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Quick Response Code:

Website: www.jehp.net
DOI: 10.4103/jehp.jehp_103_18

Women's information needs in mental health in disasters

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Abstract:

AIM AND BACKGROUND: Women are among vulnerable groups and susceptible to mental health problems during any disaster. Therefore, the current study aims to identify the mental health information needs of women during disasters.

METHODS: This is a qualitative study carried out using content analysis method through semi-structured interviews with 27 participants in cities of Tehran, Isfahan, and Mashhad during the year 2018.

RESULTS: The summary of the findings indicated 8 components and 25 subcomponents for health information needs of women during disasters. These information needs included primary needs and secondary needs such as psychological, social, cultural, support and rescue, policy-making, media coverage, and environmental needs.

CONCLUSION: The findings of this study can be used by authorities and policy-makers during disasters and rescue efforts for the female population and can help improve the general health status of the society.

Keywords:

Disasters, information needs, mental health, qualitative study, women

Introduction

Health information-seeking behavior can increase awareness regarding health threats and therefore help in improving lifestyle and confronting stress and threats.^[1,2] This effectiveness is especially important during crisis situations when the normal social order is disrupted. During disaster situations, affected people experience a wide range of reactions in different psychological aspects.^[3] Previously, it was assumed that all people are similarly affected during similar situations, but later studies showed that women are more vulnerable in regards to mental health^[4] and require more attention.

A study on the earthquake in the Lorestan province using focus group discussions concluded that women are faced with

financial problems, lack of ownership, feelings of insecurity, and fertility problems.^[5] Another study conducted qualitative interviews with experts and emphasized the necessity of primary biological and security needs, improvement of social status, access to facilities and values, knowledge about rights, participation in policy- and law-making, and unity among women during disaster situations.^[6] In another group discussion with 35 experts in a qualitative study, clean eater, shelter, security, respect, proper communication, awareness, and employment were emphasized as the needs of survivors in an earthquake.^[7] Another study carried out on four groups of women participating in Red Crescent activities also emphasized on shelter, hygiene, attention to pregnancy and maternity conditions, health and cosmetic needs, psychological factors, and controlling domestic violence as main needs of women during disasters.^[8] Two other separate studies on the aftermath of earthquakes in

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How to cite this article: Samouei R, Hajari S. Women's information needs in mental health in disasters. *J Edu Health Promot* 2018;7:170.

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Received: 28-04-2018

Accepted: 31-07-2018

Nepal and Eastern Azerbaijan, Iran, mentioned needs such as menstrual health, fertility, and cultural limitations of women during disasters.^[9,10] Another study on mental health needs during Sri Lanka earthquake confirmed the effectiveness of new National Mental Health Policies and offered suggestions for future health-care legislations.^[11] In another study on women during Tsunami disaster in India, psychological and social care was introduced as an important and effective strategy for improving women's mental health during disasters.^[12] Another study on 1253 female earthquake survivors indicated that social relations can protect women against mental health problems during earthquakes,^[13] while a different study emphasized the importance of managing physical, psychological, emotional, fertility, and environmental consequences during these situations.^[14] Other studies regarding health information needs of 235 nomadic women emphasized on hygiene, educational, religious, cultural, and financial needs.^[15]

Studies regarding information-seeking behavior indicate that women are active information seekers,^[2,16] pay more attention to preventive measures compared to men,^[17] and play an important role in health care and lifestyle determination of family members.^[2] These characteristics can be helpful in reducing the effects and consequences of disasters which lead to lack of balance and high stress and urgency not only in individuals and family members but also for the region and society as a whole. Therefore, the current study aimed to specifically identify mental health information needs of women. This study was carried out using a qualitative approach given the importance of cultural background and understanding regarding time, location, and current situation.

Methods

This is a qualitative study which was carried out using content analysis approach in the last quarter of 1396 and 1397 (2017). The study population consisted of all managers, planners, and faculty members of psychology or psychotherapy with experience and knowledge regarding mental health and disasters in Tehran and Isfahan provinces as well as women working in disaster relief. Sampling was carried out using purposeful sampling and data saturation was achieved through 27 interviews. Semi-structured interviews were used as data gathering tool. Interviews were carried out in person and with previous appointments.

The information gathered during interviews were recorded or written down with the consent of the interviewees who were informed about the study's aims and were ensured regarding confidentiality and ethical practices during study along with the fact that more than one interview session might be necessary. Initial

interview time was 45 min and they were carried out with minimum possible bias. Interviewees were told that they can refuse to continue the interview at any given time which causes them to be removed from the study. An interview guide with main and probing questions was used for the interviews. Interview questions followed patterns such as: "What are mental health information needs of women during natural disaster situations?"

