Title

Women in refuge: Syrian women voicing health sequelae due to war traumatic experiences and displacement challenges

Journal

Journal of Psychosomatic Research, 129

ISSN

0022-3999

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Publication Date

2020-02-01

DOI

10.1016/j.jpsychores.2019.109909

Peer reviewed

Manuscript Details

Manuscript number	JPSYCHORES_2019_381_R1
Title	Women in refuge: Syrian women voicing health sequelae due to war traumatic experiences and displacement challenges.
Article type	Full Length Article

Abstract

Objective: The Syrian war created a mass exodus of people to neighboring countries. Jordan hosts approximately 1.4 million Syrians who sought refuge and protection. This research represents an effort to understand the subjective narratives of Syrian refugee women's war traumatic experiences and displacement challenges while living in Jordan and the consequences on their physical and mental health. Methods: Data gathered between March and June 2014 included 24 in-depth interviews with Syrian refugee women who sought services from humanitarian organizations in Jordan. Interviews were conducted in Arabic and were audio recorded. A team of four researchers translated and transcribed the interviews. Group narrative methodology was utilized to analyze the interviews. Results: The study suggests that Syrian refugee women experienced diverse war atrocities including shelling, loss of property, separation from family members, and threats to their lives and their beloved ones, among a few. In Jordan, they reported on multiple displacement challenges, which are perceived as a continuous traumatic experience, as well as somatization. Narratives of women also included sequelae to their physical and mental health due to such stressors. Barriers to obtaining physical and mental health services are discussed, including inadequate medical treatment, lack of mental health services, and stigma on mental health which might be associated to somatization of mental illnesses. Conclusion: It is crucial that humanitarian organizations and host countries like Jordan bear the responsibility to enhancing accessibility to comprehensive trauma-focused physical and mental health services for Syrian refugees in a culturally and gender sensitive manner.

Keywords	Syrian refugees, physical and mental health, traumatic experiences, displacement challenges, somatization, narratives, women.

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Submission Files Included in this PDF

File Name [File Type]

Response letter to reviewers final.docx [Response to Reviewers]

Highlights.docx [Highlights]

Abstract.docx [Abstract]

Manuscript final.docx [Manuscript File]

Authors Declaration of Interest 1.pdf [Conflict of Interest]

Author signature Scan Segal.pdf [Conflict of Interest]

Title Page.docx [Data in Brief]

To view all the submission files, including those not included in the PDF, click on the manuscript title on your EVISE Homepage, then click 'Download zip file'.

Research Data Related to this Submission

There are no linked research data sets for this submission. The following reason is given:
The data that has been used is confidential

September 18, 2019

Dear Jess Fiedorowicz

Editor

Journal of Psychosomatic Research

We would like to thank the editors and reviewers for their comments and suggestions for improving this manuscript. We have made major changes marked in yellow (as required). Please see our detailed responses for each comment as follows:

Reviewer 1

This is an interesting manuscript which focuses on the high vulnerable group of Syrian women. Nevertheless there are some critical points I would like to address:

(1) Carefully look over the manuscript regarding scientific writing and be clear of the structure of the manuscript (which topic fits to which section).

Response: Re-organization of major parts of the manuscript was conducted to provide a clearer structure.

(2) The discussion section should combine results of literature to the quotes and statements of the refugees (pages 15-18).

Response: The discussion was edited to include quotes and statements of refugee women.

(3) What is the take home message – any ideas for interventions?

Response: Recommendations for interventions were added to the conclusion section (page 17-18).

(4) What happened to the data about non-verbal cues?

Response: Non-verbal cues were added to each citations from the data.

(5) Why did the authors only include past and present in the current manuscript? It would be good to include the transition topic as well regarding the fact that (forced) migration can be seen as a process with events prior flee, during flee and post migratory stress factors.

Response: A short description of the transition and future phases were added (pages 10-11+14-15). However, "the transition and future phases will be discussed briefly since they will be detailed in other manuscripts, to give appropriate time and space to the richness and complexity of the findings." This clarification was added in page 5.

(6) What happened to the question "What gives you strength to cope every day?"

Response: The question "What gives you strength to cope every day?" was addressed in page 14-15.

Further comments:

Methods

1. The aim of the study (Page 2, line: 12-15) “the aim … advance refugee well-being” should not be part of the method section, but of the introduction section.

Response: The aim of the study was moved to the introduction section (pages 1-2).

2. Section 2.2 Sample and participants should be reported in the results section.

Response: Section 3.1 sample and participants was moved to the results section (page 7).

3. Page 4 lines 4-6 “it was …together with them” – what is the aim of this statement? It should be written in a scientific way.

Response: This sentence was edited and a scientific explanation and reference were added in page 3.

4. What happened between 2014 to 2019 that the data gets published that late?

Response: A clarification was added to the manuscript in page 5.

5. I would recommend to shorten the section 2.4 Ethics.

Response: The Ethics section has been shortened (page 3).

Results

6. How many refugees did you ask to take part in the study? How was the willingness to participate? If they did not want to participate what was the reason.

Response: Explanation regarding refusal to participate was added in the recruitment section page 2.

7. Can you report data about their health care provision? Where do they go when they feel mentally or physically ill? Who takes care? Are they taking medication?

Response: Health and access to care section 3.2 was added in page 7.

8. Please provide information about the professional background of all researchers who were involved in the project.

Response: The professional background of all researchers who were involved in the project was added (page 4).

9. If you have further psychometric properties about that sample please report.

Response: Additional psychometric properties were added in page 7.

Reviewer 2

The paper is an important contribution to give voice to female refugees fleeing from Syria to Jordan and to demonstrate the connection between concrete experiences of these women and (mental) health issues.

My remarks:

Page 2: Recruitment: How did the staff members select those volunteers which were later connected to the researchers?

Response: Explanation of recruitment was added in page 2.

Page 5: Data Analysis

Can you please elaborate “micro and macro level of the narratives“?

Response: Elaboration on the micro and macro levels of the narratives were added in page 4.

The concrete process of the analysis is not fully clear: e.g., you differentiate between themes and codes in the text – what does this mean in your research (later you mention the codebook)? First you create themes and sub-themes (through a process of intersubjective validation) and then, each team member goes back to analyze the interviews independently again –to create the codes, you are referring to in the next sentence? With what rationale? Where are the codes in the results?

