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# A qualitative study on the unmet sexual needs of older women

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Sexual health in older women is one of the significant aspects of health, and planning to improve sexual health requires identifying these women's needs. This study was conducted to explain older women's unmet sexual needs. The present study was conducted qualitatively using the inductive content analysis method in 2023. The data collection tools were semi-structured interviews and field notes. A total of 29 individuals (seven sexual health care providers and 22 older women) were recruited as participants using the purposive method and the strategy of selecting participants with maximum diversity. Data were analyzed using the Graneheim and Lundman approach. Data analysis led to the emergence of 110 primary codes, 24 sub-subcategories, and eight subcategories (promoting sexual requests and desires, maintaining privacy in sexual relations, valuing sexuality, adopting strategies to reduce life's adversities, improving sexual involvement, the ability to resolve the conflicts of maternal/ spousal roles, the development of preventive services related to sexuality issues in the health sector, the development of therapeutic services related to sexuality issues in the treatment sector), and three main categories (respect for sexuality, empowerment for sexuality, and the development of services related to sexual health). Based on older women's experiences, their unmet needs were related to empowering them to resolve sexual conflicts, strengthening sexuality dignity, and improving the processes and structures of the health system. In this regard, it is recommended that health and social policymakers design effective interventions to improve older women's sexual health.

Keywords Need assessment, Sexual health, Elderly, Woman, Qualitative research

According to the World Health Organization, old age is the transition to the age of 60. The aging process is characterized by a gradual decline in the functioning of all body systems. However, the belief that aging is always associated with profound physical and intellectual defects is not supported since the majority of older people maintain their cognitive and physical abilities to a significant extent<sup>1</sup>. Population aging is a global phenomenon, with nearly all countries expected to see a significant rise in the proportion of individuals aged 60 and older between 2017 and 2050. In 2017, older adults accounted for approximately 13% of the global population, projected to rise to 28% by 2050<sup>2</sup>. Additionally, it is estimated that by 2050, 17% of the world's population will be aged 85 and older<sup>3</sup>. Iran's elderly population is expected to reach 30% by 2050<sup>4</sup>.

Currently, the most significant demographic, medical, and social problem worldwide is the aging of the population. In a situation where the older will become a significant population, it is of particular importance to consider all aspects of health and plan prudently to meet their health needs<sup>5</sup>. One crucial issue in health care related to the older society is sexual health. This dimension of health encompasses a situation where couples benefit from a healthy, appropriate, and sexual relationship; accordingly, their physical, mental, and behavioral status is satisfactory, indicating harmony, intimacy, and love in married life<sup>6</sup>.

According to the results of Samadi et al.'s study (2018), although the sexual desires and activities of the older decreased compared to the young, the interest in sexual relations in one-fourth of 65-year-old or older women was moderate or high, and more than one-third of women in this age group reported being sexually active in the past three months. Moreover, a high percentage of women in society remain interested in sexual affairs as they age; some of them, particularly those in ill health or women whose husbands have erectile dysfunction, may fulfill their sexual needs through behaviors such as touching, kissing, and hugging. Therefore, respecting older people's sexual rights and taking into account all dimensions of sexuality are of particular importance<sup>7</sup>.

Sexuality is a socially mediated and multidimensional phenomenon that includes biological, psychological, and social impacts and is reflected in specific individual behaviors, imaginations, desires, beliefs, attitudes,

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values, roles, and sexual relationships, such as sexual intercourse, kissing, touching, and physical or emotional intimacy<sup>8–10</sup>. In this regard, negative social and cultural attitudes and gender stereotypes are considered significant impediments to achieving optimal sexual health. Negative social perspectives as obstacles to achieving a desirable level of sexual health in older people have been confirmed by some studies<sup>11–13</sup>. This group of individuals tends to express their sexual desires when they have positive beliefs and values about sexuality; therefore, social conflicts in different societies appear to have a significant impact on expressing sexual needs and desires, thus leaving the needs unsatisfied<sup>14</sup>.