Each interview was then transcribed. To this end, the entire recording of the interview was played once and then each interview line was investigated and relevant codes were extracted. Two researchers simultaneously carried out the coding and any disagreements were resolved through discussion. Interview transcripts were also returned to the interviewees and they were asked to give their opinions regarding interviewers' understanding of the answers. There were no reported disagreements and only to interviewees insisted on offering a more complete account.

Thematic analysis was used to analyze the data. To this end, information gathered from interviews were coded and categorized in abstract semantic units and subthemes were determined. These subthemes were then categorized in the main subthemes and then into more abstract themes based on content and semantic similarities before being reported.

Results

The information needs of women in this study were categorized in 2 primary and secondary (social-psychological) themes, 8 components (physiological, no physiologically, psychological, cultural sociology, support and relief efforts, policy-making, media efforts, and environmental), and 25 subcomponents which are presented in Table 1. Table 1 also shows some of the codes extracted from the interviews.

Some of the quotes from interviewees are shown below based on the results of Table 1.

Regarding the nature of security, one interviewee said: "Security is the first priority. Well, now that I'm injured and my house is destroyed, where can I spend the night? Do my children have a place to stay and food to eat? This is different between summer and winter. The first priority is the feeling of security and then primary needs."

Under screening component, different factors such as attention to age differences among women were mentioned: "For better information management, we must group the women. In some areas, we see women at their 30s and 40s who are single, but in other areas, we have married 14-year-olds; or a pregnant 16-year-old. We

Table 1: Women's health information needs during disasters

Theme	Component	Subcomponent	Codes
Primary	Physiological	Food	Need for food, clean food and water, nutritious foods under special conditions, milk and calcium
		Sexual-hormonal	Abnormal bleeding, menopause problems, infection, sexual problems, and unsecure prevention
Secondary (psychological, social)	Nonphysiologically	Cloth and tools	Proper cloths, underwear, hygiene needs, daily pad, some hygiene and makeup tools
		Security and shelter	Proper shelter, secure location, children's security, and preventing abuse from helpers
	Psychological	Educational	Education regarding stress management, resistance, emotional management, and first aid
		Psychological intervention	Emotional externalization, control of impulsive behavior, suicide prevention, stress, and anxiety management
		Consultation needs	Attention to the gender of consoler and patient, familiarity of psychologist with women's local culture, and lack of obvious social and language levels
	Sociological-cultural	Screening	Women's age grouping, attention to previous conditions, and vulnerable women
		Cultural	Attention to women's culture during relief efforts, changing mistaken beliefs, attention to clothing, and delict of women
		Value and respect	Being understood, being seen, giving hope, respect toward women, and new and proper care packages
		Role and responsibility	Helping women for finding themselves, wife's role, and giving responsibility based on abilities
		Spiritual	Changing wrong beliefs regarding relation between earthquake and sin, help from religion, and offering similarities with religious figures
	Support-relief	Problems and pressures	Higher pressure of living in temporary shelters, lack of physical activity in women in deprived areas, higher level of sexual violence, and guarding the tents
		Relief	Ensuring timely relief, use of experienced workers, and creating calm trough previous timely relief efforts
		Support	Being near family and friends, emotional support, occupational support for women, and financial support
		Communication	Social support, group interactions, empathy from others, communication with family members and acquaintances, and creating groups
Policymaking	Facilities	Primary welfare facilities, heating and cooling equipment, and tools for cooking and laundry	
	Legislation	Creating health houses, involving women in disaster management, and legislations for supporting women	
	Planning	Applicable intervention plan for disasters, improving women's mental health before disasters, and learning from other earthquake-probe countries	
Media-informing	Implementation	Known locations for distribution of care packages, predetermined rations, and giving progress reports	
	Family	News about acquaintances' health and news about suppose and children	
	Disaster and crisis	Clear and unambiguous news, information regarding relief methods, showing hopeful news	
Environmental	Technology	Use of communication technology for quick informing, telegram@ groups, and use of multimedia resources	
	Ecological	Attention to sessional conditions for sheltering, pungent smells, humidity, and environmental pollution	
	Geographical	Separating urban and rural areas in relief efforts, attention to geographical conditions	

have to consider these things when giving information to women." Regarding cultural factors, one participant said: "It's not good to use psychologists who don't know the local culture. Like a psychologist from an urban culture who is trying to help a rural woman." Regarding Hijab, one interviewee said that Hijab is part of their identity: "Maybe immediately after disasters women can't have their usual cloths. Maybe a woman who had always followed proper Hijab is now faced with conditions where she doesn't have enough cloths and this losing Hijab damages part of her psychological identity. A woman must know what to do in these situations."

Attention to values and privacy of women was also mentioned: "Giving a tent to several families or putting them in the same shelter is not correct. A woman needs independence. They might want to use their underwear when in their own tent or shelter."