Response: The process of the analysis was edited and explained more clearly in pages 4-5.

You are explaining that this article is on Past and Present only. It would be good to mention what happens with the other parts and/or to give a rationale why only these two.

Response: A short description of the transition phase was added in pages 10-11. A clarification was added in page 5.

How exactly were the major chronological themes divided into additional sub-themes? Top-down or bottom-up? Or in a hermeneutical circle? Mentioning that the process was “complex” is not satisfactory from my point of view.

Response: Complexity of the process was added in page 5. In addition, the development of the sub-themes were added to the description in page 5.

Page 6, Figure 1: According to the structure of the manuscript, there should be a direct link from „War Traumatic Experiences“ as well as „Displacement Challenges“ to „Physical, Mental & Somatic Sequela“, but not from „Barriers to Care“. This last aspect is not elaborated in the text the same way as the two others are, even if there might be a connection. One could even consider to see „Barriers to Care“ as a subcategory of displacement challenges (see second sentence in 3.2. “lack of access to services”)? Why an extra category?

Response: Figure was edited in page 6.

Page 9: account woman 24: this is a very important account with regard to the risk of transgenerational transmission of trauma. I miss this topic in the discussion!

Response: The terms “transgenerational transmission of trauma” and “secondary traumatization” were added to the discussion in page 16.

Page 12f: The category “Barriers to Care” is a very interesting one, as there are external (finances etc.), but also internal (cognitive, emotional) barriers. As your participants are all women, the reader might be interested if you think that the internalization of cultural stigmatization of poor (mental) health is in one way or the other related to gender issues (or not).

Response: We elaborated the issue of barriers to care in the discussion in pages 15-16.

Page 14: Limitations: Does the “complexity” you refer to in page 5 has its own limitations? I miss a little more about the limitations of the narrative methodology, e.g. compared to other qualitative methods, e.g. (feminist) critical discourse analysis or others.

Response: Limitation regarding the complexity mentioned in page 5 was added, as well as the limitation of narrative methodology (please see page 17).

How do you think that in the rationale of this kind of (qualitative or mixed-method) research we should refer to comparison groups? What kind? Syrian women who stayed in Syria? Jordan women? (I would delete this.).

Response: The sentence was deleted, accepting the recommendation of the reviewer.

Finally: in the abstract: Conclusion – I think it is not only about “cultural sensitivity” but also about a sensitivity to the gender aspect with regard to war and trauma.

Response: Abstract was edited to include gender in the conclusion and in the conclusion section in the manuscript in page 18.

Highlights:

- War traumatic experiences and displacement have impacted Syrian refugee women.
- Physical, mental and somatization health sequelae were associated to trauma and displacement.
- Barriers to care in Jordan are discussed in relation to worsened health among Syrians.
- Financial constraints and stigma are among the barriers to healthcare discussed.

Abstract

Objective: The Syrian war created a mass exodus of people to neighboring countries. Jordan hosts approximately 1.4 million Syrians who sought refuge and protection. This research represents an effort to understand the subjective narratives of Syrian refugee women's war traumatic experiences and displacement challenges while living in Jordan and the consequences on their physical and mental health.

Methods: Data gathered between March and June 2014 included 24 in-depth interviews with Syrian refugee women who sought services from humanitarian organizations in Jordan. Interviews were conducted in Arabic and were audio recorded. A team of four researchers translated and transcribed the interviews. Group narrative methodology was utilized to analyze the interviews.

Results: The study suggests that Syrian refugee women experienced diverse war atrocities including shelling, loss of property, separation from family members, and threats to their lives and their beloved ones, among a few. In Jordan, they reported on multiple displacement challenges, which are perceived as a continuous traumatic experience, as well as somatization. Narratives of women also included sequelae to their physical and mental health due to such stressors. Barriers to obtaining physical and mental health services are discussed, including inadequate medical treatment, lack of mental health services, and stigma on mental health which might be associated to somatization of mental illnesses.

Conclusion: It is crucial that humanitarian organizations and host countries like Jordan bear the responsibility to enhancing accessibility to comprehensive trauma-focused physical and mental health services for Syrian refugees in a culturally and gender sensitive manner.

Women in refuge: Syrian women voicing health sequelae due to war traumatic experiences and displacement challenges.

1. Introduction

Since the start of the Syrian crisis in March 2011, more than 5.6 million Syrians have fled Syria, which has led to one of the largest refugee crises of the century (1). Due to the influx of more than 1.4 million Syrian refugees in Jordan and the resulting economic and social strain, the Jordanian government and in country non-governmental organizations (NGOs) have been unable to secure the necessary basic needs for this displaced population (2,3).

The high prevalence of mental disorders among war refugees, and further links between posttraumatic stress disorder (PTSD) and war traumatic events (4) is well established. Depression, PTSD, affective disorders and psychosis are frequent among Syrian refugees (5–8), with increased risk among women (9,10). Similarly, war events and displacement challenges have deeply affected the physical health of Syrian refugees. They suffer from poorer health outcomes due to the atrocities encountered by war and displacement (11,12). Chronic conditions such as high rates of hypertension and cardiovascular diseases are also prevalent among these refugees (13). Not only is physical health weakened by direct trauma or chronic illnesses, but also through the somatization of mental conditions (14).

While there are studies surveying physical and mental health effects of the Syrian war (15,16), few examined somatization of mental health issues (14,17), especially among women. Armed conflict contributes to gender specific and reproductive health risks among women, thereby increasing their vulnerability (9,10). Syrian women are disproportionately more vulnerable than other Syrian refugees and are more likely than men to face gender-based violence, early or forced marriages, and limited access to reproductive health services (3,8,9).