A study by Thames (2017) conducted on African women similarly showed that older women felt restricted in discussing their sexual needs and behaviors with physicians, partners, and friends due to social conflicts<sup>15</sup>. An Iranian study also found that older women were limited in expressing their sexual needs to health workers. These researchers state that health workers often view the sexual aspects of elderly care as outside the scope of their duties, and the sexual health of women after their reproductive years is often considered unimportant <sup>16</sup>.

Sexual health is considered a crucial indicator of older people's quality of life; however, most sexual health needs of older people remain unmet<sup>13</sup>. Given the increasing elderly population, health and social policymakers must enhance the quality of life for older women by addressing their sexual health<sup>14,15</sup>. As noted, sexual health is a vital aspect of public health, and disruptions in this area can prevent older women from experiencing a healthy aging process. However, studies indicate that no research has been conducted to specifically identify the older women' sexual health needs. Understanding these needs is crucial, as it enables a comprehensive analysis of the current situation and facilitates developing programs and policies to improve their sexual health. This study was conducted to explain older women's unmet sexual needs.

#### Methods

This study was conducted qualitatively with an inductive content analysis approach between November 2023 and January 2024, with the approval of the Ethical Committee of Isfahan University of Medical Sciences (code: IR.MUI.NUREMA.REC.1401.157).

# Settings and participants

The participants in this study included 22 older women and seven sexual health care providers (Tables 1, 2). According to the purpose of the present study, which seeks to obtain first-hand data on older women's sexual health needs, the recruitment of the both groups of participants was initiated using purposive sampling and continued through the strategy of maximum diversity. In order to achieve maximum diversity, the demographic characteristics considered for older women, according to the research team, were age, education level, occupation, duration of marriage, number of marriages, and number of children. Demographic characteristics of sexual health service providers for maximum diversity included work experience, experience in providing sexual health services, education level, and occupation. These characteristics were also considered by the research team.

The researcher obtained a letter of introduction from the university's research vice-chancellor (where the code of ethics was approved) to present to health center officials. Permission to interview older women was granted by health center officials. Additionally, older health service providers were interviewed separately in

| Variable                     | Number (percent) |  |
|------------------------------|------------------|--|
| Age (years)                  |                  |  |
| 60-65 years                  | 7 (31.82%)       |  |
| 66-70 years                  | 6 (27.27%)       |  |
| 71–75                        | 9 (40.91%)       |  |
| Level of education           |                  |  |
| High school                  | 13 (59.09%)      |  |
| School diploma               | 7 (31.81%)       |  |
| Bachelor's degree and higher | 2 (9.09%)        |  |
| Profession                   |                  |  |
| Employed                     | 6 (27.27%)       |  |
| Housewife                    | 16 (72.73%)      |  |
| Duration of marriage         |                  |  |
| 20-30 years                  | 1 (4.54%)        |  |
| More than 30 years           | 21 (95.45%)      |  |
| Number of children           |                  |  |
| One                          | 1 (4.54%)        |  |
| Two                          | 2 (9.09%)        |  |
| More than two                | 19 (86.36%)      |  |
| Number of marriages          |                  |  |
| One                          | 22 (100%)        |  |
| Total                        | 22 (100%)        |  |

Table 1. Individual characteristics of older women participating in the study.

| Variable   | Number (percent) |
|--|------------------|
| Work experience (years)                                      |                  |
| 10-15 years  | 1 (14.28%)       |
| Over 15 years  | 6 (85.72%)       |
| Work experience in the field of health care services (years) | providing sexual |
| 5-10 years   | 4 (57.14%)       |
| 11-15 years  | 2 (28.57%)       |
| Over 15 years  | 1 (14.28%)       |
| Level of education   |                  |
| Ph.D   | 3 (42.85%)       |
| Medical specialist   | 3 (42.85%)       |
| Bachelor's degree  | 1 (14.28%)       |
| Profession   |                  |
| Psychologist   | 1 (14.28%)       |
| Urologist  | 1 (14.28%)       |
| Gynecologist   | 2 (28.59%)       |
| Reproductive health specialist                               | 2 (28.59%)       |
| Midwife  | 1 (14.28%)       |
| Total  | 7 (100%)         |

