosis, ascites, kidney stone, Alzheimer's, lung cancer, fracture, osteoporosis, thalassemia	Kyphosis, hypothyroidism
24	9	Central	Type 2 diabetes, MI, breast cancer, postpartum depression	Anemia, gastritis
25	5	Central	Arthritis, disk, kidney stone, heart disease, heart disease, tonsillitis, UTI	Anemia, allergy

Shaheen, A. M., Hamdan, K. M., Albqoor, M., & Arabiat, D. H. (2020). Perceived barriers to healthcare utilization among Jordanian families: A family Centred approach. Applied Nursing Research, 54, Article 151313. https://doi.org/10.1016/j.apnr.2020.151313

3.2. *Service system barriers*

Four subthemes emerged related to service system barriers: appointments, cost/health insurance coverage, bureaucracy/disorganized waiting system, and availability of services.

- ***Appointments***

  Families addressed several issues regarding scheduling appointments in the health services including; long waiting time, distant appointments, and not considering the urgency of the appointment. One of the participants responded when asked about barriers of healthcare utilization '*The long waiting time in hospitals, the congestion, the large number of individuals seeking care and lack of organization*' (*Mother, 2nd generation, family 02*). Another participant added '*I have a CT scan, they postponed my appointment for two months, and how can I handle to wait this long time. I mean the distant dates…..*' (*Grandmother, 1st generation, family 21*). Another participant commented *'Regarding appointments, they do not consider the patients' urgent condition' (Daughter, 2nd generation, family 22*).

- ***Bureaucracy and disorganized waiting system***

  Participants considered waiting for a long time due to the huge number of clients and the required procedure to obtain healthcare services as a barrier to healthcare utilization. One mother said *'We wait for services for a long time in the hospital, there are huge numbers of clients and a lot of crowdedness and disorganization in receiving the services' (Mother, 2nd generation, family 02).* Another son added *'The rules that they put are an obstacle you have to pay, take a receipt, and then create a record to receive the service' (Son, 3rd generation, family 20).* Another family member said *'The slow routine procedures, the crowdedness, a lot of people are waiting for ahead of you' (Son, 3rd generation, family 20).*

- ***Cost/health insurance coverage***

  Some family members highlighted the issue of affordability of health services; one mother commented *'The high prices of medications and the lack of lower price alternatives for these*

Shaheen, A. M., Hamdan, K. M., Albqoor, M., & Arabiat, D. H. (2020). Perceived barriers to healthcare utilization among Jordanian families: A family Centred approach. Applied Nursing Research, 54, Article 151313. https://doi.org/10.1016/j.apnr.2020.151313

medications, while the financial situation doesn't allow us to buy these medications' (*Mother, 2nd generation, family 05*). In another family, one member said, *'The greatest barrier to go to the hospital is the financial condition because I do not have health insurance …*' (*Son, 2nd generation, family 18*).

- ***Availability of services***

  Family members considered that the number of healthcare services is insufficient to meet clients' needs. One grandfather said, *'There is a lack in the number of specialty clinics and the number of healthcare centers, they should be more organized in providing the services …' (Grandfather, 1st generation, family 09).* Another one added *'… , there is a lack in the number of hospitals and the number of specialized healthcare providers and clinics' (Grandfather, 1st generation, family 18).*

4.2. Structural/physical barriers

Four emerged subthemes related to structural/physical barriers: car parking, transportation from and to the medical facility, the distance of medical facility to clients' residence, and general cleanliness and appearance of the medical facility.

4.2.1. Car parking

An issue related to the unavailability of parking places in health care facilities was identified as a barrier by some family members. One family member said, *'One barrier is related to car parks, usually car parks unavailable in the hospital' (Grandfather, 1st generation, family 09).*

Shaheen, A. M., Hamdan, K. M., Albqoor, M., & Arabiat, D. H. (2020). Perceived barriers to healthcare utilization among Jordanian families: A family Centred approach. Applied Nursing Research, 54, Article 151313. https://doi.org/10.1016/j.apnr.2020.151313

