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Improving the quality of sexual life in postmenopausal women: a qualitative study

Elnaz Haji Rafiei¹, Hedyeh Riazzi^{2*}, Jamal Shams³ and Hamid Alavi Majd⁴

Abstract

Background Postmenopausal women frequently encounter a range of physical, emotional, and relational challenges. One aspect that is frequently overlooked is the impact of menopause on sexual life. The objective of this study was to elucidate solutions to enhance the quality of sexual life of postmenopausal women.

Methods This qualitative conventional content analysis study was conducted from December 2022 to August 2023 in Qazvin, Iran. Using purposive sampling with maximum variation, data were collected through in-depth interviews with 21 participants, comprising 15 postmenopausal women and 6 experts, for a period of 3 months.

Results From the interviews, a total of 495 initial codes were identified and subsequently organized into 39 subcategories and 11 categories. This rigorous coding process led to the extraction of three themes: "Understanding and managing influencing factors", "Raising awareness and a new perspective on sexual relationships", and "Accepting and managing postmenopausal changes".

Conclusion By identifying the key themes that emerged from this study, we can gain a deeper understanding of the promotion of healthy and positive sexual relationships, as well as the development of strategies for addressing the challenges and complexities that arise in these relationships. The findings can serve as a basis for the implementation of interventions and the planning of initiatives aimed at the promotion of the quality of sexual life of postmenopausal women.

Keywords Menopause, Sexual health, Quality of life, Qualitative study

Introduction

Menopause, a natural biological process, is a significant life event that affects millions of women worldwide. This complex phenomenon involves an intricate interplay of genetic, biological, and psychological factors [1]. The transition to post-menopause is often characterized by a broad range of physical and emotional changes, including hormonal fluctuations, hot flashes, night sweats, sleep disturbances, muscle and joint pain, anxiety, depression, and decreased libido. Furthermore, symptoms such as vulvovaginal atrophy, including vaginal dryness and painful intercourse, can also contribute to declining sexual

*Correspondence:

Hedyeh Riazzi
h.riazi@sbmu.ac.ir

¹Students Research Committee, School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences, Tehran, Iran

²Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences, Tehran, Iran

³Behavioral Sciences Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran

⁴Department of Biostatistics, School of Allied Medical Sciences, Shahid Beheshti University of Medical Sciences, Tehran, Iran



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frequency and satisfaction [2]. Additionally, chronic age-related conditions can exacerbate these issues and ultimately negatively impact sexual well-being [2–3].

Sexual life plays an important role in menopause and has tremendous effects on women's physical health, well-being, self-confidence, and subsequently their quality of life [4]. Postmenopausal women, like other age groups, tend to maintain their sexual life, and the desire to continue sexual activity is considered one of the components of life satisfaction [3]. On the other hand, due to the complex interaction of individual, interpersonal and social factors affecting health, these groups of people are more exposed to sexual disorders than women in the reproductive period [5]. Decreased sensitivity and desire for sexual activities is the complaint of most women who refer to menopause clinics [6]. Sexual problems among all women are estimated at 25–63%, which reaches 68–86.5% in postmenopausal women. Also, it is shown that more than one third of middle-aged and elderly women experience many problems related to sexual issues [7, 8].

Despite the significance of sexual health in postmenopausal women, and considering the greater susceptibility to sexual problems in postmenopausal period, there is a dearth of research exploring the factors that contribute to their sexual life. Previous studies have primarily focused on the physical and biological aspects of menopause, with insufficient focus on psychological and social determinants that influence sexual relationships [9–12]. For instance, studies have focused more on hormonal changes, and common medical conditions [13], menopausal symptoms and health problems such as diabetes, hypertension, cardiac problems and medications [14], pelvic floor disorders [15], endothelial dysfunction, genitourinary syndrome of menopause, insulin resistance and other neuroendocrine changes [16]. Moreover, there are few qualitative studies that captures the complex and nuanced experiences of postmenopausal women [17–19]. In fact, the gap in the literature lies in scarce resources on sexual quality of life that captures the personal experiences of postmenopausal women, particularly in societies where discussing sexual issues considered to be sensitive. As such to address this gap, the present study employed a qualitative approach to explore the experiences and perspectives of postmenopausal women and experts in order to find solutions for improving the quality of sexual life of postmenopausal women. The study aimed to identify the key factors for improving the quality of sexual life, sexual health, and well-being in this population. The findings of this study have important implications for the development of targeted interventions and programs.