**Table 2**. Individual characteristics of sexual health care providers.

coordination with the researchers. After coordination and enquiring about their opinions, participating older women were interviewed near their place of residence or the places suggested by them. Interviews with sexual health care providers were conducted in medical teaching centers, health centers, sex clinics, counseling centers, or their offices. The interviews were initiated by explaining confidentiality approaches and the possibility of voluntary withdrawal from the study, as well as obtaining informed consent. The inclusion criteria for older women included being married, being willing to participate in the study, delivering informed consent to provide information, Iranian nationality, ability to communicate, age 60 and older (based on the definition of the onset of old age in the country according to The National Document for the Elderly)<sup>17</sup>, physical and mental ability to participate in the interview, no known mental disorders, and no known physical diseases or the diseases that affect sexual activities. The sexual health care providers included all reproductive health specialists, counselors, and psychologists in the sexual counseling field who were willing to participate in the interview.

# Data collection

The data collection tools included semi-structured, in-depth, individual interviews and field notes. The interviewer is one of the researchers. She is a female, Ph.D. student specializing in reproductive health. Interviews with older women began with general questions: "Express your experience of a sexual relationship in old age," "What do you need to have a desirable sexual relationship with your spouse?" and "Which of your needs is not met." Interviews with other participants (sexual health care providers) initiated with the general question, "What do you think are the unmet sexual needs of women in old age? Please explain completely. In this study, 29 interviews (each lasting for 45 to 90 min) were conducted in locations preferred by the participants.

The interview began with the aforementioned questions, and the participants' open-ended and interpretive responses guided the process. Additionally, to clarify and deepen the participants' explanations, the researcher used probing questions ("What do you mean?" "Please provide an example or explain further"). Interviews continued until data saturation was reached. Data saturation refers to the point at which no new insights are gained as the interviews progress<sup>18,19</sup>. Saturation was achieved after interviewing the 22nd participant in the older women group and the 7th participant in the sexual health care providers group.

#### Data analysis

In order to analyze the data, conventional qualitative content analysis based on the Graneheim and Lundman approach was used<sup>20</sup>. Data analysis was performed manually. The researcher transcribed the data while conducting and recording each interview with an mp4 device. Afterward, the interviews were reviewed repeatedly to get a complete understanding of them, and sentences and expressions were coded. After the formation of the codes by inductive method, the similar codes were merged, and those with similar meanings were placed in one category, which formed the subcategories. Following that, by comparing the subcategories, the categories conceptually related to each other were placed in a main category.

# Rigor and trustworthiness

In order to ensure the accuracy and reliability of the data, four factors, including credibility, dependability, confirmability, and transferability, were used<sup>21</sup>. In order to obtain credibility, the member check method was used to confirm the accuracy of the data and codes. Moreover, different methods, such as prolonged engagement with the subject and interviews at different times and places, were also considered. In order to establish dependability,

