



Perceived Educational Needs of Postmenopausal Iranian Women: A Qualitative Study

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Abstract

Background: Menopause is a natural change that almost all women experience in middle age. Just like puberty, menopause is considered a turning point in a woman's life. Postmenopausal women experience a wide range of symptoms that may affect their health and well-being, but in most cases, they are unaware of the postmenopausal symptoms they are experiencing or will experience. This study aimed to investigate the perceived educational needs of postmenopausal women in southern Iran.

Methods: This study was conducted using a conventional qualitative content analysis approach in 2021 in Jiroft (southern Iran). The main research question was, 'What educational needs do postmenopausal women experience?' To answer this question, 15 participants were selected using purposive sampling (seven postmenopausal women, four gynecologists, three midwifery experts, and one nutritionist). The data were collected using semi-structured interviews, which continued until data saturation. The collected data were analyzed using the method proposed by Graneheim and Lundman. The MAXQDA 12 software was used to manage qualitative data analysis.

Results: Data analysis revealed one main theme (perceived educational needs) with two categories and five subcategories: (a) Perceived information and medical needs (the need to know about the healthy transition to menopause, the need for support and advice in health-related decisions, and health-promoting educational needs) and (b) The need for self-control (the need for self-management of physical symptoms and the need for self-management of psychological symptoms).

Conclusion: This study showed that postmenopausal women face many physical and psychological challenges and need more education to better meet these challenges. Thus, officials and experts in charge of women's health such as gynecologists, midwives, nurses, and care providers need to pay special attention to problems and issues of postmenopausal women and plan to promote their awareness and knowledge.

Keywords: Menopause, Educational needs assessment, Qualitative research

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Introduction

The interruption of menstruation for more than 12 months is referred to as menopause (1,2), which is a natural change that almost all women experience in middle age (3). Just like puberty, menopause is considered a turning point in a woman's life (4). The average age of menopause is about 51 years worldwide. However, studies in different parts of Iran have reported a lower age (49.6 years) compared to many developed countries (5,6). Furthermore, with increasing life expectancy, it is estimated that approximately one-third of women's lives are spent in menopause, indicating the importance and role of this period in a woman's life (5). Menopause is associated with changes in the hypothalamic and pituitary hormones that regulate the menstrual cycle (7) and a decrease in ovarian gonadotropin, estrogen, and

progesterone hormones (8). These hormonal events lead to significant biological and psychosocial changes in 50%–85% of postmenopausal women and can cause significant stress and disability in them (9). A study showed that about 45% of women seek professional advice from a doctor to resolve their menopausal symptoms following these changes (10). Symptoms experienced during this period include vasomotor symptoms (e.g., hot flashes and night sweats), psychological symptoms (e.g., depression and insomnia), physical symptoms (e.g., heart palpitations, back pain, and dizziness), and sexual symptoms (e.g., decreased libido and vaginal dryness) (11,12). Despite the wide range of these symptoms and their effects on the health and well-being of postmenopausal women (13), they are often unaware of the symptoms they are experiencing or will experience (14). Existing evidence



shows that women in different countries such as North America (15), Australia (16), Sri Lanka (17), the UAE (18), Malaysia (19), Egypt (20), and Eritrea (3) do not have enough information about menopause, the physical and psychological issues associated with it, and ways to manage the symptoms. Educating postmenopausal women has been shown to improve their understanding of this stage and the importance of self-care (9) because knowledge is a requirement for using health services, and postmenopausal women should be well aware of the health issues of this period to be able to protect and improve their health (21). Different health behavior models emphasize the need to raise community awareness about health-related behavioral changes. The most widely used model is the health belief model (22). First developed by Hochbaum et al, this model considers behavior as a function of one's knowledge and attitude and has six components including perceived susceptibility, perceived severity, perceived benefits, perceived barriers, perceived self-efficacy, and cues to take action (23,24). According to this model, if postmenopausal women understand the benefits of promoting their menopausal healthcare behaviors, feel self-efficacy in performing those behaviors, and know when to perform these actions, they can change their lifestyles to have a comfortable transition to menopause. Postmenopausal women are neglected in most societies (5), while the problems of postmenopausal women affect not only themselves but also their family, colleagues, and communities. For this reason, clinicians who provide care during the menopause period have an important role in providing preventive and curing medicine (25), which requires recognizing the women's needs in this period of life (26). Although the nature and prevalence of menopausal symptoms are similar for most women, these symptoms may vary in different cultures which is due to differences in lifestyle, social and economic status, and women's self-perception (25). Given an increase in the population of women aged 45 to 60 years (18) and the lack of sufficient research to identify the educational needs of this group of women, the present study aimed to investigate the educational needs of women during menopause with conventional content analysis method. Indeed, this method is applied to understand and clarify the basic meaning of the phenomenon in question from the perspective of those who are directly involved with it (27).