Materials & methods

Study design and participants

This qualitative content analysis study was conducted in Qazvin, Iran, with a sample of 15 postmenopausal women and six experts in sexology. The participants were selected based on specific criteria. It was necessary for the participants to have undergone menopause, which was defined as having experienced 12 consecutive months of amenorrhea. The postmenopausal women were required to be Iranian, literate, married, and sexually active, with no recent stressful events (e.g., accidents, serious illness, or death of close relatives) and not having severe marital conflict (based on their reports). Experts in sexology were required to have more than two years of work experience and a history of providing services in the field of sexual health to postmenopausal women. The only exclusion criterion was unwillingness to continue participation in the study.

Data collection

From January to March 2023, a purposive sampling with maximum variation was employed to ensure a diverse representation of participants across a range of demographic variables, including age, education level, socioeconomic status, duration of menopause, occupation, and work experience. Postmenopausal participants were approached through invitations sent to women covered by comprehensive health centers affiliated with Qazvin University of Medical Sciences. The experts were selected from prominent specialists in the field of sexology who were willing to participate in interviews. There were no instances of rejection or withdrawal throughout the study period. All interviews were conducted in a private setting to provide a secure and calming environment for the participants, who were permitted to select the location of their choice. Semi-structured face-to-face interviews were employed to investigate the perceptions of postmenopausal women and experts on the factors influencing the sexual life experiences of menopausal women. Expert advice was sought for the development of the semi-structured interview questions to ensure relevance and clarity. The first author, E.H., employed effective interviewing techniques to establish a comfortable and intimate atmosphere, thereby facilitating the open sharing of experiences by participants. The study inquired about postmenopausal women's perceptions and attitudes toward sexual life in the postmenopausal period, their personal experiences, the barriers and facilitators they encountered, and the personal strategies they employed. The interviews with postmenopausal women commenced with broad questions, such as, "What are your perspectives on sexual relationships in postmenopausal women?" These were subsequently supplemented with probing inquiries, including "How?" "Please clarify,"

and “Please provide a more detailed explanation,” to elicit comprehensive information. As the study progressed, direct questions were also incorporated, such as “In your view, what strategies exist to enhance sexual relationships during menopause?” The interview question guide is shown in Box 1 (supplementary file).

The interviews continued until data saturation was attained, which was defined as the point at which no novel and meaningful insights were derived from the interviews. This was achieved following interviews with 21 participants, with interview durations ranging from 35 to 65 min. All interviews were recorded and transcribed promptly after the completion of each session.

Data analysis

The data collection process employed the Graneheim and Lundman method for conventional content analysis [20]. Subsequently, each interview was subjected to a meticulous analysis and coding procedure following transcription. The transcripts were subjected to meticulous review on multiple occasions in order to gain a profound understanding of the data and to identify initial categories of meaning and codes. An iterative approach was employed in order to derive codes, subcategories, categories, and themes from the transcripts. Subcategories and categories were established by grouping related initial codes, and the underlying significance of the textual data was refined until a consensus was achieved among the researchers. This resulted in a comprehensive representation of the factors influencing the sexual life of postmenopausal women. Qualitative data were reported following the consolidated criteria for reporting qualitative research (COREQ) guidelines [21].

Rigor of the data

The rigor of the data collection process was supported through the implementation of a systematic and meticulous approach. The Graneheim and Lundman method for conventional content analysis was employed to ensure a structured framework for data analysis [20]. Each interview transcript was subjected to multiple readings to cultivate a deep understanding of the data, thereby enhancing the credibility and trustworthiness of the findings. The iterative process of coding and categorization facilitated a rigorous examination of the data, enhancing the reliability of the study results. Furthermore, the collaborative nature of refining subcategories and categories until a consensus was reached among researchers further strengthened the rigor of the data analysis process. Overall, the appropriate methodology and thorough approach to data collection and analysis underscored the robustness and rigor of the study's findings.