Regarding the roles and life responsibilities and pressured on women, a disaster psychologist said: "One important thing to note is that gender roles after earthquake are different in different locations and sometimes can change too. For example, in Bam, women were more involved in problems outside of their homes

and men had a more supportive role. However, it was not like that in Harris. Women kept their previous gender roles and other things were also added to it like taking water from streams. We have to pay attention to gender roles of women in disaster areas and any changes and even the pressure of new roles for women. Sometimes you see that women have to do their previous works such as taking care of cleaning or children's schooling and cooking while other things such as getting care packages, food rations, and bringing water are also added to them. They will be under constant pressure like a critical joint."

In the area of policy-making, one expert said: "The majority of planners are men and therefore decisions and plans are male-focused. How can a man of a team of men consider women problems in their decisions? Women should be used during decision-making regardless of gender looks, social stigma, or ethnical problems." He also had this to say to authorities: "Constant presence and follow-up by authorities, giving reports on what has been done, and what is being done and what will happen in the future will help increase hope in women," Another thing of note was that: "In Iran, we only consider the first critical few days as important. So, what happens after a year or several years? What happened to the grief processing of me as a woman? What happened to my need for love or self-development in the following years?"

Regarding the use of technologies, one expert said: "TV and Telegram© can be very effective in these educations. We can also teach some skills to mothers and women regarding what activities and games are effective for children in disaster situations and can help them. Of course, not everyone has access to these things."

Regarding the importance of attention to geographical conditions, one interviewee said: "Our management in disasters is hurried. We don't pay attention to the needs of special groups. For example, we don't consider geographical conditions in planning and management. In a rainy area, they put the tents on the ground. Many old women have bone and back problems. We need to consider these when creating shelters."

Discussion

According to the findings of this study, part of women's health information needs was related to their primary needs such as nutrition and sexual hygiene, hormonal conditions, and physiological situations. Regarding the dimension of fertility needs, these results agreed with the results of Forouzan *et al.* and Bahman Janbe *et al.*, Budhathoki *et al.*, and Parsizade and Eskandari and also

agreed with the results by Shooshtari *et al.* regarding primary biological needs.^[5,6,8-10] Primary biological needs seen in Maslow's hierarchy of needs are the first groups of needs whose lack of satisfaction can lead to mental problems due to urgency and stress for survival and well-being. Due to different hormonal conditions, women need different types of attention regarding these needs.

Some of the results mentioned, clothing, hygiene, and security needs of women. In case of security, these results agree with the ones reported by Forouzan *et al.* and Shooshtari *et al.* and regarding clothing agree with the results by Parsizade and Eskandari.^[5,6,8] Given the Islamic nature of Iran, clothing conditions and related problems play important roles for women. Furthermore, when women are placed in unsecure and unorderedly locations, the importance of sheltering and protection offered to women increases significantly.

In psychological dimensions, the results of the current study confirm the results reported by Mahoney *et al.* and Becker.^[11,12] Psychological support can be effective both as preventive services before mental health problems and as interventions after the onset of these mental problems. Furthermore, screening is necessary to understand the needs of each group and offering effective responses.

In the culture dimension, the results of the current study agreed with the results of Forouzan *et al.*, Budhathoki *et al.*, and Sezgin and Punamäki in relation to social communications, with the results of Shooshtari *et al.* and Boalhari and Chimeh in case of respect problems; and with the results of Shooshtari *et al.* in regards to policy-making.^[5-7,9,13] Creating mental health for each group is greatly dependent on cultural, spiritual, and social problems and follows a definition of health which includes all biopsychosocial aspects. This means that all these aspects should be considered to create the basis of mental health.

The results of the current study also indicated media aspects as an important part of information needs, and great emphasis was treated with timely and correct information regarding health of family members and other survivors to women. This aspect was not seen on previous studies and was specific to the current study. Since the participants in this study included relief workers, psychologists, and women workers during disasters, they all had experience with women during disaster situations and had seen the current conditions first hand. Therefore, most indicated that the priority information needs of women in disasters includes news regarding the health of family members and other survivors which shows the emotionally central and supportive role of women in families.

Another finding was related to environmental, weather, and geographical factors which agrees with the results reported by Ardalan *et al.* Specifically, favorable or dangerous weather conditions and environmental pollutions can directly affect the health of survivors as well as their well-being.^[14] This can lead to great anxiety and stress due to unfavorable conditions which can have adverse psychological and mental effects.

One of the strengths of this study was its multidisciplinary nature and investigating women's mental health under special and crisis conditions using qualitative approach and opinions of those with direct experiences regarding these situations. This leads to findings which are closer to reality and evidence based. The outputs of this study needs necessary for prevention of mental problems as well as psychological relief work which can be used by planners and care providers. One of the limitations of this study was the inability to consider one of the recent disasters and to include relevant authorities in the interviews. Furthermore, no specific pattern or protocol was extracted and only women were investigated among various vulnerable groups.

