

# Exploring psychosocial needs of young women with breast cancer in a country with crisis: a mixed-methods study

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## ABSTRACT

**Introduction:** Previous research conducted in politically stable countries showed that the diagnosis and treatment of breast cancer among young women can be very distressing and devastating and may result in a lot of unmet psychosocial needs affecting their quality of life. This study aimed to address the psychosocial needs of young women with breast cancer in war-torn Syria.

**Materials and Methods:** A mixed-methods explanatory sequential design was employed in this study. Initially, a quantitative survey was conducted for 3 months from May to July 2022 on 167 young women using the Psychological Needs Inventory to identify their psychosocial needs. Secondly, a qualitative, semi-structured interview was conducted for 6 months from July to December 2022 with 11 participants to explore the challenges faced in meeting these needs.

**Results:** The quantitative results showed that three items, "Help with financial matters", "Advice about food and diet", and "Help with transport", were identified as significant unmet psychosocial needs. All three items fall within the category of practical needs. The qualitative results identified five themes: (1) challenges of adequate information needs with five subthemes (inadequate communication with the health professionals, lack of educational programs and awareness campaigns, inadequate number of nurses, need for nutritionists, and effects of unmet informational needs); (2) psychological challenges with five subthemes (uncertainty of the future, fear concerning the children, fear of death, treatment-related effects and the loss of a woman's identity, and inadequate psychosocial care); (3) financial challenges with 2 subthemes (treatment not available and expensive, low incomes and high cost of living); (4) social influences with 2 subthemes (society's view and stigma, lack of marriage choices); and (5) environmental stressors with 2 subthemes (stressful hospital environment and situational factors).

**Conclusion:** These psychosocial needs identified were found to align with Maslow's hierarchy of needs, underscoring a cascading effect of the Syrian crisis across various dimensions of well-being. Young breast cancer women living in countries with crises have high levels of unmet psychosocial needs.

## KEYWORDS:

*Young women, breast cancer, crisis, Maslow hierarchy of needs, and psychosocial needs*

## INTRODUCTION

Breast cancer is a significant public health problem in low and middle-income countries.<sup>1,2</sup> Although it was previously known as a disease of older women; its incidence has significantly increased among younger women in recent decades.<sup>3,4</sup> Since 2011, the crisis in Syria has deeply impacted the lives of its citizens. The last statistics available on breast cancer were published in 2009 by the Syrian National Cancer Registry, but no further report has been published since then due to the constraints on the registry after the start of the country crisis.<sup>5,6</sup> However, the number of breast cancer cases in Syria was likely to keep increasing. For example, according to data from the Al-Bairouni and Tishreen University Hospitals, breast cancer accounted for 24% and 23%, respectively, of all cancer cases in 2020.<sup>7</sup>

Breast cancer can significantly impact the psychosocial needs of young women with this disease. Previous studies revealed that young women with breast cancer can have significant unmet information needs,<sup>8-10</sup> psychological needs,<sup>4,10,11</sup> social needs,<sup>4,10,12</sup> and practical needs.<sup>13,14</sup> These psychosocial needs were shown to be associated with poor adjustment to the disease process, poor quality of life, and increased healthcare utilization and costs.<sup>8,15-17</sup>

However, most of these past studies on psychosocial needs came from politically stable countries. To the best of our knowledge, studies that addressed the psychosocial needs of young women with breast cancer in countries in war crisis are rare. Therefore, it is imperative to identify the psychosocial needs (and the extent to which these needs are unmet) of young women diagnosed with breast cancer through the lens of a country in crisis, such as Syria.

## MATERIALS AND METHODS

### *Overall study design*

This study adopted a two-phase mixed-methods explanatory sequential design to explore the psychosocial needs of young women with breast cancer in Syria. The first phase was a self-administered cross-sectional quantitative survey of 167 young women with breast cancer from Tishreen University

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Hospital in Latakia City, Syria, aimed to determine the types of psychosocial needs ranked according to importance or priority (conducted for 3 months from May to July 2022). The second phase was a semi-structured interview with 11 participants who had already completed the quantitative survey in Phase 1, with the aim to explore deeper into the challenges faced in meeting these needs (conducted for 6 months from July to December 2022). The ethical approval for conducting this study was obtained from the institutional medical ethics committee of University Malaysia Sarawak (No. FME/22/42); approval was also obtained from the Department of Oncology at Tishreen University Hospital. Informed consent was obtained from the participants who agreed to participate in the study.