Ethical considerations

All participants were informed of the study's purpose and assured of the confidentiality of their data and their voluntary participation. To ensure the comfort and privacy of the participants, all interviews were conducted in a private and comfortable room. Prior to the interview, informed written consent was obtained from each participant, which included permission for the recording of their interview. All voice recordings collected during the study were securely stored to ensure confidentiality and data integrity. The recordings were transferred to an encrypted computer system as soon as possible following each interview. Access to these recordings was restricted to research team members only.

Results

The study comprised 15 postmenopausal women and 6 experts. The postmenopausal women had a mean age of 55.69 years, and an average duration of menopause of 5 years. The mean age of participated experts was 43.83 years. Detailed characteristics of the participants are presented in Tables 1 and 2.

From the interviews, 495 initial codes were extracted, which were then organized into 39 subcategories and 11 categories. Subsequently, 3 themes emerged: “understanding and managing influencing factors,” “raising awareness and a new perspective on sexual relationships,” and “acceptance and management of postmenopausal changes” (Table 3). In the following, the themes and relevant quotes for each are delineated.

Theme 1- Understanding and managing influencing factors

According to the participants, various factors significantly impact sexual relationships. Proper recognition and handling of these factors can contribute to the development of a better and higher-quality of sexual life in postmenopausal women. This theme encompasses categories such as individual and familial problems, barriers and inhibitors, personal and environmental attractiveness, the need for security, and individuals' life experiences and backgrounds. The following quotations provide further insights into these aspects.

Category 1: individual and Familial problems

A number of participants highlighted the influence of individual and familial issues on sexual relationships. In this regard, a woman with five years of postmenopausal experience articulated the following:

“Following my mother's diagnosis with cancer, our family became deeply involved in her care. Subsequent to her passing, my father's illness resurfaced, and we dedicated ourselves to supporting him for a period of four years.

Table 1 Characteristics of the menopausal women

Participant	Age (year)	Education	Occupation	Duration of marriage (year)	Duration of menopause (year)
P1	50	Master's	Employee	21	4
P2	52	Diploma	Housewife	30	3
P3	50	Diploma	Housewife	26	3
P4	56	Bachelor's	Retired	18	5
P5	55	Diploma	Housewife	35	2
P6	61	High school	Housewife	44	3
P7	56	Bachelor's	Retired	36	5
P8	58	Bachelor's	Retired	31	8
P9	54	High school	Housewife	39	7
P10	59	High school	Housewife	40	10
P11	62	Higher education	Employee	41	10
P12	57	High school	Housewife	42	6
P13	57	Higher education	Housewife	23	3
P14	56	Diploma	Housewife	38	7
P15	51	High school	Housewife	34	6

Table 2 Characteristics of the experts

Participant	Age (year)	Gender	Specialized field	Occupation
P16	39	Female	Sexual and reproductive health	Tarbiat Modares University
P17	38	Male	Clinical psychology	Shahid Beheshti University of Medical Sciences
P18	44	Female	Sexual and reproductive health	Shahid Beheshti University of Medical Sciences
P19	53	Male	Sexual medicine	Ibn Sina Research Institute
P20	42	Female	Sexual and reproductive health	Tehran University of Medical Sciences
P21	47	Female	Sexual and reproductive health	Islamic Azad University, Tehran branch

These events created a distance between me and my spouse” (56-year-old, bachelor’s degree, retired).

One of the experts posited that *“one can envision a family experiencing financial hardship to the extent that the burden becomes overwhelming. In such circumstances, the capacity to engage in sexual relationships is constrained, and sexual intimacy is not a priority”* (47-year-old female, sexual and reproductive health, 20 years experiences).

Category 2: barriers and inhibitors

The participants identified several obstacles that affect the enjoyment of sexual life during post-menopause. These include hormonal changes, virtual spaces, marital interactions, the sexual behaviors of one’s spouse, and cultural factors. One expert emphasized the following:

“The manner in which a spouse responds to his wife’s postmenopausal changes is of paramount importance. If he exhibits behaviors or attitudes that suggest he views her sexual life as over, this, in conjunction with his over-all behavioral and psychological state, has a profound impact on the continuation of their relationship and the woman’s sexual pleasure” (53-year-old male, sexual medicine, 22 years experiences).

Another expert elaborated, *“In our culture, there is a perception that postmenopausal women believe their sexual life has come to an end, especially when society*

occasionally reinforces this feeling” (42-year-old female, sexual and reproductive health, 16 years experiences).