Despite the growing body of medical, psychological, and social literature on refugee traumatic experiences, there is still limited understanding, especially in the Middle East, of women's lived experiences where their narratives remain unvoiced or unheard. The complexity and sensitivity to access refugees, as well as Syrian women's particular vulnerabilities, make research on war trauma and displacement challenging. Yet, given the significant concerns regarding the impact of war and displacement on women, it is essential to gain better understanding of women's experiences and perspectives if only to inform policy makers, and improve service agencies responses. This study sought to explore the subjective narratives of Syrian refugee women as they describe their personal war traumatic experiences and displacement challenges in Jordan and the consequences of such events on their physical and mental health. The aim of the narrative inquiry was psychological, taking

into account emotions, cognitions, and relational dynamics of refugee women with the aim of informing interventions and policies that may advance refugee well-being.

2. Methods

This study is part of a larger research project pertaining to the physical and mental health of Syrian refugees who reside in the urban areas of Jordan. To address the aims of this study, the researchers sought to expand the understanding of refugee women's challenges and to provide a platform to voice their personal and collective experiences utilizing the narrative paradigm within the qualitative research approach (18,19).

2.1. Recruitment

The first author established collaboration with humanitarian organizations in Jordan that provided services to Syrian refugees. The researcher asked organizational staff to help her recruit participants for the study and explained the purposes of the research at their weekly meetings. Staff members approached all Syrian refugee women who sought services at their organizations and offered them to participate in the study. The refusal rate is unknown to the researchers since women's declination from participating was communicated solely with the staff who initially approached them. Interviews took place within the organizations' working hours; however, staff members also connected the researcher with local Syrian volunteers who introduced her to Syrian refugee women who could not participate in the study during working hours. Therefore, additional interviews took place according to women's preference of location and time. Recruitment of participants was ceased following theoretical saturation (20), when further interviews would not likely lead to new information.

2.2. Data Collection

Data collection took place between March to June 2014. In-depth in-person interviews were conducted by the first author in Arabic and were audio recorded after gaining permission from participants. In these interviews, women exposed detailed personal narratives about their subjective experiences in Syria and Jordan. The interviews lasted between 40 to 150 minutes. Inclusion criteria were being a Syrian refugee woman who lived in a Jordanian urban area, +19 years of age, and willing to participate in the study. No incentives were offered to participants.

Demographic information was obtained at the beginning of the interview to include age, city of residence in Syria, the number of children and their ages. Though women were hesitant at the beginning of the interview process, they summoned the courage to share their experiences with an

outsider who wanted to listen to their voices, and a trusting relationship was established between participants and the researcher (19). Although the researcher asked open-ended questions, she also allowed a flow in participants' descriptions and responses (21).

The process of questioning was gradual. The interview started with the question *"Tell me how was life in Syria for you before the war?"* and later on *"How was your experience during the war? How did you escape?"* Questions afterwards included *"How would you describe your life today in Jordan? What are the challenges and needs you have?"* and *"Do you suffer from any physical health issues or mental health issues?"* Given the sensitive nature of the interviews, they were held in comfortable areas. When not in an NGO building, they were held in the participant's homes or other public areas of their preference. The first author invited participants to share their stories and frequently validated her understanding of their narration (21,22). She also requested explanations on topics that were unfamiliar to her whenever participants exposed such content (23). It was not uncommon that the researcher empathized with the sad descriptions of women that she allowed herself to cry together with them during the interviews and shared some of her own personal experiences (24). This empathetic space has encouraged women to disclose their experiences authentically and contributed to the richness of the narratives presented. Due to the sensitive emotional state of the women, the interviews were terminated with a positive inquiry to help participants with closure: *"What gives you strength to cope every day?" and "What gives you hope?"*

2.3. Ethics

Only oral consent was required from participants to insure a safe space for authentic responses. This study was approved by the Committee for the Protection of Human Subjects, [removed for blind review] (CPHS, February 2014). Prior to participation, women were provided with a consent form and an explanation on the study's purposes and procedures. Permission to audio record the women and to disseminate their words were gained. Participants were offered the opportunity to withdraw or stop the interview at any time. In cases of risk or self-harm disclosures, participants were informed on the researcher's obligation to report the case. Participation was anonymous and pseudonyms were used in the interviews to ensure confidentiality of the women. The interviews were computer password protected and were differentiated via reference numbers.

2.4. Post Data Collection

A year after the data collection, the first author returned to the organizations in Jordan and provided workshops to share the preliminary research results and reflections with refugees and staffers. After gaining their approval to publish the findings, she returned to further analyze the

interviews with her research team. The team comprised four women researchers who are bilingual in Arabic and English, with mixed backgrounds of Palestinians and Syrians. They held either Ph.D., master's or bachelor's degrees in public health, social work and political sciences/Middle Eastern studies. The senior fifth researcher on the project was only involved in designing the study and manuscript preparation due to lack of Arabic proficiency.

2.5. Data Analysis

The audio recordings of the interviews were transcribed and translated verbatim by the research team. In the final versions of the transcripts, details were added to include the macro atmosphere of the interviews, such as setting (home or elsewhere), NGOs' name, and additional details on the women that were not included in the interview, i.e. breastfeeding during the interview, interruption by NGOs staff, etc., and the micro non-verbal cues (tone and loudness of voice, sarcasm, crying, laughter, pauses, interruptions, etc.) (23,25).

The study utilizes the narrative paradigm (18) to analyze the interviews while taking into account both the micro and macro levels of the narratives and content conveyed (21). In the first phase, each researcher read the transcripts and assigned major repetitive themes that she had noticed separately. In group discussions, each team member offered their insights on the major themes noted and compared them to the rest of the group analyses (26). An "interpretive zone" was created where diverse viewpoints were discussed among the team members in trying to make sense of meaningful issues conveyed by the narrators (25). A code book of the themes was formed after the team reached a consensus on the major themes, and then utilized a top-down approach to define sub-themes. Different colors were assigned to each theme and subthemes so that the researchers can differentiate them from one another and use them for coding each of the interviews. Afterwards each team member analyzed the interviews independently, allocating different colors to each sentence according to the code book. In group discussions, codes were compared and finalized based on consensus among all team members for each sentence in all interviews (25,27). When disagreements occurred (27), the majority who agreed on a specific code would provide their reasoning, which would follow with the agreed analysis, regardless of their seniority or academic status (25).