### **Phase 1: The quantitative survey**

#### *Participants*

A total of 167 young breast cancer women were conveniently recruited from Tishreen University Hospital in Latakia, Syria, which is the second most comprehensive Syrian oncology centre and receives cancer patients from many cities around Latakia. The sample size was estimated a priori using G\*power software by employing an F test with an effect size set at 0.15, alpha level = 0.05, the power of study = 0.95 and number of predictors = 7 based on the theoretical framework of the validated Psychosocial Needs Inventory (PNI) used in this study. Based on these parameters, the initial estimate was 153 participants. To accommodate a potential lower response rate, an additional 10% was included, resulting in a final estimated sample size of 168 participants. The participants were included if they were aged between 18 and 50 years (defined as “young” in this study), had histologically proven breast cancer, and were proficient in the Arabic language. The rationale for the cut-off age of 50 years and younger in this study was based on previous studies that have consistently showed that women aged 50 years and below have greater psychological impact from breast cancer compared to women aged more than 50 years old.<sup>18</sup>

#### *Procedures and materials*

Data collection from participants in this phase was conducted using a structured questionnaire which included the socio-demographic data and the validated PNI instrument.<sup>19</sup> The PNI consists of 48 items under seven need categories: (1) interaction with health professionals (9 items); (2) information needs (5 items); (3) support networks (5 items); (4) identity needs (5 items); (5) emotional and spiritual needs (15 items); (6) practical needs (8 items); and (7) childcare needs (1 item). Every item in this questionnaire was ranked on its significance using a 5-point Likert scale ranging from 1 (not at all important) to 5 (very important) and the extent to which the participants were satisfied with acquiring support to meet their psychosocial needs on a 5-point Likert scale ranging from 1 (unsatisfied) to 5 (very satisfied). The PNI in this study was translated into Arabic language and the face validity was checked by an independent expert committee and the internal reliability ranged from 0.68 to 0.93. Statistical Package of the Social Scientists (SPSS), version 23.0 was used to generate the descriptive results of this study. With regards to the scoring of PNI, an item is defined as “significant” if that item is rated as “important” or “very important” by more than 50% of the participants of the 167 participants.<sup>20</sup> Similarly, an item is

defined as “unmet” if it is rated as “unsatisfied” or “very unsatisfied” by more than 50% of the participants.<sup>20</sup>

### **Phase 2: Semi-structured qualitative interviews**

#### *Participants*

The participants for this phase were conveniently recruited from the original sample in Phase 1. No other criteria were imposed in the recruitment of participants in this phase. The recruitment process was iteratively continued until data saturation was believed to have been achieved and no new findings or insights could be gleaned, which happened at the 11th participant in this study.

#### *Procedures and materials*

Data collection in this phase was conducted using semi-structured interviews arranged and performed by the first author who is a native Arabic speaker, from June to December 2022, each interview lasted for 45-60 minutes. The interviews were performed in the participants' homes to ensure privacy and comfort. The interview guide, informed by earlier quantitative findings in Phase 1 (where three items, i.e., “Help with financial matters”, “Advice about food and diet”, and “Help with transport”, were identified as significant unmet psychosocial needs) as well as aimed at deeper exploration of other significant needs identified in that phase, with the following broad questions: (1) Can you describe the financial challenges you faced during your cancer treatment, and what kind of support or resources you think could help address these difficulties? (2) What kind of advice or guidance about food and diet have you received during your treatment, and what additional support do you feel is needed? (3) How has transportation affected your ability to attend treatments and appointments, and what changes or support would make this easier for you? (4) How have the psychological and emotional challenges of cancer impacted your treatment journey? (5) How do you feel about your communication with the healthcare staff during your treatment? (6) In your opinion, how has the Syrian societal misconceptions stigmatized breast cancer patients? The last question was added as there may be specific local socio-cultural nuances that could have positively or negatively influenced the psychosocial needs of these patients in Syria. First developed in English, the interview guide was then translated into Arabic and pilot-tested for clarity before being used for the interviews.