Some experts discussed the impact of virtual space and couples’ interactions on sexual relationships. They noted that social networks contribute to creating distance between all couples, even elderly couples. An expert suggested that it may be beneficial to encourage couples to spend more time together when they are in each other’s company (44-year-old female, sexual and reproductive health, 18 years experiences).

Category 3: personal and environmental attractiveness

The physical characteristics and hygiene of couples, as well as their surrounding environment, including the diversity of locations where sexual activity occurs, were identified by participants as having a significant impact on sexual relationships. A woman with three years of postmenopausal experience provided the following observation:

“After the Botox injection, I had an allergic reaction, and my face looked very ugly. My husband was very upset, showed me no kindness, and it had a negative impact on our relationship; his feelings toward me had changed” (61-year-old, high school, housewife).

A woman with seven years of postmenopausal experience stated:

Table 3 Subcategories, main categories, and extracted themes

Subcategory	Category	Theme
<ul style="list-style-type: none"> - Negative role of mental concerns - Impact of family issues and conditions on sexual relationships - Effects of physical and psychological factors - Influence of economic and occupational conditions on sexual relationships - Effects of hormones on sexual relationships - Obstacles to an enjoyable sexual life - Impact of virtual space on sexual relationships - Role of marital interactions in sexual relationships - Effects of spousal sexual behaviors - Influence of culture on sexual relationships - Role of physical characteristics and hygiene of couples in sexual relationships - Influence of environment on sexual relationships - Negative impact of the presence of children on sexual relationships - Influence of physical space on sexual relationships - The necessity of maintaining privacy - Social level and educational background - Impact of past sexual experiences - Impact of illness on sexual relationships - Influence of medications on sexual relationships - Effect of diet on sexual relationships - Importance of couples' awareness of sexual issues - Role of age in sexual relationships - Effects of menopause on sexual desire - Effects of menopause on sexual pleasure - Impact of physical changes resulting from menopause - Incorrect beliefs of couples regarding sexual relationships - Role of couples' attitudes in sexual relationships - lack of power balance in sexual relationships - Elimination of taboos and ineffective sexual beliefs - Resilience in the face of sexual challenges caused by menopause - Changing expectations from sexual relationships - Changes in sexual function following menopause - Importance of addressing and adapting to the symptoms of menopause - Necessity of planning for establishing sexual relationships - Timing of sexual relationships - Importance of counseling and seeking advice from specialists - Provision of educational programs and enhancement strategies for sexual life - Role of informational resources - Importance of sexual health services 	<p>Individual and familial problems</p> <p>Barriers and inhibitors</p> <p>Personal and environmental attractiveness</p> <p>Need for security</p> <p>Individuals' life experiences and background</p> <p>Recognizing diseases and dietary factors</p> <p>Understanding the physiological nature of menopause</p> <p>Changing attitudes</p> <p>Adaptive behaviors</p> <p>Appropriate planning</p> <p>Searching for solutions</p>	<p>Understanding and managing influencing factors</p> <p>Raising awareness and a new perspective on sexual relationships</p> <p>Accepting and managing post-menopausal changes</p>

“Adherence to hygiene and bathing routines is essential for maintaining a positive relationship and provides a heightened sense of pleasure. For example, when my spouse is clean and has taken a shower, I experience a significantly improved emotional state compared to other occasions” (54-year-old, high school, housewife).

A woman with three years of postmenopausal experience expressed her views on diversity and its impact on sexual relationships:

"I appreciate diversity in my preferences. At any given time, I may desire to wear a specific nightgown, engage in sexual activity in the bathroom, or have sex in the bathtub. I prefer our relationship to be characterized by a proclivity for fantasy, and I am not inclined to engage in sexual activity in the conventional locations of bed or on the floor" (61-year-old, high school, housewife).

Category 4: need for security

A sense of security is an indispensable element that profoundly impacts sexual relationships. The proximity of the children's room to the parents' bedroom, the limited space in the house, and the presence of children at home are among the factors that influence couples' sense of security. A woman with three years of post-menopausal experience stated:

"Our former residence was my mother-in-law's house. Our room was not equipped with a locking mechanism, the bathroom was not located within our bedroom, and our bedroom was situated in close proximity to the hallway" (50-year-old, diploma, housewife).