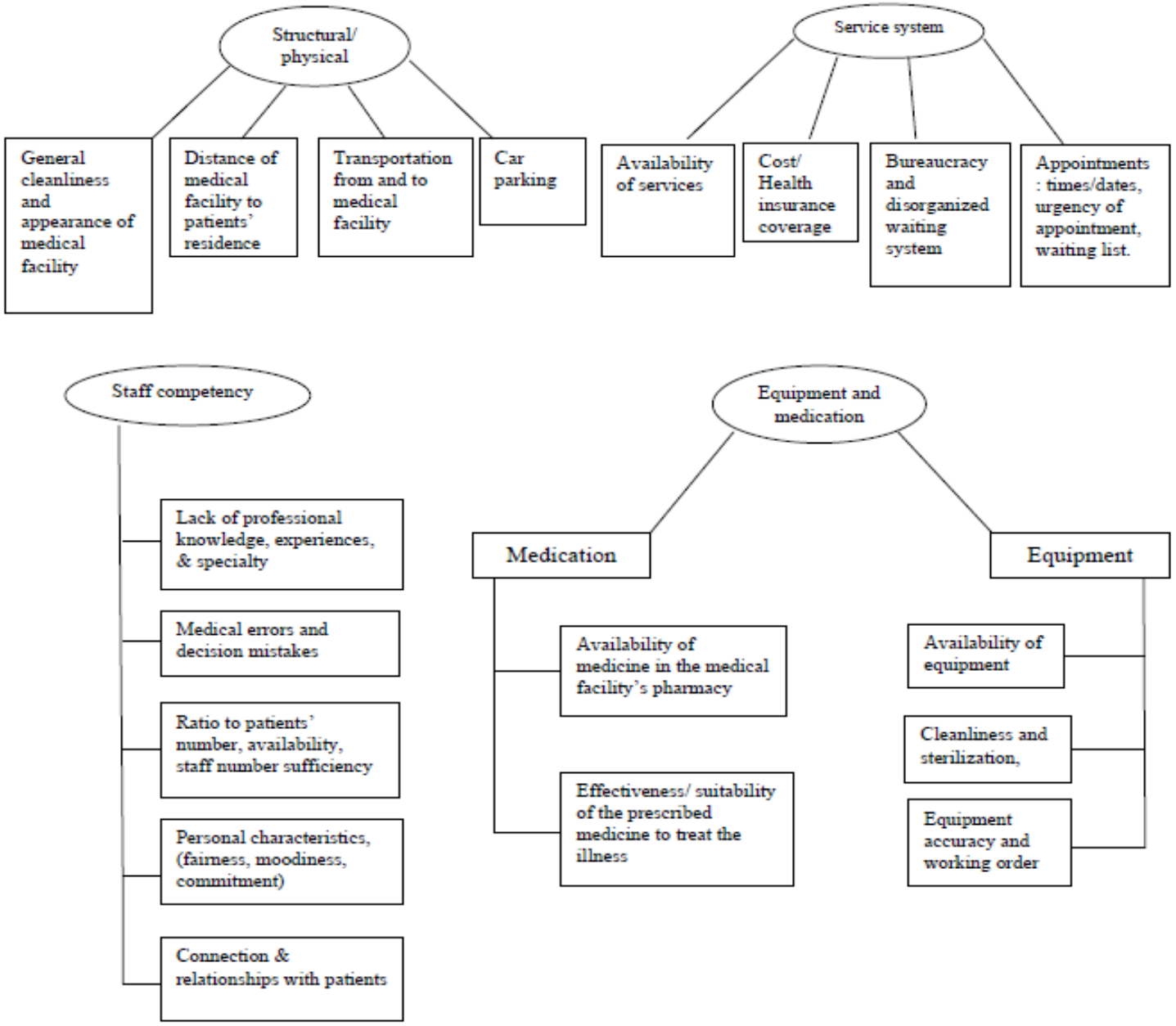

Fig. 1. Themes related to health services barriers.

4.2.2. Transportation from and to the medical facility

Transportation obstacles were raised by the participating families. One father said *'…. I have problems with transportation to the healthcare facilities, I cannot find vehicle'* (*Father, 2nd generation, family 23*). Another son added '*…. The location of the hospital is inappropriate, we can't find a bus or a taxi to reach the hospital' (Son, 2nd generation, family 22*).