#### *Data analysis*

Contents of the interviews were audio recorded, transcribed verbatim, and translated into English by the first author. Although back translation was not performed, the accuracy of the forward translation was checked by an independent Egyptian language teacher who is proficient in both Arabic and English languages. Thematic analysis was then performed using NVivo 10 software. For this analysis, open coding (or first level coding) was initially performed by the first and second authors through iterative readings and labelling of keywords and phrases from the transcripts. After the initial open coding, a second axial coding (or second level coding) was performed by re-analysing these open codes to look for common themes among them. Discrepancy between researchers were resolved with mutual discussions in order to reach a consensus. Trustworthiness and credibility were enhanced through member checking by the participants.

**Table I: The socio-demographic and illness-related characteristics of the sample**

Variables	Classifications	Frequency (%) N = 167
Marital status	Single	17 (10.20)
	Married	140 (83.80)
	Divorced	1 (0.60)
	Widow	9 (5.40)
Number of children	No children	29 (17.40)
	One child	18 (10.80)
	Two children	41 (24.55)
	Three children	38 (22.80)
Monthly income (USD)	More than 3 children	41 (24.60)
	Less than \$35	58 (34.7)
	\$36-50	82 (49.1)
	\$51-75	15 (9.00)
Family history of breast cancer	\$76-100	7 (4.2)
	>\$100	5 (3.0)
	Yes	50 (29.9)
Place of residence	No	117 (70.1)
	Inside Lattakia	46 (27.5)
Type of treatment approach	Outside Lattakia	121 (72.5)
	Conservative	28 (16.8)
	Mastectomy	139 (83.2)

## RESULTS

### Results from Phase 1: The quantitative survey

The mean age of the 167 participants was 42.04 years old, with the youngest participant aged 27 years old and the oldest participant aged 50 years old. The other detailed socio-demographic characteristics of the participants of Phase 1 are described in Table I.

Table II describes a list of “significant psychosocial needs” and “unmet psychosocial needs” based on participant responses. Interestingly, a deeper analysis of the findings in Table II reveals an apparent inconsistency between the data for “significant psychosocial needs” and the data for “unmet psychosocial needs.” Specifically, only three items, i.e., “Help with financial matters,” “Advice about food and diet,” and “Help with transport”, were identified as both significant and unmet needs. Notably, these three items fall within the category of practical needs. However, for the majority of the other items, the median scores for unmet needs were conspicuously low relative to their significance, suggesting that these psychosocial needs were largely “met”, rather than “unmet”.

### Results from Phase 2: Semi-structured qualitative interviews

In this phase, five major themes were identified from this qualitative analysis.

#### Theme 1: Challenges of adequate information needs

##### Subtheme 1: Inadequate communication with the health professionals

All participants in the study expressed dissatisfaction regarding their communication experiences with their oncologists. Notably, participants said that the oncologists were often too busy to discuss their concerns. For example, one participant said:

*“Due to the large number of patients, overcrowding, and many commitments at the hospital, the doctor has at least 40 files per day.” – R.*

In addition, 5 out of 11 participants also considered the limited number of oncologists in the hospital a barrier to

good communication. They attributed this limited number of oncologists to the effects of the Syrian crisis that forced many physicians to leave the country, as demonstrated by what was said by this participant:

*“There are some doctors who left the country during the crisis have not come back yet. They are getting more appreciation and support abroad, so, they will not come back.” – W*

##### Subtheme 2: Lack of educational programs and awareness campaigns

All participants noted a critical shortage of cancer educational and awareness programs and emphasized the need for more of these initiatives to be conducted in Syria to enhance breast cancer awareness and self-care knowledge among women. As one participant said:

*“I feel that there is a great need for educational programs on television, advertising, campaigns in the streets, or coming to the houses. Awareness campaigns are important, as are treatment and support, as we do not know how to take care of ourselves.” R*

##### Subtheme 3: Inadequate number of nurses

Six out of 11 participants highlighted the positive role nurses can play in supporting the patients. They mentioned that the nurses were very kind in their dealings with the patients, and they helped them a lot. However, due to the inadequate number of nursing staff, nurses were unable to give adequate information and explanation to them. For example, one participant said:

*“The nurses have a big load, and the number of nurses is very few; some of them prepare the medicine, and some of them give the medicine, and they have to run here and there; so they are not able to catch up with the questions from patients.” W*

##### Subtheme 4: Need for nutritionists

Nine out of 11 participants were not satisfied with the dietary information given to them and as a result, felt confused by the inconsistent guidance on food choices. As a result, many turned to the internet for advice. For example, one participant said:

Table II: Item rating of psychosocial needs in terms of importance and satisfaction

Needs Category/Items	Number of participants who rated item as "important" or "very important"	Number of participants who rated item as "unsatisfied" or "very unsatisfied"
<b>Interaction with Health Professionals</b>		
Confidence in the health professionals I meet	145*	19
Health professionals have time to discuss issues with me	145*	67
Easy and quick access to doctors	142*	60
Honest information	150*	16
Health professional who treats me with respect	152*	7
Information given sensitively	136*	27
Health professionals who listen to me	142*	62
Easy and quick access to health professionals other than doctors	77	68
Opportunities to participate in choices around treatment	103*	51
Median score	142	51
<b>Information Needs</b>		
Information about treatment plans	147*	44
Information about what to expect	142*	59
Information about medication and side effects	139*	61
Advise on what services help are available	136*	83
Access to other sources of information	122*	73
Median score	137	61
<b>Support Networks</b>		
Support from family	157*	16
Support from friends	132*	23
Support from care professionals	125*	39
Someone to talk to	151*	19
Support from neighbours	80	69
Median score	132	23
<b>Identity Needs</b>		
Help in maintaining independence in the face of illness	123*	33
Help in maintaining a sense of control in my life	123*	37
Support in dealing with changes in my body	134*	44
Support in dealing with any changes in the way others see me	108*	44
Support in dealing with any changes in my sense of who I am	121*	44
Median score	123	44
<b>Emotional and Spiritual Needs</b>		
Hope for the future	149*	17
Help with any fears	147*	35
Help in dealing with the unpredictability of the future	105*	59
Time for myself	138*	54
Helping with finding a sense of purpose and meaning	147*	25
Help with any sad feelings	136*	26
Help in dealing with the feelings of others	100*	54
Opportunities for personal prayer	147*	14
Opportunities for meeting others who are in a similar situation	137*	27
Help with any loneliness	118*	36
Support from people of my faith	129*	34
Help with any anger	99*	47
Support from a spiritual advisor	104*	51
Help with any feelings of guilt	69	61
Help in considering my sexual needs	90*	67
Median score	129	36
<b>Practical Needs</b>		
Help with any distressing symptom	144*	40
Help with transport	115*	95**
Help in dealing with any tiredness	139*	37
Advice about food and diet	153*	102**
Help with housework	147*	29
Help with getting out and about socially	99*	59
Help with financial matters	149*	113**
Help in filling out forms	53	60
Median score	141.5	59.5
<b>Childcare Needs</b>		
Help with childcare	93*	50

Note:

1.\* An item is defined as "significant" if it is rated as "important" or "very important" by more than 50% (i.e., n = 84) of the 167 participants.<sup>20</sup>  
 2.\*\*Similarly, an item is defined as "unmet" if it is rated as "unsatisfied" or "very unsatisfied" by more than 50% (i.e., n = 84) of the 167 participants.<sup>20</sup>



**Table III: Maslow's hierarchy of needs of young women with breast cancer in Syria as evidenced from findings in both phases of this study**