A participant with two years of postmenopausal experience stated:

“The limited spatial capacity of our domicile, comprising a single bedroom, has a detrimental effect on our

capacity to engage in sexual intercourse. The restricted spatial parameters of our residence have had a markedly deleterious impact on our relationship" (55-year-old, diploma, housewife).

In this regard, one expert stated:

"The presence of other family members or the lack of a private space for couples can impede the ability to maintain a satisfying relationship. The lack of privacy can lead to feelings of stress and anxiety, which can, in turn, affect the quality of the relationship. This is particularly relevant when considering the example of a family with four unemployed sons" (47-year-old female, sexual and reproductive health, 20 years experiences).

Category 5: individuals' life experiences and background

The backgrounds of individuals, including their social status, childhood sexual education, and past sexual experiences, were found to significantly influence in postmenopausal sexual relationships. One participant with six years of postmenopausal experience expressed:

"A review of past sexual experiences has been demonstrated to have a beneficial effect on the current relationship" (57-year-old, high school, housewife).

In this regard, one expert stated:

"One potential solution to enhance the sexual well-being of postmenopausal women is to encourage couples to recall and reflect on five positive experiences from the initial five-year period of their sexual life. These experiences can then be shared with their partner and reenacted within the subsequent week" (53-year-old male, sexual medicine, 22 years experiences).

Another topic that was discussed in depth was the background of people's sexual education. In this context, one of the experts offered the following insight:

"One of the factors affecting the sexual lives of couples is the manner in which individuals are educated about sexuality during childhood. For instance, if boys are adequately instructed from an early age and learn how to treat women with respect, they will likely treat their wives in a similar manner, which may also influence their sexual relationships" (42-year-old female, sexual and reproductive health, 16 years experiences).

Theme 2- Raising awareness and a new perspective on sexual relationships

Couples' knowledge and attitudes toward sexual relationships in the postmenopausal period are of paramount importance. The categories of this theme include recognizing diseases and dietary factors that affect sexual relationships, understanding the physiological nature of menopause, and changing of couples' attitudes toward sexual relationships in the postmenopausal period.

Category 6: recognizing diseases and dietary factors

It is important to note that diseases, medications, and diet can affect sexual relationships. Therefore, it is essential to consider these factors when examining sexual health in postmenopausal women. A woman with a six-year history of post-menopause acknowledged the influence of dietary substances on her sexual health.

"It is my contention that a number of foods have the potential to impact one's sexual desire. Eggs, for instance, represent a food group that may elicit such an effect. This hypothesis is consistent with the traditional wisdom espoused by elders, who advised against consuming foods with a "cold temperament" (57-year-old, high school, housewife).

One expert on the impact of disease on sexual relationships said:

"It is not uncommon for spouses suffering from chronic diseases or the effects of aging to experience erectile disorders. These disorders can have a significant impact on a spouse's sexual desire and activity. It is essential to educate couples that erection is not a prerequisite for sexual intimacy and that sexual satisfaction can be achieved without an erection" (38-year-old male, psychologist, 14 years experiences).

Category 7: Understanding the physiological nature of menopause

It appears that an understanding of the physiological aspects of menopause, including the influence of age on sexual relationships, the impact of menopause on sexual desire, and the effects of physical changes associated with menopause, may contribute to the quality of sexual relationships. One woman who had experienced menopause for two years stated:

"The age of one's partner should be taken into account in sexual relationships. Currently, there is a preference for mutual understanding and respect in these relationships, which extends beyond the purely sensual aspects of sexual intercourse" (55-year-old, diploma, housewife).

The results demonstrate the influence of menopause on an individual's sexual desire and pleasure. One woman with eight years of postmenopausal experience stated:

"As women age and reach menopause, their sexual feelings tend to diminish" (58-year-old, bachelor's degree, retired).

Regarding the acceptance of menopausal changes, one expert stated:

"It is possible to educate women to regard themselves in the mirror and accept their own identity, as well as the reality that the aging process is universal, including their spouse" (39-year-old female, sexual and reproductive health, 12 years experiences).

Category 8: changing attitudes

The results of the study indicate that inaccurate and dysfunctional sexual beliefs, an imbalance of power in sexual relationships, and the presence of taboos are influential factors that affect sexual attitudes after menopause. It seems that adjusting these attitudes can lead to an improvement in sexual relationships. In this regard, a woman with four years of postmenopausal experience expressed the opinion that it is beneficial for women not to stigmatize sexual relationships during this period, as this makes sexual relationships more enjoyable (50-year-old, master's degree, employee).