4.2.3. Distance of medical facility to patients' residence

Some family members considered that healthcare services are in- accessible due to geographical barriers. One mother said, 'Here *where we live, it is very far from the nearest healthcare center or hospital, we have to travel for long distances to seek care' (Mother 2nd generation, family 13).* Another mother added *'…, the health centre is very far from my house…' (Mother, 2nd generation, family 17).*

4.2.4. General cleanliness and appearance of the medical facility

The cleanness of the medical facilities that provide health services and the equipment used in providing these services was identified as a barrier to use the health services by participating families. One daughter said *'Healthcare facilities lack cleanliness' (Daughter, 3rd generation, family 25).* Another son added *'….The cleanliness of the hospitals is non-existent and even the service in the hospitals is bad, no hot water, no cleanliness, no services, and no treatment, I pay for services but I don't take anything in return'(Son, 3rd generation family 26).*

3.3. Equipment and medication

Three subthemes emerged related to equipment: availability of equipment, cleanliness/sterilization of equipment, and equipment ac- curacy/working order. Two subthemes emerged related to medication: availability of medicine in the medical facility's pharmacy and effectiveness/suitability of the prescribed medicine to treat the disease.

- **Availability of equipment**

Shaheen, A. M., Hamdan, K. M., Albqoor, M., & Arabiat, D. H. (2020). Perceived barriers to healthcare utilization among Jordanian families: A family Centred approach. Applied Nursing Research, 54, Article 151313. https://doi.org/10.1016/j.apnr.2020.151313

Some family members complained about the lack of necessary equipment or machines. One family member said *'… , there is no equipment in the facilities….' (Son, 3rd generation, family 21).* One mother added *'We wish that they provide more dialysis machines' (Mother, 2nd generation, family 2).*

- **Cleanliness and sterilization of equipment**

Some family members discussed the cleanness of the equipment used in providing services*'… The clinics were not clean, the tools were also not clean, they should care for the patient, they don't maintain privacy in the treatment, there is more than one patient in the same place receiving treatment, and there is no cleanliness in general in the hospitals' (Father, 2nd generation, family 23).* One daughter also said, *'they give very distant* appointments, mistreat us, and they ignore sterilization of the equipment before using' (Daughter, 3rd generation, family 25).

- ***Equipment accuracy and working order***

Medical equipment that is outdated or needs maintenance is another barrier identified by the families. One father said *'Medical equipment needs maintenance and healthcare providers do not know how to use them' (Father, 2nd generation, family 11).* Another family member added *'They use low-quality medical equipment that is outdated' (All family members, family 25).*

- **Availability of medicine in the medical facility's pharmacy**

Some family members complained about the availability of pre- scribed medications in healthcare facilities. One family member said *'….an important barrier is the availability of medicine in the healthcare centers' (Son, 2nd generation, family 18).* A grandmother added *'when you go to the clinic they prescribe medications for you, but when you go to the pharmacy in the facility they tell you that the medicine is out of stock, you have to buy it from outside pharmacy' (Grandmother, 1st generation, family 21).*

Shaheen, A. M., Hamdan, K. M., Albqoor, M., & Arabiat, D. H. (2020). Perceived barriers to healthcare utilization among Jordanian families: A family Centred approach. Applied Nursing Research, 54, Article 151313. https://doi.org/10.1016/j.apnr.2020.151313

- *Effectiveness/suitability of the prescribed medicine to treat the illness* Different family members reported that healthcare providers pre- scribed faults, such as writing the wrong medication, dose, route, or frequency *'the healthcare team is not qualified they prescribe medications not appropriate to your health problem ….' (Son, 3rd generation, family 17).* Another family member elaborated *'…. they diagnose me without examination, and they give the same medicine for all kinds of diseases' (Son-*in-law, 2nd generation, family22).