Methods

This qualitative study was conducted using a conventional content analysis method to examine the educational needs of postmenopausal women in 2021 in Jiroft (southern Iran). Seven postmenopausal women, four gynecologists, three midwifery experts, and one nutritionist were included in the study to examine all aspects of menopause. The participants were selected

via purposive sampling. The inclusion criteria for postmenopausal women were being menopausal for at least two years (the first year to confirm menopause and the second for better understanding of and experience in issues related to menopause) and willingness and consent to participate in the study. The inclusion criteria for gynecologists and midwives were having at least five years of work experience, a history of cooperation in the field of care for postmenopausal women, and willingness and consent to participate in the study. The exclusion criteria for all participants were unwillingness to continue participation. Data collection continued until data saturation. In qualitative studies, data are saturated when no new theme or information is observed upon collecting additional data (28,29).

The data in this study were collected using in-depth semi-structured face-to-face interviews from January 2021 to February 2021 in Jiroft, a city in southeast of Iran. After receiving the code of ethics and preparing the list of people who met the inclusion criteria, the interviews were conducted. The objectives of the study and the research procedure were explained to the participants. The location of each interview was chosen based on participants' preference, and the interviews were conducted in the hospital, private medical offices, and the homes of the participants. Informed written consent was obtained from the participants. About clinicians, each interview began using the interview guide with questions such as "Please talk about the educational needs of postmenopausal women", and "Please tell us about the physical and psychological symptoms of women during this period". The questions asked from the postmenopausal women aimed to explore their opinions on their educational needs: "Could you please talk about your educational needs during menopause?" Where necessary, probing questions, such as "Can you explain more?" and "Can you please give an example?" were asked for further clarification. All interviews were recorded with a digital voice recorder. The first author (FR) conducted an interview session with each participant. Each session lasted 40 to 60 minutes.

Data collection and analysis were performed simultaneously. The collected data were analyzed using Graneheim and Lundman's content analysis method (30). Interviews were transcribed immediately. First, each text was read several times until a general impression was received. Second, all texts were read line-by-line and were broken down into meaning units which were key phrases in the text. Third, the meaning units were condensed and labeled with codes. Fourth, the codes were allocated into subcategories based on similarities and differences. Then, similar subcategories were grouped into main categories. Finally, categories were determined as the expression of the latent meaning of the text. MAXQDA 12 software was used for data analysis.

The rigor of the findings was established using Lincoln and Guba's criteria (31). The credibility of the data was ensured through prolonged contact with the participants and data immersion. Besides, the participants' statements were summarized and reviewed by them to ensure a correct understanding of the participants' experiences. The extracted codes and categories were checked and confirmed by two menopausal participants. Two faculty members specializing in qualitative research were asked to check the data analysis process to ensure the confirmability of the data. Moreover, to enhance the data transferability, the sampling procedure was done with maximum variation, the research procedure and the findings were reported in detail, and the findings were checked and confirmed by gynecologists who were not participants.

Results

In this study, 15 interviews were conducted with seven postmenopausal women, four gynecologists, three midwifery experts, and one nutritionist. All participants were women. The mean age of postmenopausal women was 51.90 ± 2.90 years. For the gynecologists and midwives, the average work experience was 8.90 ± 3.17 and 10.12 ± 1.28 years, respectively. The nutritionist had 5 years of experience (Table 1).

A total of 845 initial codes were extracted from the data. After merging, 197 codes remained, which eventually yielded one main theme (perceived educational needs) and 2 categories: (a) Perceived information and medical needs (with three subcategories) and (b) The need for self-control (with two subcategories), as shown in Table 2.

Perceived educational needs

This main theme consisted of two categories including

perceived information and medical needs and the need for self-control.