Maslow's hierarchy of needs	Findings from Quantitative Survey (Phase 1)	Findings from Semi-structured qualitative interviews (Phase 2)
Self-actualization	Needs related to "...finding a sense of purpose and meaning" was also identified as a significant need (88.0%) that remained unmet for a subset of participants (i.e., 25 participants, 15.0%)	Some participants expressed their emotional struggles that prevented them from pursuing long-term goals
Esteem needs	"Support in dealing with changes in body" was identified as a significant unmet by 44 participants (26.3%). Similarly, needs related to maintaining independence, and control in life were still identified as significant unmet needs for a subset of participants.	Participants highlighted the psychological impact of mastectomy, loss of femininity, and body image issues. One participant stated, "...the lady misses a feminine part of her body, (and) ...it becomes a burden." Chemotherapy-related hair loss further added to self-esteem challenges.
Belonginess and love needs	A significant proportion of participants identified "support from family" (94%) and "someone to talk to" (90.4%) as significant needs. Emotional support and interaction with health professionals also rated highly as significant needs (e.g., "health professionals who listen to me" rated as a significant need by 136 out of 167 participants, or 81.4%).	Participants described the emotional toll of societal stigma surrounding breast cancer, which strained their relationships and social support systems. Stories of bullying and negative social interactions further illustrate the unmet social belonging needs.
Safety and health needs	"Help with financial matters" is the most unmet need (67.7% unmet), highlighting the absence of financial security. A significant proportion of participants identified challenges with access to reliable doctors (86.8%) and other healthcare professionals (85.0%) and information on their treatment plans (88.0%) as significant needs.	Participants described the inability to access consistent and affordable treatment, with some turning to desperate measures such as selling assets. Stress caused by living in a crisis environment (e.g., disruptions to electricity, overcrowded hospitals) undermines stability and health.
Physiological needs	High level of unmet practical needs such as "advice about food and diet" (61% unmet) and "help with transport" (56.8% unmet), and income distribution with 83.8% of participants earn \$50 or less monthly. This suggests severe limitation in accessing nutritious food and transportation.	Expressed frustration over their inability to afford healthy foods (e.g., "avocado costs 25,000 Syrian lira per kg, which is unaffordable"). Having to resort to desperate measures such as using emergency savings.

*"It is very necessary for nutritionist to be available as part of the treatment plan of cancer patients because the patients sometimes understand the information wrong." A*

**Subtheme 5: Effects of unmet informational needs**

Seven out of 11 participants indicated that receiving inadequate information about the disease and the treatment side-effects had negatively affected them physically and psychologically, lessened their confidence in the doctors and the treatment, and, as a result, made them more stressed. For example, one participant said:

*"He made me hate the medicines, the doctors, and the hospitals. I started to ask if any doctor I go to would be like him. What can I gain from this doctor? They can prescribe the medicine to me, and the nurses in the department will then give it to me. That's all. He made me stressed and have no confidence." Ra*

**Theme 2: Psychological challenges**

All the participants in this study expressed the importance of being psychologically comfortable because they believe that it can adversely impact the cure and recurrence of the disease.

**Subtheme 1: Uncertainty of the Future**

All participants shared feelings of uncertainty and anxiety regarding their future; the unpredictability of life and fear over the impact of potential disease recurrence. For example, one participant said:

*"I am fearful of recurrence, and everyone is feeling fearful of recurrence. It is impossible to find someone who is not afraid. But I don't show that, and I don't talk about that in front of my family in order not to make them think I am scared." - L*

**Subtheme 2: Fear of disease transmission to loved ones**

Three out of 11 participants were concerned about the genetic risk of their children developing cancer. For example, one participant, after discovering her disease postpartum, asked her doctor about the potential transmission to her child through breastfeeding and said:

*"Look how scared I am. I was pregnant with my son, and I thought that I might have had this lump many years ago, so I asked the doctor if this could affect my son because I was pregnant at that time and I also fed him from the breast. He said, No, it would not." - Ra*

### Subtheme 3: *Fear of death*

Six out of 11 participants feared dying and leaving their children motherless, concerned about their children's future and care. They expressed their desire to keep on living mainly for the reason to raise their children. For example, one participant said:

*"The children were the most important thing I thought about when I went for the surgery. I started thinking, if I died, what would happen to them? For example, they would be orphaned, and the people would sympathise with them. No, I would never deprive them of anything."* RI

### Subtheme 4: *Treatment-related effects and the loss of a woman's identity*

All participants described their difficult experiences with the treatment, specifically the mastectomy and chemotherapy. They expressed that they have experienced a lot of physical and psychological issues that have affected their lives and those of their families. The most distressing experience was the mastectomy, which altered their body image, caused a loss of sense of femininity and self-confidence, and altered their self-esteem, as stated by this participant:

*"Look, the lady misses a feminine part of her body; I think she feels something is missing. She loses self-confidence, specifically if she is married. Life got more exhausting; you have to take care of the issue of the breast by putting on pads. It becomes like a burden, and you have to attend to it."* - RA

Seven out of 11 participants found chemotherapy distressing with experiences of severe side effects such as hair loss, which can be especially difficult for those who valued their long hair. This affected not just the individuals but also their loved ones too. For example, one participant said:

*"As my hair began to fall out, I became distressed and lashed out at those around me. I would become irritable and upset others with my words. This even led to me to avoid my fiancé when my hair loss started. I couldn't bring myself to accept my appearance, not even 1%."* - W

### Subtheme 5: *Inadequate psychological care*

All the participants expressed that they had not received adequate psychological care at the hospital because of the workload of their oncologists and nurses. They highlighted the need to involve psychologists and sociologists in the treatment plans of cancer patients, specifically in the distressing conditions they live in. As said by this participant: *"There should be a psychologist to support the patients psychologically and socially."* - L

## Theme 3: Financial challenges

### Subtheme 1: *Treatment not available and is expensive*

All participants reported difficulties accessing treatment at hospitals as well as the financial burdens in purchasing these expensive medications. Some had to resort to selling assets like gold and houses, while others used their emergency savings for treatment. For example, one participant said:

*"Honestly, my family helped me partially. I also sold a gold ring, and my husband has also been putting some money aside for urgent events, so we were able to pay for the cost of this expensive medicine."* - L

### Subtheme 2: *Low incomes and high cost of living*

All participants mentioned that the Syrian crisis had significantly increased living costs and devalued the local currency, making it hard for low-income individuals to afford a healthy diet due to the need to prioritize their children's needs. As one participant said:

*"I told you if you want to eat healthy food, you cannot, for example, eat an avocado, which is said to be very beneficial for us. When I asked about its price, it was 25 thousand Syrian lira per kg, so I cannot afford to buy it at this price."* - Ri

## Theme 4: Societal Influences

### Subtheme 1: *Society's view and stigma*

All participants also talked about the negative social stigma associated with breast cancer, including the prevailing misconceptions that cancer is contagious or akin to getting a death sentence. These beliefs had not only negatively impacted them but also their families and children as well. For example, one participant said:

*"The people around them tell them that their mother is a cancer patient, and she will not live for a long time; she will die. My older child's friends think that at any moment when he comes to the house and may not find me anymore."* - A

They also expressed the distress feelings resulted from negative and annoying comments encountered during their social interactions. As stated by one participant:

*"For example, they say, look, how she shaved her hair like crazy? I was hearing these words on the bus and at the bus station. The way that people bully you is very ugly; they don't know your reasons."* - W

### Subtheme 2: *Lack of marriage choices*

Two out of 11 participants also expressed doubt over the prospect of marriage due to the fear of societal stigma as well as the potential partners' acceptance of their physical changes. For example, one participant said:

*"Who wants to marry a sick woman who has undergone a mastectomy, will be in long-term treatment, and has become deformed in her body?"* H

## Theme 5: Environmental Stressors

### Subtheme 1: *Stressful Hospital Environment*

All participants said that the hospital environment was stressful and inadequately equipped. They also cited overcrowding as a source of stress, suggesting the necessity for a more patient-friendly setting. For example, one participant said:

*"The hospital environment should be better and more organized than this. Very crowded and chaotic, and it is not tolerable."* - Ra

### Subtheme 2: *Situational factors*

All participants reported living under significant stress due to the breast cancer at a young age and the disrupted basic utilities like electricity, water, gas, and fuel are additional situational factors that further exaggerated the environmental stress. The disruptions in electricity supply were particularly distressing and affected their ability to cope with extreme weather after chemotherapy. As described by one participant:

*"After chemotherapy, you hope for a cool environment, maybe just to use a fan, but you can't because there's no electricity or water."*