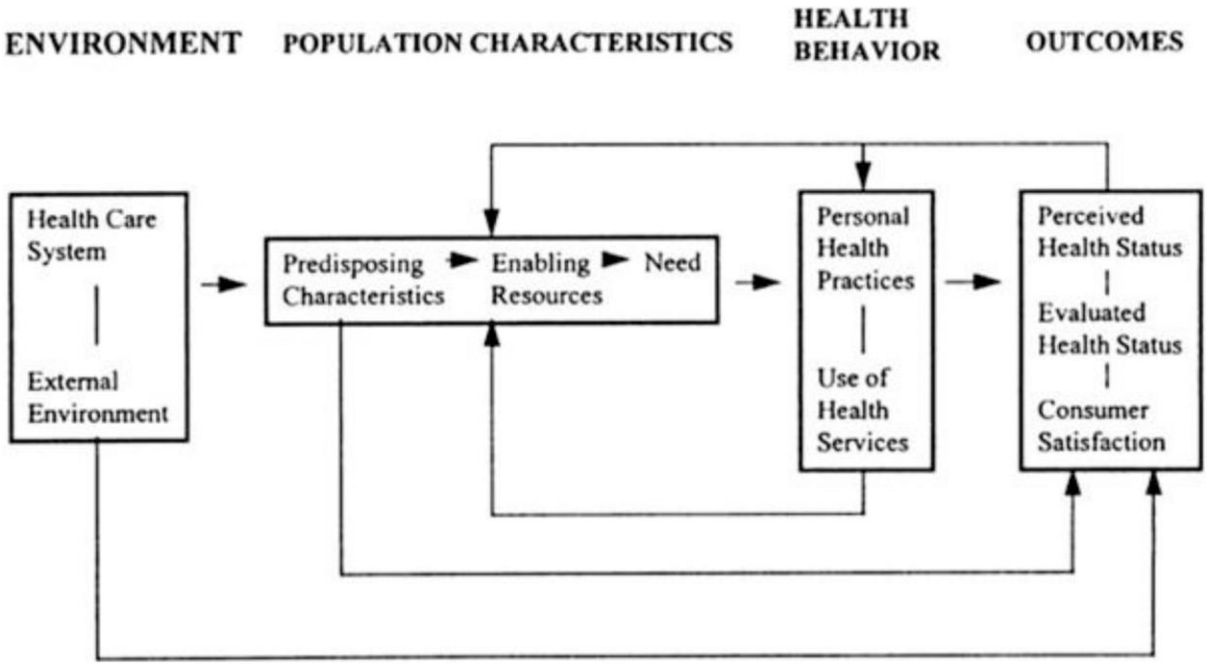

Figure 1. Andersen's health behaviour model.

4.4.5. Connection and personal relationships

The communication between health care providers and patients is an important aspect that shapes the professional relationship. Families in the study identified different aspects that affect this relationship, including trust, privacy, and attention. A grandfather said, '*Healthcare providers do not discuss with patients' issues regarding*

Shaheen, A. M., Hamdan, K. M., Albqoor, M., & Arabiat, D. H. (2020). Perceived barriers to healthcare utilization among Jordanian families: A family Centred approach. Applied Nursing Research, 54, Article 151313. https://doi.org/10.1016/j.apnr.2020.151313

their health condition and don't help them feel comfortable to talk about such issue' (Grandfather, 1st generation, family 22). Another daughter commented '*We lack trust in the doctors because they don't pay attention to our health problems … ….*' (*Daughter, 2nd generation, family 22*). Some family members raised is- sues about lack of privacy and attention '*They don't deal with the patients with kindness, they are tough, …., and don't pay attention to the patient, and invading privacy during treatment because they consider the patient with the presence of other patients*' (*Mother, 2nd generation, family 23*). Another daughter added 'They don't treat patients in humanity; they neither provide counselling nor listen to the patient, and they treat us with disrespect' (*Daughter, 2nd generation, family 24*).

5. Discussion

This study examined perceived barriers to use health services among Jordanian families; it identified a variety of factors that have an impact on their use of health services. It used the Behavioural Model of Health Services Use (BM) developed by Ronald M. Andersen to conceptualize the key factors that affect family use of health services. Andersen's model (1995) was first developed by the sociologist in 1968 to help explain why families use healthcare services (Babitsch, Gohl, & von Lengerke, 2012). The four major constructs of the model are the environment, population characteristics, health behavior, and health outcomes (Ivanov et al., 2010). Figure 2 shows these major constructs. Predisposing factors, such as the individual characteristics of age, gender, and ethnicity, and enabling resources like income impose the need to use health services. The needs also can be perceived by the individuals or evaluated by the healthcare providers (Babitsch et al., 2012). The findings demonstrated that families were highly influenced by specific factors in the BM. These factors are classified into four overarching themes; physical barriers, services system, equipment and medications, and staff competency.