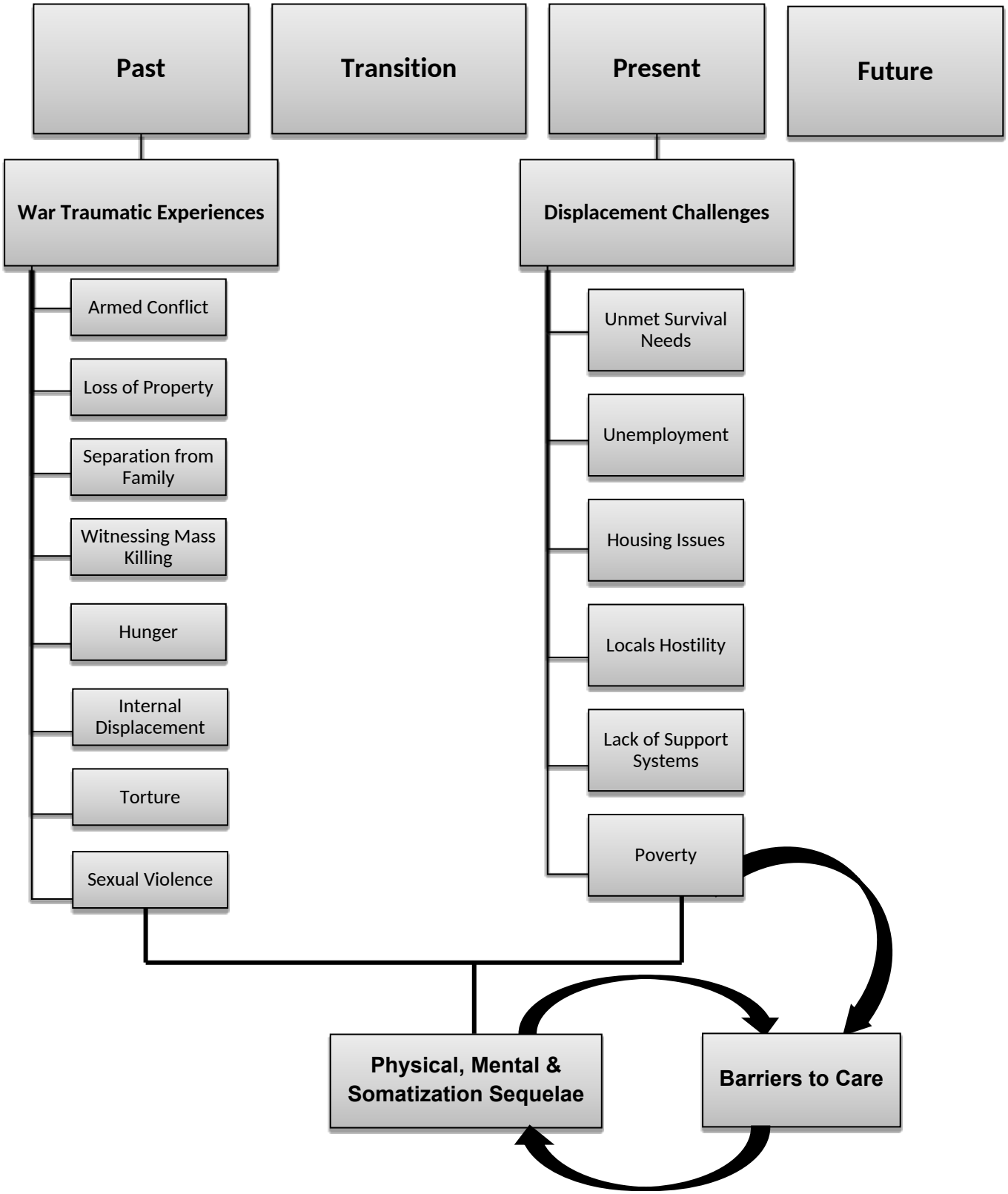
The analysis led to the division of themes into four chronological phases: (1) Past, (2) Transition, (3) Present, and (4) Future (23). The past was divided into two separate periods that included women's narratives describing their lives prior to the war; and a second period in which they described the war traumatic events. The transition included their escape journey from Syria to Jordan, and the circumstances in refugee camps. The present included displacement challenges in Jordan and their consequences, whereas the future included their aspirations, dreams, and their coping strategies.

This article will focus only on the past and present phases, whereas the transition and future phases will be discussed briefly since they will be detailed in other manuscripts, i.e. in order to give appropriate time and space to the richness and complexity of the findings.

The team also divided these four chronological phases into major themes and sub-themes. For the purpose of this paper, two major themes in the past and present were identified: (1) War traumatic experiences, and (2) Displacement challenges. The theme of war traumatic experiences was divided into the following sub-themes: Armed conflict (shelling/bombing), loss of property, separation from family members, internal displacement, hunger, witnessing mass killings, sexual violence, and torture. The theme of displacement challenges was divided into the following sub-themes: Unemployment, poverty, unmet survival needs, housing issues, locals' hostility, and lack of social support systems. An additional sub-theme was identified as "barriers to obtaining care", which stemmed from poverty and was also interacting in a hermeneutical circle with mental/health sequelae. The two major themes and sub-themes were related to the type of health sequelae: physical health, mental health, and somatization (Figure 1).

During the process of data analysis, the codebook was modified adjusting to the women's narratives (23). The process of translating, transcribing, editing, and analyzing the interviews until reaching a consensus among the majority of the team members was extremely complex and took approximately four and a half years to be finalized. The complexity of the study included difficulties in finding the accurate translation of Arabic terms in English, technical issues such as scheduling meetings with all or the majority of team members, changes in education, employment and geographical locations among team members, the team's exhaustion and need to be distant from the traumatic materials, and feelings of isolation due to data confidentiality and the inability to share the materials with others – these were some of the challenges faced by the team, which made the process longer and slower compared to other research projects.