One woman with two years of postmenopausal experience stated:

"I think sexual matters are exclusive to a specific period (reproductive age) that has concluded. to a certain period that has ended. For me, it's like I've done my duty and it's all over" (55-year-old, diploma, housewife).

One expert acknowledged:

"It is possible to consider measures that could facilitate a change in the individual's perspective, with the aim of ensuring that the onset of menopause does not coincide with the end of their sexual relationships" (44-year-old female, sexual and reproductive health, 18 years experiences).

Theme 3- accepting and managing postmenopausal changes

The participants demonstrated an awareness of the need to adapt their behaviors, engage in appropriate planning, and pursue solutions that align with the changes associated with menopause in order to enhance their sexual lives.

Category 9: adaptive behaviors

Adapting to the changes that occur during the postmenopausal period appears to be an effective approach to improving sexual well-being. One participant posited that the performance of adaptive behaviors is contingent upon the possession of requisite skills, including sexual proficiency, patience, and focus. These abilities, in particular the latter two, are crucial for maintaining positive relationships during menopause (38-year-old male, psychologist, 14 years experiences). In this regard, one of the experts acknowledged that the ability of couples to accept the emotional experiences that occur during menopause, such as depression, anger, and vulnerability, will positively influence their sex life during this period (42-year-old female, sexual and reproductive health, 16 years experiences).

Category 10: appropriate planning

In the pursuit of enhancing sexual life, appropriate planning, including prior coordination and scheduling in

sexual relationships, has been considered. A woman with a five-year history of postmenopausal status expressed the following:

"It would be preferable for our sexual relations to be arranged in advance with my husband so that I can prepare myself adequately before intercourse. This may entail taking a shower, ensuring that there are no guests present, or avoiding fatigue, with a view to enhancing the quality of our relationship" (56-year-old, bachelor's degree, retired).

One of the experts acknowledged:

"In order to maintain personal space and healthy relationships, it is essential to plan ahead. This may entail taking breaks, removing children or grandchildren from the situation, or finding an alternative location for sexual relationships" (47-year-old female, sexual and reproductive health, 20 years experiences).

Category 11: searching for solutions

In light of the findings, it appears that pursuing solutions, such as the significance of counseling with specialists, attending educational programs, and seeking enhanced solutions to improve sexual well-being, accessing informational resources, and utilizing sexual health services, are efficacious approaches to improving the sexual lives of postmenopausal women. One participant articulated the following:

"Menopause is a phase that shares certain characteristics with other major life events, such as marriage, childbirth, and the menstrual cycle. As with these other transitions, menopause requires a certain level of education and counseling to navigate successfully" (62-year-old, higher education, housewife).

One expert offered a solution for improving the sexual life of postmenopausal women:

"One potential avenue for enhancing the quality of sexual experience is to employ creativity in addressing the issue of monotony in sexual behavior. This may entail the introduction of novel skills and behaviors that couples may discover or anticipate implementing" (53-year-old male, sexual medicine, 22 years experiences).

In this regard, another expert offered the following perspective:

"A comprehensive review of primary health care services is imperative, with particular emphasis on the integration of sexual health care throughout the lifespan, particularly in the postmenopausal period. This integration should extend beyond a mere few questions and encompass ongoing screening and comprehensive educational packages. Providers must present these services in a variety of formats, including verbal communication and the provision of informational brochures" (42-year-old female, sexual and reproductive health, 16 years experiences).

Discussion

The results of this study revealed three main themes: "understanding and managing influencing factors," "raising awareness and a new perspective on sexual relationships," and "acceptance and management of postmenopausal changes." These themes shed light on the solutions that improve the quality of sexual life of postmenopausal women.