Shaheen, A. M., Hamdan, K. M., Albqoor, M., & Arabiat, D. H. (2020). Perceived barriers to healthcare utilization among Jordanian families: A family Centred approach. Applied Nursing Research, 54, Article 151313. https://doi.org/10.1016/j.apnr.2020.151313

The first major theme of health services barriers was the physical or structural barrier including transportation from and to the medical facility, car parking, the distance of the medical facility to patients' residence, and general cleanliness and appearance of the medical facility. The physical factors of availability of transportation and transportation costs are considered enabling factors in the BM; the increase in healthcare use is usually among individuals who can afford transportation costs (Tesfaye, Chojenta, Smith, & Loxton, 2018). In a study examined factors associated with maternal mortality in Jordan, delayed care for deceased women was investigated and researchers found that 16% of the death was related to delayed transportation. Some of these women's families reported reasons like financial hardness and living in very distant area difficulties (Okour et al., 2012). The woman who was more likely to seek care, their families reported easy access to maternal health services and living close to the healthcare facility (Okour et al., 2012). The outcomes of this theme are consistent with previous re- search on the traditional physical barriers that reduce individuals' ability to use health services (Allen, Call, Beebe, McAlpine, & Johnson, 2017; Chiang, Labeeb, Higuchi, Mohamed, & Aoyama, 2013).

The second major theme of the barriers was the services provided by the healthcare system, including the availability of services, the cost of care and the health insurance coverage, bureaucracy and disorganized waiting systems, and appointments (times and/or dates, the urgency of the appointments, and waiting lists). Waiting time for healthcare is sometimes connected to the socioeconomic status of the patients. These inequalities which reflected on patient's ability to use the health ser- vices are reported more frequently (Taber, Leyva, & Persoskie, 2015). A report on access inequalities in healthcare in Europe showed that patients who can afford to pay out of pocket tend to use services by the private sector and that is mainly to avoid long waiting times (Baeten et al., 2018). Some previous literature also found that the most perceived barriers to using health services among underserved populations were poor quality interactions with healthcare systems, bureaucracy, and complexity of the regulations, and shortage of healthcare providers

Shaheen, A. M., Hamdan, K. M., Albqoor, M., & Arabiat, D. H. (2020). Perceived barriers to healthcare utilization among Jordanian families: A family Centred approach. Applied Nursing Research, 54, Article 151313. https://doi.org/10.1016/j.apnr.2020.151313

(Loignon et al., 2015; Mercer, Cawston, & Bikker, 2007). These barriers were found even among populations were public services were free of cost. Avoiding health services use due to these factors can be explained as environmental factors in the BM (Holtzman et al., 2015). These environmental barriers are very common circumstances discussed by the participants in the study and were found in most examined literature.

The third theme discovered in this study was the staff competency. It included problems of lack of professional knowledge and experience, medical errors, staff number insufficiency, and personal characteristics of the providers. In this theme, participants described the barriers in different aspects, such as mistreatment, lack of specialty knowledge, and misdiagnosis. Some participants reported experiences of prejudicial relationships with their providers, lack of counselling services, and lack of trust, respect, understanding, and privacy in the relationship with the providers. Most types of communication barriers between clients and healthcare providers are well-documented in the literature; many of the factors identified here by the participants are consistent with what previously described in prior research (Norouzinia, Aghabarari, Shiri, Karimi, & Samami, 2016). For example, the quality of communication between patients and their healthcare providers is affected by the knowledge and attitude of the healthcare workers and would affect the mutual respect and trust in the therapeutic relationship.

The final theme was equipment and medications, including the availability of medicine and its suitability and effectiveness and the equipment availability, accuracy, and working order. Prior research documented that a shortage in health resources, such as interrupted medication supply, contributed to decreased access to healthcare (Goudge, Gilson, Russell, Gumede, & Mills, 2009; Loignon et al., 2015). The third and fourth themes take part in the enabling resources of the BM. Babitsch et al. (2012) classified these reported barriers in the enabling factors in the BM, such as the availability and effectiveness of health services, the density of

Shaheen, A. M., Hamdan, K. M., Albqoor, M., & Arabiat, D. H. (2020). Perceived barriers to healthcare utilization among Jordanian families: A family Centred approach. Applied Nursing Research, 54, Article 151313. https://doi.org/10.1016/j.apnr.2020.151313

healthcare providers, and staff education and development (Holtzman et al., 2015). Many of the barriers identified in this study are consistent with factors previously described in prior literature in both developed and developing countries, and these results also have been reflected in health behavior models including the BM (Allen et al., 2017; Baeten et al., 2018; Chiang et al., 2013; Holtzman et al., 2015; Okour et al., 2012).