Figure 1: Major themes and sub-themes from Syrian refugee women's narratives



3. Results

3.1. Sample and Participants

The study comprised 24 Syrian refugee women who resided in the urban areas of Jordan; Amman, Irbid, Ar-Ramtha, Hiteen, and Al-Zarqa. Their age ranged from 21 to 55 years (M = 37.22, SD = 8.91), 87.5% were married, 8.3% widowed, and 4.2% divorced. Out of the married women, age of marriage ranged from 14 to 30 years (M = 20.61, SD = 4.92), 25% experienced forced marriages, while 46.7% were married to a relative. Number of children ranged from zero to 8 children (M = 4.29, SD = 2.07). Prior to their escape, Syrian women resided in Aleppo (25%), Dara'a (16.7%), Al Moadamyeh (16.7%), Homs (12.5%), Damascus (8.3%), countryside (16.7%), and Yarmouk refugee camp (4.2%). The majority (75%) crossed the border to Jordan legally. The women resided in Jordan from 8 months to 5 years (M = 18.95, SD = 13.13), in which they shared their housing arrangement with 1 to 9 family members (M = 5.04, SD = 2.34). The majority of women were literate (72.2%), with 64.3% having limited schooling, 70.8% were unemployed, 66.7% described their economic status as very low, and 29.2% as low, while 56.5% reported that their spouses were unemployed. Five women (21.73%) reported being injured during the war, and 30.4% reported that other family members were injured.

3.2. Health and access to care

Women reported on their usage of medical services in Jordan; 66.7% utilized health clinics, 58.3% went to hospitals for care, while only 8.3% utilized mental health services. Part of obtaining care was related to registration in UNHCR, from which 87.5% received food coupons, but 58.3% reached out to multiple organizations for additional services and medical care. Participants obtained medications (54.2%), mainly purchased from pharmacies out of pocket (41.6%), or provided through organizations (12.5%). Some women complained that NGOs distributions of services were unfair, not concordant with needs assessed, and that eligibility criteria were unclear: *"why don't they give everyone?"* (Woman 14).

Women reported suffering from diverse diseases, which were mainly chronic (79.2%), whereas 12.5% were injured during the war. During their displacement in Jordan, they reported vision problems (20.8%), stomach aches (20.8%), issues with reproductive systems (16.6%), asthma (16.6%), allergies (16.6%), hypertension (12.5%), headaches and migraines (12.5%), general fatigue (12.5%), general unspecified pain (12.5%), diabetes (8.3%), and pain in the hands (8.3%). Additionally, 25% reported on diverse diseases related to arthritis, cholesterol, heart disease, and thyroid problems. They also described mental health issues such as depression (41.6%), anxiety and stress (37.5%), poor mental health (broken, lost, and tired) (29.2%), sleep disturbances (25%), and feeling anger (16.6%).

3.3. The past: War traumatic experiences

At least one war traumatic experience in Syria including exposure to shelling, violence, torture, rape, hunger, loss of property, and separation from families were reported by all participants. Women reported on the urgency to escape Syria under shelling in trying to seek protection. Many of the women experienced raids in their homes and confiscation of property:

Woman 16: *We experienced destruction, theft, explosions and shelling, forced evacuation and beating to the body [determined tone].*

Many women reported on witnessing mass killings:

Woman 13*: I was 5 months pregnant [short pause] and I would see the army attacking people, more than 100 people killed, 100 people slaughtered in addition to the beatings and the people burning, some people shot and cut...an unbearable, unbearable sight [speedy overwhelmed speech].*

3.3.1. Physical health sequelae due to war traumatic experiences

War traumatic experiences have a direct impact on physical health of refugees. Women reported experiencing torture or sexual violence themselves or of their family members. One woman described how she and her daughter were imprisoned, starved, and beaten. The woman's knee was hit to the point she needed an operation after being released:

Woman 20: *Because of the beatings on my knee, they had to take out a cartilage... recently I haven't been able to walk on it at all. Beatings after beatings...and they starved us in prison. I lost 35 kilos [77 pounds] [sad numbed tone].*

Her teenage daughter was raped and brutally beaten:

Woman 20*: She was subjected to beatings that made her bleed from… her middle ear. Her jaw went to one side… that was after I begged them. I mean I kissed their hands and feet, asking them not to rape her… [I told the deputy], "I will kiss your feet, take what you want from me but not my daughter, don't hurt my daughter" [shivering voice].*

Another instance of beating and rape that left long term physical symptoms on a woman:

Woman 24: *I was raped by a group of four soldiers from the regime army. After they were finished with me, they threw me like garbage on the floor and they beat me. I had bruises all over my body, it took months until they were gone away. After what happened I couldn't walk for weeks, I still have [vaginal] bleeding... and my period is very strong with a lot of bleeding... I feel as if my whole body has changed since then. I always have urine infections every month [monotonous tone].*

However the most reported physical ailments resulted from physical injury from conflict:

Woman 14: *[My brother's] wife is paralyzed; she was in Moadamyeh, she got a bullet in her spine, here in her neck [shows the location], and it got her paralyzed. Now nothing other than her head moves and she just started speaking recently. She used to not be able to speak even [speaking quickly, not pausing between sentences].*

Another woman reported being hit by shrapnel on her right hand:

Woman 16*: From the shrapnel, I had to get surgery. This scar here [shows the place on her arm], it still hurts so much. I can't carry some things and I feel numbness sometimes [low voice].*

3.3.2. Mental health sequelae due to war traumatic experiences

All women who experienced shelling and bombing, expressed immense fear and anxiety that their homes would be hit.

Woman 9: *Bullets started firing right next to our heads and at that point, I feared for my children. I wanted to put my kids in front of me to shield them, but I was scared that bullets would come from the front. God I was so scared! We were surrounded by tanks! [Sighs] Do you know what it's like to not be able to sleep or eat or drink because you are constantly thinking about protecting your children? [Shivering voice].*

Woman 1: *When I slept, I sometimes saw fighting and yelling and I would wake up with a weak state of mind. I was scared that these things will come true, I was scared that these things will happen. You never knew if you're safe there [in Syria] [scared tone while crying].*

Women also described the emotional and mental toll:

Woman 24*: The children come here to the Union, they like it here [smiles], the ladies give them food and play with them and they hug them, sometimes I can't hug them, I don't know why but I don't feel I need to [sad tone]. I feel dirty and not a good mother to them, ever since [I was raped].*

Woman 10: *I lost my daughter for almost 4 hours [disappeared]. After 4 hours I had a breakdown [pauses]... I wouldn't stand up, I wouldn't move [rapid speech]. Until I found her [at the police station], I had a nervous breakdown [speech slows]. I shut down and was in shock and depressed.*