Perceived information and medical needs

These needs included the need to know about the healthy transition to menopause, the need for support and advice in health-related decisions, and health-promoting educational needs.

1. The need to know about the healthy transition to menopause

Most of the women stated that they had had premenopausal symptoms that worried them and had not known that these symptoms were a sign of an important period in their lives. They believed that if they had had the necessary information, they would have been better able to cope with their menopause and had a better transition to menopause. One of the participants stated, "I had been sweating at night for two years before my menstruation stopped. My body soaked when I woke up. I did not know I was approaching menopause at all. I was very worried. I thought I had a dangerous disease. If I had had the necessary information, I would have been less stressed" (Participant 1). Another participant added, "I did not know much about menopause. My information was limited to what I had heard from others" (Participant 3).

2. The need for support and advice in health-related decisions

This subcategory accounted for the postmenopausal women's need to be supported by medical staff to make more effective decisions about how to see a doctor, when to see a doctor, and how to choose a treatment option.

Table 1. The participants' demographic characteristics

Participant code	Group of participants	Education status	Marital Status	Occupation status	Duration of menopause (years)
1	Menopausal woman	Bachelor's degree	Married	Unemployed	3
2	Menopausal woman	High school diploma	Married	Unemployed	2
3	Menopausal woman	High school diploma	Married	Unemployed	2
4	Menopausal woman	High school diploma	Married	Unemployed	3
5	Menopausal woman	Bachelor's degree	Single	Unemployed	2
6	Menopausal woman	Bachelor's degree	Married	Unemployed	4
7	Menopausal woman	High school diploma	Single	Unemployed	3
8	Gynecologist	MD	Married	Employed	-
9	Gynecologist	MD	Married	Employed	-
10	Gynecologist	MD	Married	Employed	-
11	Gynecologist	MD	Married	Employed	-
12	Midwife	Master's degree	Married	Employed	-
13	Midwife	Master's degree	Married	Employed	-
14	Midwife	Master's degree	Married	Employed	-
15	Nutritionist	PhD	Married	Employed	-

MD, Medical Doctor.

Table 2. The categories and subcategories extracted in this study

Main theme	Categories	Subcategories
Perceived educational needs	Perceived information and medical needs	The need to know about the healthy transition to menopause The need for support and advice in health-related decisions Health-promoting educational needs
	The need for self-control	The need for self-management of physical symptoms The need for self-management of psychological symptoms

Most of the postmenopausal women stated that they did not have the necessary information about the importance of seeing a doctor. They did not know what physical or mental symptoms they should see a doctor for. According to the participants, physicians also need to provide postmenopausal women with the information they need to decide on hormone therapy and supplements. One of the participants stated, *"I wish there were a medical center or clinic that specifically advised and trained postmenopausal women"* (Participant 6).

3. Health-promoting educational needs

Several participants stated that they needed to receive information about a healthy lifestyle, especially healthy eating, supplementation, the amount and type of physical activity for menopause, and how screening tests were performed. One of the participants stated, *"I've heard that nutrition can affect the sleep and hot flashes of postmenopausal women, but I don't know what kind of nutrition we should have"* (Participant 5). In addition, one gynecologist stated, *"Most women do not have the information they need about breast self-examination, mammograms, and Pap smears, and they need to receive the necessary information"* (Participant 9).

The need for self-control

This category refers to the women's need to know how to control the physical and psychological symptoms associated with menopause.

1. The need for self-management of physical symptoms

The participants in this study reported that they had experienced multiple physical symptoms during menopause and had had little knowledge about how to reduce these symptoms. Most of them complained of hot flashes and night sweats, genitourinary symptoms such as vaginal dryness and urgency to urinate, musculoskeletal pain, fatigue, insomnia, hair loss, and breast pain. One of the participants reported, *"I did not have vaginal dryness in the beginning, but now I feel pain and burning after intercourse due to vaginal dryness. I went to the doctor, and she gave me a gel, which did not work. Now I do not know what to do to solve this problem"* (Participant 2). Another participant (a nutritionist) added, *"Postmenopausal women should get the necessary information about foods containing estrogen. I recommend flaxseed and soybeans to reduce their hot flashes, and they are very satisfied. Of course, I am also aware that some people are prohibited*

from taking estrogen" (Participant 15).