In this study, we committed to ensuring the scientific rigor, and therefore we reported the accuracy of data collection and analysis. For the credibility of the study, we carefully monitored the procedures of data collection and interpretation, we used the same interview guide for all family members, and we employed an external researcher to ensure reflexivity. In the findings of this study and terms of credibility, we delivered the participants' quotes that revealed a believable experience as it has been lived. We clearly stated the effort we took to ensure the authenticity of the findings, such as taking the time to build a trustful relationship with the participants, comparing and refining interpretations, and providing rich and full narratives. Regarding the criticality, in the three major areas of their findings, we were open to deliver varied responses from the participants' lived experiences. We were also opened to focusing on many different sensitive stories the participants shared, such as mistreatment, disrespect, and mistrust. Our results are best generalized to Arab families in Jordan. However, further research is required to examine whether they apply to other Arab countries.

5.1. Limitations

There are some limitations to the present study. There is a possibility of introducing selection bias due to using the snowball sampling technique. However, we tried to include families from two major geo- graphic areas of the country (middle and south). Most of the barriers discussed by the families were reported in the public

Shaheen, A. M., Hamdan, K. M., Albqoor, M., & Arabiat, D. H. (2020). Perceived barriers to healthcare utilization among Jordanian families: A family Centred approach. Applied Nursing Research, 54, Article 151313. https://doi.org/10.1016/j.apnr.2020.151313

health sector. There is a need for more focused studies to examine specific challenges in each sector. Given the significance of this inquiry and the possible implications of reduced healthcare access, specific qualitative methodologies, such as ethnographic and interpretive phenomenology, are required in this field to formulate an understanding of the lived experience of using health services. Further research also is required to examine possible factors of avoiding medical care, such as cultural, religious, and other environmental factors.

5.2. Contributions

To our knowledge, this is one of the few qualitative studies that examined barriers to use health services among Jordanian families. We sought to use the BM conceptual model to help propose and explain the perceived barriers in terms of environmental and enabling factors. This study would increase awareness about the underserved populations who avoid seeking medical care. Public health efforts are required to increase awareness about the importance of contacting the healthcare system as early as possible. However, public health policy may require developing new initiatives that reduce these perceived barriers, such as enhancing communication skills among healthcare workers, increasing supervision and inspection of healthcare quality, and enhancing patient engagement by using phone calls and messages as appointment re- minders and careful follow-up. Quality assurance and accreditation is one of the most effective approaches to provide high-quality performance and enhance the quality of care to assure patient satisfaction.

Acknowledgements

The authors are grateful to the University of Jordan/Deanship of scientific research - for funding this study. This study was commissioned and funded by the University of Jordan. We like to the thank Professor Ayman Hamdan-Mansour for his assistance and support in the data collection. The author is grateful to Edith Cowan University for helping in carrying the thematic analysis for this study. A special thanks to Professor Lisa

Shaheen, A. M., Hamdan, K. M., Albqoor, M., & Arabiat, D. H. (2020). Perceived barriers to healthcare utilization among Jordanian families: A family Centred approach. Applied Nursing Research, 54, Article 151313. https://doi.org/10.1016/j.apnr.2020.151313

Whitehead and Associate Professor Mohammad AL Jabery for development and analysis of the family interviews.

REFERENCES

Allen, E. M., Call, K. T., Beebe, T. J., McAlpine, D. D., & Johnson, P. J. (2017). Barriers to care and healthcare utilization among the publicly insured. *Medical Care, 55*(3), 207.

Anderson, M., Dobkin, C., & Gross, T. (2012). The effect of health insurance coverage on the use of medical services. *American Economic Journal: Economic Policy, 4*(1), 1–27.

Assefa, F., & Mosse, A. (2011). Assessment of clients' satisfaction with health service deliveries at Jimma University specialized hospital. *Ethiopian Journal of Health Sciences, 21*(2), 101–110.