The study underscored the multifaceted nature of sexual quality of life in postmenopausal women, revealing a complex interplay of individual, familial, environmental, psychosocial, relational, and cultural factors. The extant literature corroborates these findings. Physiological changes, including a decline in hormones and associated symptoms, have been shown to negatively impact on sexual quality of life [22, 23]. Similarly, psychological issues, such as anxiety and body image concerns, have been identified as contributing to diminished sexual desire [24]. Furthermore, relational dynamics, including communication and emotional intimacy with partners, have been shown to play a significant role in sexual functioning [22, 25]. Additionally, cultural stigmas surrounding postmenopausal sexuality compound these challenges [26]. By recognizing and addressing these influential elements, it becomes evident that a proactive approach to managing the diverse needs of postmenopausal women could be provided. Women need to be strong enough to tackle all barriers of sexual relationship during postmenopausal and even encourage their partners for happy sexual life.

The findings indicate that increased awareness of these factors enables women to more effectively navigate their sexual lives during the postmenopausal period. This understanding encourages the implementation of proactive measures, such as seeking approaches for eliminating vaginal dryness and painful intercourse [27], or obtaining medical advice regarding hormonal treatments if necessary [28], or engaging in open conversations with partners about sexual needs and expectations [25]. Additionally, couples may benefit from counseling sessions aimed at improving their relationship [29]. By cultivating a supportive environment, couples can more effectively adapt to evolving sexual dynamics, ultimately enhancing the quality of their intimate relationships [25]. It is crucial to comprehend these elements in order to enhance the overall quality of sexual life for women in this specific life stage. Thus, a comprehensive grasp of these elements can serve as a foundational instrument in facilitating the development of strategies and interventions aimed at managing them. This underscores the necessity for comprehensive and personalized strategies for sexual health management in this population, which ultimately enhances their overall quality of sexual life. The critical role of information and education in reshaping attitudes

toward sexuality in the postmenopausal period is perceived from the second theme, a finding that aligns with previous researches [30–33]. It has been demonstrated that an increase in sexual knowledge and awareness can positively influence several key aspects of couples' communication and interaction. When couples possess greater sexual awareness, they are better equipped to modify their sexual relationship methods, resolve conflicts constructively, and improve relational dynamics during periods of marital stress [34]. Lack of knowledge and awareness among women results in a loss of sexual confidence and the assumption that the onset of menopause marks the end of their sexual lives [35]. Increased self-confidence and a positive perception of health following educational interventions have been documented in several studies [36, 37]. Furthermore, studies have indicated that postmenopausal women often experience shifts in self-image, including feelings of diminished femininity, disability, hopelessness, depression, and anxiety, all of which can negatively impact sexual functioning [38, 39]. A negative perception of health status has similarly been identified as a risk factor for sexual dysfunction [40], and a strong association between sexual awareness and sexual dysfunction has been established [41]. The participants in the present study indicated that social norms and misconceptions frequently contribute to feelings of shame or inadequacy regarding their sexual lives. Promoting awareness about the natural changes that occur during postmenopausal period may help women cultivate a healthier perspective on their sexual identities. It is also possible to influence social attitudes and cultural beliefs that affect the sexual lives of postmenopausal women through education and awareness, as it is imperative to adopt a novel perspective with a new lens and from a different point of view. Other studies also support this point [29, 31, 34]. Additionally, encouraging open discussions about sexual health can empower women to explore new approaches to intimacy, fostering creativity and adaptability in their sexual relationships [42]. This shift in mindset is crucial for dismantling the stigma surrounding menopause and enhancing overall sexual well-being. However, sexual relationship during menopause could be an era of new experiences in sexual life. Women need to be empowered to understand such a condition accurately and thoroughly.

The final theme, focuses on the importance of embracing the physiological and psychological alterations that accompany menopause. Many participants noted that acceptance is a crucial step in improving the quality of sexual life. By acknowledging the changes in their bodies and sexual functioning, women can develop strategies to manage these shifts, such as exploring new forms of intimacy or seeking support through counseling or peer groups [29]. The emphasis on acceptance allows women