Conclusion

According to the results of the current study, we suggest for proper planning to be carried out based on the needs of different groups and necessary education to be offered to the target groups under normal conditions in order to maintain and improve mental health of different groups during disaster situations, especially vulnerable people such as women. The amount of chaos and damage during disasters is usually such that such strategies will not be possible to implement. Therefore, these results indicate that using a more preventive approach for facing sudden and disaster situations can help minimize the effects of these disasters and therefore control at least part of the possible adverse mental problems. On the other hand, awareness of the needs of women in the earthquake causes women's mental health to be better preserved through adequate relief and service and the negative consequences of mental health are largely controlled. Therefore, the results of this study can be used by planners and decision-makers in disaster situations.

Acknowledgment

This study is the result of a research proposal supported by Isfahan University of Medical Sciences with ethics code of IR. MUI. REC.1396.2.068.

Financial support and sponsorship

The study was financially supported by Isfahan University of Medical Sciences.

Conflicts of interest

There are no conflicts of interest.

References

1. Wang W, Yu N. Coping with a new health culture: Acculturation and online health information seeking among Chinese immigrants in the United States. *J Immigr Minor Health* 2015;17:1427-35.
2. Sabzevari S, Nikbakht Nasrabadi A, Negahban Bonabi T. Sources of women's health information: A qualitative study. *J Qual Res Health Sci* 2015;3:349-62.
3. Shultz JM, Neria Y, Allen A, Espinel Z. Psychological impacts of natural disasters. In: Bobrowsky PT. editors, *Encyclopedia of Natural Hazards*. Encyclopedia of Earth Sciences Series. Dordrecht: Springer; 2013. [Doi: 10.1007/978-1-4020-4399-4_279].
4. Corrarino JE. Disaster-related mental health needs of women and children. *MCN Am J Matern Child Nurs* 2008;33:242-8.
5. Forouzan AS, Baradarn Eftekhari M, Falahat K, Dejman M, Heidari N, Habibi E. Psychosocial needs assessment among earthquake survivors in lorestan province with an emphasis on the vulnerable groups. *Glob J Health Sci* 2013;5:79-84.
6. Shoostari S, Abedi MR, Bahrami M, Samouei R. Empowerment of women and mental health improvement with a preventive approach. *J Educ Health Promot* 2018;7:31.
7. Bolhari J, Chime N. Mental health intervention in Bam earthquake crisis: A qualitative study. *Tehran Univ Med J* 2007;65:7-13.
8. Parsizade F, Eskandari M. The study of capabilities and needs of women in crisis situations. *J Seismol Earthq Eng* 2013;16:59-72.
9. Budhathoki SS, Bhattachan M, Castro-Sánchez E, Sagtani RA, Rayamajhi RB, Rai P, *et al.* Menstrual hygiene management among women and adolescent girls in the aftermath of the earthquake in Nepal. *BMC Womens Health* 2018;18:33.
10. Bahman Janbe F, Ordibeheshti Khiaban M, Kohan SH. Qualitative study of female gender roles in the earthquake. *J Women Fam Stud* 2017;9:7-34.
11. Mahoney J, Chandra V, Gambheera H, De Silva T, Suveendran T. Responding to the mental health and psychosocial needs of the people of Sri Lanka in disasters. *Int Rev Psychiatry* 2006;18:593-7.
12. Becker SM. Psychosocial care for women survivors of the tsunami disaster in India. *Am J Public Health* 2009;99:654-8.
13. Sezgin AU, Punamäki RL. Perceived changes in social relations after earthquake trauma among Eastern Anatolian women: Associated factors and mental health consequences. *Stress Health* 2016;32:355-66.
14. Ardalan A, Sohrabizadeh S, Latifi MF, Rajaei MH, Asadi A, Mirbeigi S, *et al.* Responding to physical and psychological health impacts of disasters: Case study of the Iranian disaster rehabilitation plan. *East Mediterr Health J* 2016;22:212-8.
15. Mohammadi M, Sapidnameh Z, Ebadollah Amoghini J. Information needs of nomadic women of Kohkiluyeh City. *Hum Inf Interact* 2016;2:79-87.
16. Wang MP, Viswanath K, Lam TH, Wang X, Chan SS. Social determinants of health information seeking among Chinese adults in Hong Kong. *PLoS One* 2013;8:e73049.
17. Reczek C, Umberson D. Gender, health behavior, and intimate relationships: Lesbian, gay, and straight contexts. *Soc Sci Med* 2012;74:1783-90.