Babcock, P., & Gove, P. B. (1993). *Webster's third new international dictionary of the English language, unabridged: Since 1847 the ultimate word authority for schools, libraries, courts, homes, and offices: Merriam-Webster*.

Babitsch, B., Gohl, D., & von Lengerke, T. (2012). Re-revisiting Andersen's behavioral model of health services use: A systematic review of studies from 1998–2011. *GMS Psycho-Social-Medicine, 9*.

Baeten, R., Spasova, S., Vanhercke, B., and Coasters. (2018). Inequalities in access to healthcare. A study of national policies, European social policy network (ESPN),

Brussels: European Commission. (2018). *(Inequalities in access to healthcare. A study of national policies, European Social Policy Network (ESPN)*. Brussels

Boyatzis, R. E. (2007). Mentoring for intentional behavioral change. *The handbook of mentoring at work: Theory, research & practice* (pp. 447–470). Thousand Oaks: Sage.

Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology, 1*(3), 185–216.

Carrière, G., & Sanmartin, C. (2010). Waiting time for medical specialist consultations in Canada, 2017. *Health Reports, 21*(2), 7.

Shaheen, A. M., Hamdan, K. M., Albqoor, M., & Arabiat, D. H. (2020). Perceived barriers to healthcare utilization among Jordanian families: A family Centred approach. Applied Nursing Research, 54, Article 151313. https://doi.org/10.1016/j.apnr.2020.151313

Chesla, C. A. (1995). Hermeneutic phenomenology: An approach to understanding families. *Journal of Family Nursing, 1*(1), 63–78.

Chiang, C., Labeeb, S. A., Higuchi, M., Mohamed, A. G., & Aoyama, A. (2013). Barriers to the use of basic health services among women in rural southern Egypt (Upper Egypt). *Nagoya Journal of Medical Science, 75*(3–4), 225.

Delia, D., Hall, A., Prinz, T., & Billings, J. (2004). What matters to low-income patients in ambulatory care facilities? *Medical Care Research and Review, 61*(3), 352–375.

Garcia-Subirats, I., Vargas, I., Mogollón-Pérez, A. S., De Paepe, P., da Silva, M. R. F., Unger, J. P., & Vázquez, M. L. (2014). Barriers in access to healthcare in countries with different health systems. A cross-sectional study in municipalities of Central Colombia and North-Eastern Brazil. *Social Science & Medicine, 106*, 204–213.

Goudge, J., Gilson, L., Russell, S., Gumede, T., & Mills, A. (2009). Affordability, availability, and acceptability barriers to health care for the chronically ill: Longitudinal case studies from South Africa. *BMC Health Services Research, 9*(1), 75.

Hartrick, G. A., & Lindsey, A. E. (1995). Part 2: The lived experience of a family: A contextual approach to family nursing practice. *Journal of Family Nursing, 1*(2), 148–170.

Holtzman, C. W., Shea, J. A., Glanz, K., Jacobs, L. M., Gross, R., Hines, J., & Yehia, B. R. (2015). Mapping patient-identified barriers and facilitators to retention in HIV care and antiretroviral therapy adherence to Andersen's behavioral model. *AIDS Care, 27*(7), 817–828.

Jang, Y., Kim, G., & Chiriboga, D. A. (2005). Health, healthcare utilization, and satisfaction with service: Barriers and facilitators for older Korean Americans. *Journal of the American Geriatrics Society, 53*(9), 1613–1617.

Jordan 2025 (2015). A national vision and strategy. Retrieved from http://inform.gov.jo/en-us/By-Date/Report-Details/ArticleId/247/Jordan-2025.

Knafl, K. A., & Ayres, L. (1996). Managing large qualitative data sets in family research. *Journal of Family Nursing, 2*(4), 350–364.
Kronfol, N. (2012). *Access and barriers to health care delivery in Arab countries: A review*.

Liu, J., Bellamy, G. R., & McCormick, M. (2007). Patient bypass behavior and critical

Shaheen, A. M., Hamdan, K. M., Albqoor, M., & Arabiat, D. H. (2020). Perceived barriers to healthcare utilization among Jordanian families: A family Centred approach. Applied Nursing Research, 54, Article 151313. https://doi.org/10.1016/j.apnr.2020.151313

access hospitals: Implications for patient retention. *The Journal of Rural Health, 23*(1), 17–24.
Loignon, C., Hudon, C., Goulet, É., Boyer, S., De Laat, M., Fournier, N., & Bush, P. (2015). Perceived barriers to healthcare for persons living in poverty in Quebec, Canada: The EQUIhealThY project. *International Journal for Equity in Health, 14*(1), 4.