2. The need for self-management of psychological symptoms

Most of the participants stated that it was common to experience psychological symptoms during menopause. The participants reported mood swings, anxiety, forgetfulness, irritability, decreased concentration, frustration, and decreased self-confidence. They also talked about feeling ashamed and saddened by their reduced sense of femininity. Most of the participants stated that they needed information and training on managing these symptoms and deciding whether or not to see a doctor. One of the participants (a postmenopausal woman) said, *"Because of lack of sleep, I no longer feel like doing housework, my concentration has decreased, and I get tired quickly. I don't know if non-pharmaceutical methods can control this sleeplessness"* (Participant 3). One of the midwives also stated, *"Postmenopausal women may become sensitive and irritable, and some may experience mood swings and low self-esteem following the loss of femininity. Thus, they need to receive the necessary training to manage their psychological symptoms"* (Participant 13).

Discussion

This study explored the educational needs of women during menopause. Data analysis revealed one main theme (perceived educational needs) with two categories and five subcategories: (a) Perceived information and medical needs (the need to know about the healthy transition to menopause, the need for support and advice in health-related decisions, and health-promoting educational needs) and (b) The need for self-control (the need for self-management of physical symptoms and the need for self-management of psychological symptoms).

Perceived information and medical needs

According to this study, women need training to make health-related decisions and improve their health. One of these needs is knowing how to have a healthy transition to menopause. Most of the women in this study stated they had not known they were entering menopause and needed information and training to go through a healthy transition. In contrast to the present study, Herbert et al (16) reported that Australian women recognized that they were approaching menopause based on their symptoms. Ilankoon et al (17) surveyed Sri Lankan postmenopausal women and found that after some time, due to a series of

symptoms and interruption of their menstrual periods, Sri Lankan women knew that they were entering a new phase of their lives that was natural and unavoidable for all women. These findings highlight the need for postmenopausal women to receive training from the premenopausal period. Women in the premenopausal stage often experience symptoms of menopause. Thus, if they are trained in this stage, they will be more prepared for a healthy transition to menopause and can adapt to the approaching physical and psychological changes. The women in the present study also highlighted the need for support and advice when making health-related decisions. Similarly, Utian and Schiff (15), who studied 833 postmenopausal women in North America, showed that most women believed that doctors did not give them enough information and did not address their concerns about menopause. Similar to the women in the present study, Emirati women reported that they had little knowledge about hormone therapy and other menopausal symptom management options and needed more information from physicians and health care providers (18). With these findings in mind, it can be argued that in most areas, menopause, along with all the changes it brings with it, is accepted as a natural stage of the aging process, which may lead the medical staff to consider menopause and all the issues surrounding it normal and pay less attention to educating postmenopausal women.

The women in this study also pointed to health-promoting educational needs as a subcategory of perceived educational needs. Health-promoting activities include a healthy lifestyle, especially healthy eating, supplementation, the right amount and type of physical activity for menopause, and screening tests. Postmenopausal women, like everyone else in the community, need to be educated about health-promoting activities. In a study by Herbert et al (16), some Australian women stated that they had used lifestyle changes, dietary regimens, and exercise to relieve their symptoms but had limited knowledge about the measures they were taking. Stanzel et al (32) found that Vietnamese women used self-care strategies such as exercise, dietary changes, and traditional herbs to manage postmenopausal symptoms. In a study by Utian and Schiff (15), North American women reported that physicians emphasized hormonal treatment options to reduce menopausal symptoms but paid little or no attention to non-hormonal therapies such as smoking cessation, exercise, diet, and stress reduction techniques. According to them, postmenopausal women need to know about lifestyle modification and non-hormonal therapies that affect menopausal symptoms. Furthermore, Marlatt et al (33) found that the majority of the women stated that they were interested in participating in a comprehensive lifestyle modification training program to minimize their menopausal symptoms. It seems that despite being cost-effective,

healthy lifestyle, exercise, supplementation, healthy nutrition, and screening tests are not recommended as the first line of treatment as often as they should. Thus, medical staff must pay special attention to the needs of postmenopausal women. These findings can be explained by the health belief model, which assumes that individuals can successfully adopt health-promoting behaviors if they understand the benefits of health-related behaviors and know when to take action.