| Sub-subcategory   | Subcategory   | Main category   |
|---|---|---|
| The possibility of older women's access to sexual health care services in health center | Development of preventive services related to sexuality issues in the health sector     | Development<br>of services<br>related to<br>sexual health |
| Considering experts in consulting issues  |   |   |
| Establishment of comprehensive sex-specialized clinics                                  | Development of therapeutic services related to sexuality issues in the treatment sector |   |
| Considering qualified human resources in therapeutic issues                             |   |   |
| Promotion of verbal sexual desires  | Duranting convert measures and decine   | Respect for sexuality                                     |
| Promoting non-verbal sexual behaviors   | Promoting sexual requests and desires   |   |
| Providing safe privacy  | Maintaining privacy in cayual relations   |   |
| Keeping sexual secrets  | Maintaining privacy in sexual relations   |   |
| Elimination of coercion to provide sex  |   |   |
| Elimination of violence during sexual activity  | Valuing sexuality   |   |
| Elimination of shame from sexual interactions with the spouse                           | valuing sexuality   |   |
| Free expression of sexual desires during sexual activities                              |   |   |
| Avoiding focusing on past and present crises and distresses                             | Adopting strategies to reduce life's adversities  | Empowerment<br>for sexuality                              |
| Development of strategies to receive support and help                                   |   |   |
| Venting emotions and worries to achieve peace   |   |   |
| Determination of sexual preferences   | Improving sexual involvement  |   |
| Agreement with the sexual pattern compatible with the conditions                        |   |   |
| Dynamic interaction with the spouse to explore sexual interests                         |   |   |
| Accompanying during the treatment process   |   |   |
| Sexual empathy  |   |   |
| Separation of maternal/spousal duties   |   |   |
| Understanding the needs and desires of the sexual partner                               | The ability to resolve the conflicts of maternal/spousal roles                          |   |
| Attention to female sexual attractiveness in dealing with sexuality issues              |   |   |
| Attention to desires and preferences at the time of sexual action and reaction          |   |   |

Table 3. Results of data analysis.

primary codes and examples of the category extraction, content, and items from the interview transcriptions for each category were provided to the external observer. In order to obtain confirmability, the transcriptions of several interviews and extracted codes and categories were provided to the researcher's colleagues and four outsider sex therapy specialists, and they were requested to check the accuracy of the data coding process. Furthermore, to increase the transferability, the study's findings were presented to four older women outside of the study with characteristics similar to the participants to judge the similarity of the study results to their experiences.

# Ethics approval and consent to participate

This study was approved by the ethics committee of Isfahan University of Medical Sciences (code: IR.MUI. NUREMA.REC.1401.157). All ethical considerations were taken into account based on the Declaration of Helsinki. Obtaining informed consent, maintaining anonymity and confidentiality of the data, and the right to voluntarily withdraw from the study were observed.

# Results

Of 38 invited older women, 22 participated in the study, and seven out of 10 sexual health care providers participated in the study for interviews. The participants' background characteristics are presented in Tables 1 and 2. Data analysis led to the emergence of 110 primary codes, 24 sub-subcategories, and eight subcategories: promoting sexual requests and desires, maintaining privacy in sexual relations, valuing sexuality, adopting strategies to reduce life's adversities, improving sexual involvement, the ability to resolve the conflicts of maternal/spousal roles, the development of preventive services related to sexuality issues in the health sector, the development of therapeutic services related to sexuality issues in the treatment sector, and three main categories: respect for sexuality, empowerment for sexuality, and the development of services related to sexual health (Table 3).

## Development of services related to sexual health

Improving women's sexual health requires the development of related services, which need to be considered in both the health and treatment sectors. The main category, "Development of services related to sexual health," included two subcategories: "Preventive and caring services related to sexuality issues in the health sector" and "Preventive and caring services related to sexuality issues in the treatment sector."

Most women participating in this study expressed that the existing services related to sexuality issues did not meet their sexual needs, and they needed to receive developed services that could satisfy their needs. Their most significant needs included the ability to access sexual health services and veteran experts to prevent sexual disorders. In this regard, participant 1 (a sexual health care provider: a female gynecologist) said: "Most sexual

health care providers in health centers don't provide the necessary training regarding menopause changes on sexual performance well, and sometimes this is due to their poor knowledge. They should be able to explain to women what problems they will face during menopause and what they should do to maintain their sexual health." Moreover, the participants stated that therapeutic sexual health services were not well provided. In this regard, the establishment of comprehensive specialized sexual health clinics and the consideration of qualified human resources for the treatment of sexual dysfunctions were brought up as the most critical strategies for the development of sexual health-related services. Participant 2 (a 70-year-old older woman) said: "In medical centers, there are doctors and midwives to treat sexual problems, but they can't treat us well. We need to have specialists who know how to do their job." Besides, participant 7 (a sexual health care provider: a female gynecologist) stated: "We must have a specialized center with specialist doctors as well as reproductive health specialists to provide sexual health care services to older women properly."