3.3.3. Somatization due to war traumatic experiences

Often, the stress resulting from war traumatic experiences aggravated or caused physical symptoms among women, including chronic unspecified body pain, weight loss, and loss or excessive appetite. Many women reported losing a lot of weight since leaving Syria due to stress and anxiety. One participant reported respiratory issues due to anxiety:

Woman 12: *I had to open the window because I felt suffocated at night. I shook when I was about to go to sleep. I felt like I was suffocating and I had a sense of nails all over my body. I felt it in my heart and chest [pointing at her body]. The doctor said there was nothing wrong with me, but I couldn't breathe! [Astonished]*

Many women reported headaches, migraines and allergies that started after the war in Syria erupted. Common narratives included:

Woman 15: *From the crisis, from anything that happens, I would become anxious, nervous [ah] and I would feel like my head was going to explode [lowers voice]. My body just hurts all over.*

3.4 The transition

The transition phase was described as a horror escape journey from Syria, wherein threat to women's lives and their families were very common due to fleeing under fire, challenges in passing checkpoints and internal displacement, until reaching the borders and crossing to Jordan. Then they

experienced difficulties while at refugee camps, which was followed by being smuggled out of the camps or leaving legally and reaching the urban areas in Jordan.

3.5. The present: Displacement challenges

In Jordan, women experienced displacement challenges that included economic hardships, unemployment, housing issues, and difficulties in social acclimation, among others. These are some of the narratives on their difficulties and stressors:

Woman 1*: I felt safer [in Syria] than I do here. Here [Jordan] we go to sleep without food or water [cries]… just so we can pay rent. Everything is so expensive and we can't find work because we are refugees. It's just hard...it doesn't get easier [voice waivers].*

Woman 12*: You're away from your homeland. It's difficult to adjust here…being away from family, understanding how everything works… It's difficult for refugees here [sad tone].*

3.5.1. Physical health sequelae due to displacement challenges

Deteriorated physical health after fleeing Syria was mainly reported as a consequence of inadequate living conditions, or finances:

Woman 10*: When I came here [Jordan] I wouldn't say that I'm comfortable, especially financially [shivering voice]. We are really suffering a lot, honestly. I mean, my daughter is sick, but the price of Amoclan [Amoxicillin], I just can't bring it to her [hesitant].*

Lack of access to medication not only impacted treatment for acute ailments, but also for chronic ones, including arthritis and high cholesterol.

Woman 7*: I'm telling you, every day I am on my feet… and my back hurts, everything hurts. I have arthritis and high cholesterol from always being busy. I don't have time to rest [numb tone].*

The burden of non-communicable diseases was also prevalent among women. One woman described how she was unable to do surgery for glaucoma:

Woman 8: *I got diabetes here [in Jordan]... now my eye needs surgery because of the diabetes, but my health permit expired so I wasn't able to get the treatment. It's been two or three months and I can't see well [quite slow tone].*

3.5.2. Mental health sequelae due to displacement challenges

Women reported difficulties in acclimating to Jordan:

Woman 22*: When I arrived here [Jordan], I was depressed for a week [short pause]… I cried so much. Then they said there was no work for Syrians. I lost everything. Here, I have no friends, no country, no job, and no purpose. I'm just so sad and frustrated with everything [annoyed tone].*

The effect of ongoing unemployment, financial difficulties, separation from friends and family, lack of support systems, and at times xenophobia, may have led to a higher occurrence of mental health issues:

Woman 14*: You need to be able to figure out your future, your children, your house. All of these things are taking a toll on me. I can't sleep. I'm always thinking about how we're going to make it here [speaking quickly]. My mental health is completely deteriorated… I am scared about [stuttering], for example one time if we don't have the rent so they kick us out" [overwhelmed].*

Woman 2*: If I am shocked, then my shock is from the people [in Jordan], they don't have mercy [sad but proud tone].*

3.5.3. Somatization due to displacement challenges

While mental health issues were described overtly among some women, others described them through somatic symptoms. Women narrated various psychosomatic symptoms which stemmed from displacement stressors:

Woman 17: *Yesterday, I reached a tipping point with the responsibility on my head. I felt like my tongue was tied and I couldn't say a single word. I would understand what [my husband] is saying, but I am not able to open my mouth or speak [shocked from her own reaction].*

Many women reported general pain, headaches, migraines, or hypertension, which arose in Jordan from their increased anxiety, stress, and fear of the unknown future.

Woman 5: *Everything hurts, I feel like my body is inflamed all the time [cries].*

Woman 6: *I have a headache. When I went to the center, they sent me to the hospital…and [told me] I got a headache from how much I think and do things… I got sick [questioning if this is true].*

Woman 14: *My blood pressure is so high and I'm always afraid how we are going to live the next day. I haven't slept properly for months. Not one night here, I slept restfully. My blood pressure keeps me up at nights [restless tone].*

3.6. Barriers to obtaining physical and mental health services

Barriers to obtaining health services contained internal and external aspects ranging from personal to interpersonal to socio-economic barriers. These barriers contained the following categories: (1) Socio-economic (inability to pay for services and medications, transportation, and childcare responsibilities), (2) Lack of access to services (lack of knowledge on diverse services, and distance from refugee neighborhoods), (3) Deficiencies of health systems (NGOs eligibility criteria, long waiting periods to see professionals, limited professionals, and lack of trained professionals), (4) Stigma on mental health services.

Many women cited issues within the private healthcare system in Jordan which deter them from obtaining physical or mental treatment. Woman 3 explained to the researcher as follows:

Researcher: Do you take meds?
Woman: We go to the pharmacy and get them.
Researcher: But you don't go to the doctor?
Woman: No.
Researcher: Because of the money or problems?
Woman: Money [low voice].