Majeed Alhashem, A., Alquraini, H., & Chowdhury, R. I. (2011). Factors influencing patient satisfaction in primary healthcare clinics in Kuwait. *International Journal of Health Care Quality Assurance, 24*(3), 249–262.

Marpsat, M., & Razafindratsima, N. (2010). Survey methods for hard-to-reach populations: Introduction to the special issue. *Methodological Innovations Online, 5*(2), 3–16.

Mercer, S. W., Cawston, P. G., & Bikker, A. P. (2007). Quality in general practice consultations; a qualitative study of the views of patients living in an area of high socioeconomic deprivation in Scotland. *BMC Family Practice, 8*(1), 22.

Nemet, G. F., & Bailey, A. J. (2000). Distance and health care utilization among the rural elderly. *Social Science & Medicine, 50*(9), 1197–1208.

Norouzinia, R., Aghabarari, M., Shiri, M., Karimi, M., & Samami, E. (2016). Communication barriers perceived by nurses and patients. *Global Journal of Health Science, 8*(6), 65.

Oche, M., & Adamu, H. (2013). Determinants of patient waiting time in the general outpatient department of a tertiary health institution in North Western Nigeria. *Annals of Medical and Health Sciences Research, 3*(4), 588–592.

Okour, A., Khader, Y., Amarin, Z., Jaddou, H., & Gharaibeh, M. (2012). *Maternal mortality in Jordan: The role of substandard care and delays*.

Owusu-Frimpong, N., Nwankwo, S., & Dason, B. (2010). Measuring service quality and patient satisfaction with access to public and private healthcare delivery. *International Journal of Public Sector Management, 23*(3), 203–220.
Sohrabi, M.-R., & Albalushi, R. M. (2011). Clients' satisfaction with primary health care in

Tehran: A cross-sectional study on Iranian health centers. *Journal of research in medical sciences: the official journal of Isfahan University of Medical Sciences, 16*(6), 756.

Taber, J. M., Leyva, B., & Persoskie, A. (2015). Why do people avoid medical care? A

Shaheen, A. M., Hamdan, K. M., Albqoor, M., & Arabiat, D. H. (2020). Perceived barriers to healthcare utilization among Jordanian families: A family Centred approach. Applied Nursing Research, 54, Article 151313. https://doi.org/10.1016/j.apnr.2020.151313

qualitative study using national data. *Journal of General Internal Medicine, 30*(3), 290–297.

Tesfaye, G., Chojenta, C., Smith, R., & Loxton, D. (2018). Application of the Andersen-Newman model of health care utilization to understand antenatal care use in Kersa District, eastern Ethiopia. *PLoS One, 13*(12), e0208729.

The Higher Health Council (2015). Jordan National Health Sector Strategy 2015-2019. Retrieved from http://www.hhc.gov.jo/uploadedimages/The%20National%20Strategy%20for%20Health%20Sector%20in%20Jordan%202015-2019.pdf.

Umar, I., Oche, M., & Umar, A. (2011). The patient waiting time in a tertiary health institution in northern Nigeria. *Journal of Public Health and Epidemiology, 3*(2), 78–82.

Vonberg, R.-P., Sander, C., & Gastmeier, P. (2008). Consumer attitudes about healthcareacquired infections: A German survey on factors considered important in the choice of a hospital. *American Journal of Medical Quality, 23*(1), 56–59.

Whitehead, H., May, D., & Agahi, H. (2007). An exploratory study into the factors that influence patients' perceptions of cleanliness in an acute NHS trust hospital. *Journal of Facilities Management, 5*(4), 275–289.

Whitehead, L. (2009). *Living with chronic illness: Support for family members who live with heart failure.* Families Commission.

Shaheen, A. M., Hamdan, K. M., Albqoor, M., & Arabiat, D. H. (2020). Perceived barriers to healthcare utilization among Jordanian families: A family Centred approach. Applied Nursing Research, 54, Article 151313. https://doi.org/10.1016/j.apnr.2020.151313