The need for self-control

The women in this study believed that they needed training on how to control the physical and psychological symptoms of menopause. Similarly, Herbert et al (16) reported that Australian women described menopause as a challenging time regarding how to receive health care, new medications, and treatments to relieve menopausal symptoms. They stated that they did not have sufficient information about menopause, how to control it, and symptom management strategies and were willing to receive training on it. Studies in Egypt (20), Malaysia (19), Pennington (33), and Eritrea (3) have also shown that postmenopausal women need health-training interventions, tools, and educational resources to increase their knowledge about menopause and how to control its symptoms because these women often want to learn more about the management and coping techniques of menopausal symptoms.

The need for self-management of physical symptoms was another issue highlighted by the participants in the present study. The women reported that they experienced various physical symptoms but had little knowledge on how to reduce these symptoms. Herbert et al (16) also showed that one in three postmenopausal women had vasomotor symptoms (e.g., hot flashes and night sweats) and one in three women who had sexual intercourse reported vaginal dryness during intercourse due to vulvovaginal atrophy. However, they did not have adequate information about the strategies to manage these symptoms. Moreover, in line with the present study results, Ilankoon et al (17) found that Sri Lankan women complained of hot flashes, vaginal dryness and dyspareunia, burning, and frequent urination. These women expressed the need for knowledge to manage these symptoms and believed that providing adequate and reliable information about menopausal changes and challenges would benefit symptom self-management.

The participants in the present study highlighted the need for self-management of psychological symptoms. Most of them stated that they experienced various psychological changes, but they needed information and training on managing these symptoms. In a similar vein, Herbert et al (16) reported that Australian women experienced mood swings such as depression, irritability, anger, forgetfulness, or anxiety but did not have enough

knowledge to manage them. The women stated that they needed to learn about menopause and how to manage its psychological symptoms. In addition, Ilankoon et al (17) found that postmenopausal women experienced various emotional changes such as anxiety, sadness, hypersensitivity, and irritability but did not know how to cope with them. Furthermore, Trudeau et al (26) concluded that postmenopausal women generally needed more information about menopause and the management of physical and psychological symptoms associated with it. These findings were in line with the assumptions of the health belief model since if the educational needs of postmenopausal women are met, they will feel self-efficacy and control over their physical and psychological symptoms.

Overall, the existing evidence suggests that postmenopausal women experience many physical and psychological symptoms (34,35), but they have little knowledge about the self-management and control of these symptoms. Several reasons can account for this limited knowledge (14): Postmenopausal women consider these changes to be natural, and they are unwilling to discuss them or receive help about menopause-related issues (3); Given the various roles played by these women (mother, wife, etc), they often tend to ignore their physical and mental pains and problems and do not share their problems with physicians; and (4) Less attention is paid to the problems experienced by these women and the problems are gradually forgotten over time. Finally, to answer the main research question, 'What educational needs do menopausal women experience?' it can be said that postmenopausal women have various educational needs in the field of controlling their physical and mental symptoms and health promotion that should be considered.

Developing educational studies are recommended to evaluate the results of this study on meeting the needs of postmenopausal women and their satisfaction. Moreover, it is suggested that future studies assess adaptation process with menopause in Iranian women. The strengths of this study were the maximum variation sampling of the participants to better understand the educational needs of postmenopausal women. A limitation of the study was that due to the nature of qualitative studies and the conduction of this study in only one city of Iran, it was not possible to draw general conclusions about Iranian women's experiences and educational needs during menopause.

Conclusion

The present study showed that postmenopausal women have various medical and educational needs to control their physical and psychological symptoms and face the particular challenges of this period more effectively. Educating postmenopausal women about normal

menopause is the least that can be done to prepare for the symptoms before they develop. Thus, health officials and specialists need to pay special attention to the problems and issues surrounding menopause. Moreover, postmenopausal women need to learn the required knowledge and skills through mass media, individual means of education, or educational counseling programs. Such training programs help officials take effective steps to promote the health of this group of women, who are the core of every family.

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Conflict of Interests

The authors declare that they have no conflict of interest.

Ethical Issues

The present study was part of a research project registered and approved by the Ethics Committee of Jiroft University of Medical Sciences under the code IR. JMU. REC. 1399.011.

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