Some women complained about the lack of organizational clarity in eligibility criteria, as women 16 explained how one of the NGOs responded to her request for assistance: *"This year, and the last year, "you don't deserve [not eligible]. We have our own priorities, whoever is wounded, the one who doesn't*

have her husband with her", ok, but the one who has a sick man [referring to herself], why is it forbidden?" [Frustrated tone]

The majority of women discussed significant mental health symptomatology. However, only one woman declared in a half serious, half laughing manner: "*we all need psychological care*" (Woman 21). When asked if they would obtain professional mental health support, mixed responses were obtained. Six women said that "*one should not share what is in their heart*." Ten women expressed hesitance or disapproval not only with professional therapy, but also in discussing their personal issues with family or friends:

Woman 15*: These days, if you have blood in your mouth, don't spit it in front of anyone [don't show your vulnerability in front of people] [smiles].*

Only when mental health issues became severe, women reported on their use of mental health services. Such was the case of Woman 20 who experienced torture together with her daughter: "*I have been through a lot of agony, I got therapy for myself, and for my daughter… we [therapist and woman] would sit in the balcony and talk and we would drink coffee, and you know, thank God I was benefited from it" [relaxed tone].* However, Woman 22 who was prescribed sedative pills explained "*I always slept, I didn't benefit anything from the psychiatrist*" *[annoyed].*

Stigma surrounding mental health treatment was also reported to be a significant barrier to psychological care. Some participants felt that their mental distress was a figment of their imagination and were worried about being labeled as "insane." Despite the stigma, fear, and the lack of access, many women showed gratitude and appreciated the fact that they could voice their unheard stories. *"I talk to my sister, but I don't like to talk to neighbors and mingle… didn't you notice how much I have talked? [Giggles] I honestly didn't expect myself to talk that much" [laughs]* (Woman 14), and *"I feel much more relaxed now"* (Woman 9). Seven women said that they needed someone to listen to them and "*hear what is in our hearts*."

However, barriers to care were also impacted by women's physical and mental health sequelae as Woman 18 describes: "*sometimes I don't feel like doing anything*." Such a mental health state may inhibit women from seeking help and accessing services.

3.7. The future

Despite the multiple challenges and protracted situations women faced, they managed to survive them. When they were asked "*What gives you strength to cope every day?*" they mentioned

diverse resources and coping mechanisms, which included their belief in God and religion, their children (family ties), and the hope for a better future. These resources are defined by researchers as resilience and protective factors (28).

4. Discussion

The study revealed that violence experienced by Syrians impacted the overall health of refugee women. Their narratives align with the literature on war traumatic experiences as well as the ongoing trauma brought on by displacement stressors in Jordan (2,3,7,8,29–31). The interviews illustrated the impact of poor physical and mental health on women's well-being, including somatization as Woman 22 declared feeling "*a pain inside and I don't know how to let it go away*" [monotonous tone]. While somatic complaints are largely associated with mental health issues, some studies have also shown a significant association between somatic disorders and exposure to extreme trauma such as torture (28). Besides somatic conditions, physical effects of conflict and displacement range from direct physical trauma to non-communicable diseases. A study found a significant association between chronic illnesses and the unmet needs of care as well as mental challenges among refugees (32). Socioeconomic status and traumatic experiences were among the many risk factors associated with non-communicable diseases (32,33). Additional studies have found that chronic diseases were comorbid with PTSD, with risk factors including limited accessibility to medicine and employment opportunities (33,34), as Woman 18 notes "*We suffered a lot. We were in safety and now it's different. We're broke and life is hard" [suffocating voice].*

According to a systematic review, financial constraints were a common barrier to healthcare among 66% of Syrians in Jordan, with only 20.6% reporting a lack of knowledge of medical services as another barrier (3,30). Another study found that 88.1% of Syrian refugees in Jordan reported that their income did not meet their basic needs (7). In addition, local organizations that provide psychosocial support and basic needs (food and housing materials) to refugees are mainly located in Eastern Amman, while other organizations, national and international that provide medical and psychological treatment are distant from condensed refugee neighborhoods (3). As one woman clarified when the researcher asked her if her home was away from the center that treated injured refugees: "*very far, I need one hour and a half or two hours to reach it by transportation*" (Woman 22).

It is well established in the literature that displaced populations who endure war traumatic experiences are at increased risk of developing symptoms associated with PTSD and depression, especially among women (28). As one woman disclosed "*I only need one press on my button and I start sobbing" [half giggling half serious]* (Woman 21). In the circumstance where mental health services are available to Syrian refugees, the process of seeking help is often culturally stigmatized

across the Middle East, with a study showing 8.5% of Syrians making use of mental health clinics in Jordan (7). Cultural-specific stigma towards mental illness and lack of mental health services were also associated with increased prevalence of somatic disorders (35,36). Some researchers suggested that women are prone to higher stigmatization due to the honor associated to the entire family, and that they preferred reaching out to family and friends for support, while feeling fear, shame and mistrust to approach professionals (37,38). However, in our study, no such attributions were reported, and women articulated in general that everyone suffers. Woman 2 explained while crying "*the Syrian struggle… we can't talk. Our struggle is great. I am very [sniffles]… I can't describe it with one word. I can't describe it… What's in our heart, no one has been able to display and see it. There's sadness over my country and my people.*" Woman 1 summarized "*this situation has ruined it all for us.*" To our understanding, women needed to talk to someone, but felt that they didn't want to burden others with their suffering, which is similar to the ones of their close cycles "*I don't want to talk with her (niece), I mean that I was upset like her, what should I tell her? [Desperate tone]* (Woman 22).

Additionally, the Jordanian health system is unable to accommodate the health needs of refugees and is often inadequate, impeding preventive treatment for both physical and mental health services (39). Regarding mental health services, therapy in host countries in the Middle East is not typically culturally sensitive, with limited trained professionals, who often face challenges when treating Syrian refugees with diverse health complications (3,14). According to past studies, a comprehensive model of physical and mental health care delivery for refugees should be coupled with professionals who are trained in cultural sensitivity and trauma informed approach (7,40).

Barriers to care not only impact the deterioration of physical and mental health sequelae of women. The more vulnerable populations of injured, disabled, elderly women and the ones suffering from mental health illnesses are at higher risk of not obtaining care due to their precariousness, marginalization and lack of capacity to reaching out for assistance. Therefore, these factors interact in a negative circle affecting women's health and mental health, as well as lack of obtaining care.