to redefine their sexual identities beyond traditional norms, fostering resilience and adaptability in their intimate lives [43]. Overall, this theme illustrates that acceptance not only alleviates anxiety surrounding menopause but also opens pathways for renewed sexual exploration and fulfillment. Through realistic and optimistic expectations, sexual satisfaction and intimacy are maintained and the couple's romantic relationship is nurtured and strengthened [44]. In this regard, a study conducted in East Asia showed that 74% of menopausal women considered menopause a natural event and readily accepted it [45]. Murphy and colleagues demonstrated that menopause is a transformative phase in women's lives, as evidenced by their experiences. They viewed it as "a time to manage menopausal symptoms" and "a time to accept and celebrate aging," consistent with the findings of our study [46]. In the North Indian culture, women embrace menopause, viewing it as a natural phenomenon that leads to increased respect, freedom, and broader social interactions. These women describe menopause as a time of appreciation, value, and deeper family and social roles [47]. The way in which women perceive the menopause phenomenon has a significant impact on how they adapt to their symptoms and ultimately seek medical, psychological, and behavioral advice to manage them [48]. For this reason, the first line of health care during menopause is to create a positive attitude, accept the changes caused by menopause, and try to change traditional and superstitious beliefs in order to improve the quality of life of this group of women [49]. According to researchers, all women can maintain or improve their quality of sexual life during postmenopausal period through awareness, understanding of the challenges of menopause, and education on coping strategies [50, 51]. Coping strategies could help women to accept their current conditions and thus be satisfied as time passes.

Strengths and limitations

This study addresses the often-overlooked topic of postmenopausal women's sexual lives and provides valuable insights into an area of women's health that is not often explored, especially in conservative contexts such as Iran. By conducting in-depth interviews with both postmenopausal women and experts, the study captures diverse perspectives on the challenges and solutions in this area. In addition, qualitative content analysis provided a rich, detailed understanding of participants' experiences and perceptions. This approach is well suited to exploring sensitive and complex issues such as sexual health, which may not be fully captured by quantitative methods. Conducting this study in Iran provides unique cultural insights that highlight the specific challenges faced by postmenopausal women in this context. This may contribute to tailored interventions and strategies that are

culturally relevant and sensitive. We faced some limitations. As the study was conducted in a specific cultural and geographical context (Qazvin, Iran), the findings may not be generalizable to postmenopausal women in other regions or cultural backgrounds, where experiences and challenges may be different. Therefore, subsequent studies should include a more diverse sample (e.g., from different socioeconomic backgrounds or urban versus rural areas). Given the sensitivity of the topic, participants may have been reluctant to fully disclose their experiences regarding their sexual lives, especially in a conservative cultural setting. This could lead to response bias, limiting the comprehensiveness of the data collected.

Implications of the findings

The findings of this study have significant implications for both healthcare providers and policymakers in addressing the sexual health needs of postmenopausal women. By identifying key themes, interventions can be tailored to enhance the quality of sexual life in this population. These insights underscore the necessity of comprehensive education and counseling that fosters a novel perspective on sexual relationships, empowering women to navigate postmenopausal changes with enhanced confidence. Furthermore, the study emphasizes the imperative for healthcare systems to integrate sexual health into routine care for postmenopausal women, thereby promoting holistic well-being and improving their overall quality of life.

Conclusion

The purpose of this study was to explore factors that enhance the quality of sexual life for postmenopausal women. Three key themes emerged from the data: "understanding and managing influencing factors," "raising awareness and a new perspective on sexual relationships," and "accepting and managing postmenopausal changes". These themes highlight the importance of considering the multiple factors that shape sexual relationships in postmenopausal women and promote a shift toward a more nuanced understanding of these complex issues. The findings can inform the implementation of interventions and planning aimed at promoting the quality of sexual life of postmenopausal women. Specifically, policymakers, health care providers, and practitioners can use these findings to develop targeted programs that address the unique needs and concerns of this population and promote healthier and more fulfilling sexual relationships.

Supplementary Information

The online version contains supplementary material available at <https://doi.org/10.1186/s12889-025-22722-3>.

Supplementary Material 1

Acknowledgements

The authors are profoundly grateful to Shahid Beheshti University of Medical Sciences and all individuals who participated in the research.

Author contributions

E.H.R. collected the data. H.R. designed the study, supervised it, and provided the final draft. J.S. was involved in data interpretation. H.A.M. participated in data interpretation. All authors reviewed the manuscript.

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

Data availability

All data generated during this study are included in this published article.

Declarations**Ethics approval and consent to participate**

The study was conducted in accordance with Declaration of Helsinki. The ethics committee of Shahid Beheshti University of Medical Sciences approved the study (IR.SBMU.PHARMACY.REC.1402.266). All participants signed written informed consent form after explaining the objectives of the study and ensuring the confidentiality of data for them.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

Received: 16 November 2024 / Accepted: 9 April 2025

Published online: 22 April 2025

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