- A

## DISCUSSION

Similar to previous studies,<sup>19,20</sup> practical needs were found to be a significant category of unmet psychosocial need. This is because disruption caused by breast cancer diagnosis and treatment at such a young age can adversely affect their personal development and career,<sup>4,14,20</sup> suggesting that meeting these practical needs can be very challenging, especially for financial needs, as demonstrated in both phases of this study. Coincidentally, it was also found that the psychosocial needs identified in this study can be mapped using the Maslow's hierarchy of needs theory. This implies that the impact of war crisis can have a cascading effect on various dimensions of the psychosocial needs of young women with breast cancer, ranging from the basic physiological needs to self-actualization needs.<sup>21</sup>

For example, given the high costs associated with cancer treatment, "Help with financial matters" was rated by 67.7% of the participants to be a significant unmet need in Phase 1 of study, consistent with similar past studies.<sup>2,10,13,22-24</sup> Additionally, the income data from the quantitative survey (Phase 1) shows that many participants were living in extremely precarious financial situation (e.g., a significant proportion of participants (83.8%) reported a monthly income of \$50 or less). This financial fragility consistently aligns with the unmet financial needs expressed by many participants in the qualitative interviews as well. This is vividly illustrated through stories of participants selling personal belongings to cover treatment costs.

Furthermore, the unmet needs for transport and dietary advice in the quantitative survey are likely to be indirectly consistent with their financial struggles as well. For example, many participants (particularly those who stayed outside of Latakia) explicitly mentioned the financial barriers they faced in their long-distance travels to seek treatment. In fact, one participant described the devaluation of the local currency and the unaffordability of nutritious food items like avocados, which further reinforce the finding that financial needs were a predominant concern. The lack of financial resources results in challenges in meeting basic physiological needs as well as their sense of security in Maslow's hierarchy of needs such as food, clean water, paying for utility bills, and fuel. The aggressive cancer treatments, alongside the challenging living conditions and financial strains in Syria, also intensify the critical strain in the psychological needs of Maslow's hierarchy of needs. A number of past studies have

shown that younger women experienced significantly more psychological challenges compared to older women.<sup>13,14,18,20,25</sup>

Third, the unmet social needs of participants in this study also reflect their dissatisfaction with their roles as mothers or wives and affected their belongingness and intimate relationships needs in Maslow's hierarchy of needs. This issue is consistent with findings on sexual problems and social isolation<sup>12,20</sup> and is exacerbated by the stigmatization of cancer in Syrian society including the fear of not able to get married. In fact, such stigmatization has also been observed in the broader context of the Arabic communities.<sup>12,26-28</sup>

Fourth, some participants were also dissatisfied with their post-mastectomy appearance and desired for breast reconstruction. This reconstruction was essential to boost their self-esteem (as in Maslow's hierarchy of needs), as well as their prospects for marriage.<sup>29-31</sup> The unmet need of breast reconstruction to improve their quality of life,<sup>32</sup> coupled with financial constraints and other psychosocial needs, all of which, can escalate into complex psychosocial challenges with unfulfilled self-actualization needs.

This study has some pertinent limitations. First, as the participants in this study were exclusively young women with breast cancer from a single hospital in Latakia, this might have limited its generalizability to older women with breast cancer or those from different geographical locations, both within and outside of Syria. Second, the reliance on self-administered data in the quantitative phase may be susceptible to response bias, where participants might have provided more socially desirable answers. Third, there seems to be an apparent inconsistency between the Phase 1 quantitative and Phase 2 qualitative findings. In Phase 1, only three significant needs were rated as unmet, whereas Phase 2 revealed that many participants had explicitly reported more unmet needs. Whilst this discrepancy could stem from comprehension issues in responding to the questions in both phases, it could also be due to the fact that quantitative data reflects overall trends by aggregating the composite responses from all participants, but qualitative data captured the detailed, nuanced individual lived experiences. Furthermore, this discrepancy could also be due to selection bias where participants who were willing to be interviewed may have had stronger need to vent out their negative experiences, thus, potentially skewing the qualitative findings toward highlighting more unmet needs.

## CONCLUSION

This study revealed a multidimensional impact of the Syrian crisis on these women's ability to meet their basic, safety, and relational needs, as perceived through the lens of Maslow's hierarchy of needs. The cascading effects of unmet financial and informational needs disrupted their emotional well-being, social belonging, and self-esteem, preventing many from achieving personal growth and self-actualization. Therefore, healthcare providers and policymakers must prioritize integrated interventions to address these psychosocial needs holistically.

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