Feminist theory proposes that women's personality development is based upon connectedness and relational self (41). Taking this assumption into consideration, one cannot ignore the fact that Syrian women operate in spousal and familial spheres in which their physical and mental health may have some impact on their loved ones. Such impacts are defined as secondary traumatization (42) experienced by spouses, close cycles of the traumatized, and transgenerational transmission of trauma (43). It suggests that parental or familial traumas are transmitted upon children of survivors. Therefore, the physical and mental health sequelae of Syrian women may have impacts not solely on themselves, but may also negatively affect their spouses and children as disclosed by Woman 24 in her difficulty to show affection to her children "*sometimes I can't hug them.*"

4.1. Limitations

In this paper, our analysis did not explore the interaction between the researcher and the participants in the process of interpretation and representation. The interactions among team members and the long process of translating, transcribing and analyzing the data were not included in the reflection process either, which may have provided some insights on the challenges faced by trauma researchers and the risk of secondary traumatization (42). Our analysis did not reflect how the researcher's presence played out in the narratives. Thus, in addition to content and form, future research should also address the co-construction of narratives in refugee research. As participants, Syrian refugee women seeking services from humanitarian organizations may have also adjusted their narratives to attend to their perceived audience, which might have either increased or decreased their disclosed challenges or specific experiences. In addition, the narrative methodology mainly depends on the skills of narrators and limits the interpretations of the Syrian refugee women's stories to the content and context that were personally meaningful in their experiences (23). This in turn lacks the critical interpretations of other methods, such as the feminist and other political theories. Future research using mixed methods would yield a more comprehensive understanding of refugee women's experiences. Finally, as a qualitative study, it is limited by small sample size and heterogeneity (i.e., time of interview, gender, refugee status) and the subjective interpretation of researchers. However, the current study provides a unique and important input on refugee well-being given that in Jordan a heterogeneous population of refugee women may face similar collective traumatic experiences and displacement challenges.

4.2. Conclusion

The narratives of Syrian refugee women in Jordan suggest that the physical and mental health of Syrians are impacted by war and displacement stressors. Lack of health services, scarcity of medical and mental health providers, societal and personal stigma towards mental health treatment, and financial constraints serve as barriers to treating physical and mental disorders among Syrian refugees. Limited access to mental health treatment may also lead to possible somatization of mental illnesses. These negative consequences may further impact women's barriers to obtaining care. To minimize traumatization among refugees, additional research on the integration or enhancement of comprehensive physical and mental health services into the Jordanian health system is imperative. We recommend the provision of medical and psychiatric services under the same program of family care services and combining assessments and treatments, which may result in better outcomes and less stigmatization. Advertisements of services need to be inclusive and family friendly, to encourage all family members to participate in interventions (8). Organizations have

a responsibility to enhance accessibility to mental health services by engaging the local refugee population and community religious leaders. Spreading awareness of health services available, reaching out approaches and health education and training for displaced populations and professionals are also encouraged in host communities (3). Outreach programs need to take into account the injured, disabled, elderly and those with severe mental illnesses who cannot reach clinics independently and should be responsive to such needs of the population they are serving, not leaving this most in need population unaccounted for, as compared to the general vulnerable refugee population.

Physical and mental health interventions need to be affordable, trauma focused, and provided in a culturally and gender sensitive manner that are acceptable to the population in need. Interventions are recommended to integrate multi-systemic or ecological approaches for recovery in addressing both past traumatic experiences and present challenges, stressors and problem solving, to assist refugees in developing a sense of safety and security, as well as rebuilding their social support systems. As one of the women explained her feelings of isolation "*I would feel like a foreigner [pause]. Even though I was surrounded by Syrians*" (Woman 18). These interventions were found to be effective among collective societies due to the occurrence of the healing process within the group context (28). We further recommend to tailor interventions according to the unique narrations and experiences of each of the refugee women.

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Authors Declaration of Interest

We wish to confirm that there are no known conflicts of interest associated with this publication and there has been no significant financial support for this work that could have influenced its outcome.

We confirm that the manuscript has been read and approved by all named authors and that there are no other persons who satisfied the criteria for authorship but are not listed. We further confirm that the order of authors listed in the manuscript has been approved by all of us.

We confirm that we have given due consideration to the protection of intellectual property associated with this work and that there are no impediments to publication, including the timing of publication, with respect to intellectual property. In so doing we confirm that we have followed the regulations of our institutions concerning intellectual property.

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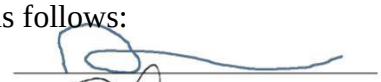
Niveen Rizkalla, PhD.  May 30, 2019

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Women in refuge: Syrian women voicing health sequelae due to war traumatic experiences and displacement challenges.

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Disclaimers

The views expressed in the manuscript are the authors own opinions, and not an official position of the institution or funder that supported this study.

Source(s) of support

This work was supported by the Mack Center on Mental Health and Social Conflict under Grant SEGAL, awarded to Steven P. Segal.

Number of figures

Figures: 1

Conflict of Interest declaration.

There were no conflict of interest {attached a letter with signatures from all authors).

Contributors

Rizkalla was responsible for the design, data collection and management of the project, in addition to data editing, data analysis and article preparation. Arafa, Soudi, Adi were responsible for the translation and transcription of the interviews, analysis and manuscript preparation. Mallat was responsible for the preparation of the manuscript. Segal was responsible to the accompaniment of the project, funding resources, and article preparation. All authors have approved the final manuscript for submission and took major role in preparing it.

Acknowledgments

We thank the Syrian refugee women for their participation and for sharing their personal narratives, and for exposing their hearts and souls with courage, as well as for allowing us to learn and grow from listening to their painful and agonized stories. We also thank all Jordanian NGOs that hosted the study and facilitated our encounters with refugees: These organizations are Waqea, Jordanian Women's Union, Bader Center, and Naher El-Rahme NGO for Social Development. We would also like to thank Jamal Atamneh for his assistance in connecting the

researchers with NGOs in Jordan; Ramy Al Asheq for his assistance in connecting the researchers with NGOs led by professional Syrians; Huda Tahboub and Habib Khoury for their assistance in the translation and transcription of some of the interviews.

Ethics approval

This study was approved by the Committee for the Protection of Human Subjects, University of California, Berkeley (CPHS, February 2014)