# Respect for sexuality

According to the participants, older women needed respect for their sexuality; therefore, sexual behaviors would be promoted, and their privacy and security concerning sexual issues would be respected. The main category, "Respect for sexuality," included three sub-subcategories: "promoting sexual requests and desires," "maintaining privacy in sexual relations," and "valuing sexuality."

In order to achieve optimal sexual health, older women needed to have a variety of verbal sexual desires and non-verbal sexual behaviors in their sexual relations. In this regard, participant 3 (a 65-year-old older woman) stated: "Well, now we may not be able to have sex as well as when we were young, but I like it most of the time our relationship ends up in a series of conversations and caresses, or sometimes we can only have kissing and touching." Participant 4 (a 66-year-old older woman) said: "It's believed that sexual activities are only for young people, but older people need it even more than the young. They may not be able to perform it perfectly, but sometimes, with a caress from their spouse, they can reach orgasm."

Desirable sexual relationships in older women, based on the participants' statements, required maintaining privacy. They believed that due to the negative attitudes towards the sexual rights of older people, providing a quiet, safe environment and withholding their sexual secrets in all dimensions were among the most important requirements of respecting sexuality. Participant 2 (a 70-year-old older woman) stated: "To have a sexual relationship at this age, we need to have a quiet and safe place, which is very rare. Unfortunately, our children consider older people's relationships bad and don't have a good opinion."

Participant 6 (a 67-year-old older woman) said: "For example, my husband wants to give me a massage. I have to close the door. I tell my children that their father wants to massage my back, so I'm naked; I'm afraid they may see me."

Valuing women's sexuality by eliminating coercion to have sex, eliminating any violence during sexual intercourse, eliminating shame during sexual interactions with the spouse, and freely expressing sexual desires were other issues perceived by the participants. In this regard, participant 7 (a 72-year-old older woman) stated: "I like to have sex of my own free will. I don't feel like having a relationship most of the time. Well, at this age, I really want to be free. Sometimes you can't; you shouldn't accept because of obligation." Participant 14 (a 74-year-old older woman) said in this regard: "About sex, my husband believes that whenever he feels like it, I should want it too, but I say that it is not compulsory. Sometimes, I don't want to accompany him in that relationship. Sometimes, I do it just because I don't want him to complain or sulk and increase my problems, so I accept it forcefully."

In this study, it was also found that older women demanded shame-free interactions with their husbands and were willing to have sexual conversations; however, they refrained from them due to cultural and social taboos. Participant 12 (a 73-year-old older woman) said: "I like it so much when I sleep next to my husband and have sex with him, to tell him about my feelings easily, but I don't feel comfortable, and I believe it's embarrassing. I always think he should talk about these things."

## **Empowerment for sexuality**

The participants of this study, both older women and sexual health care providers, were unanimous in their belief that older women needed to be empowered to manage their sexuality in order to ensure their sexual health and subsequently manage their marriage to eliminate related problems and existing conflicts. The main category, "Empowerment for sexuality," included three subcategories: "Adopting strategies to reduce life's adversities," "Improving sexual involvement," and "The ability to resolve the conflicts of maternal/spousal roles."

Achieving optimal sexual health in older women requires avoiding an emphasis on crises and distress of the past and present since crises and difficulties can act as significant obstacles in establishing regular sexual relations in older women. In this regard, Participant 10 (a 69-year-old older woman) stated: "There are many problems in life, and our minds are hectic, so we don't try to have a relationship. Every day, we face more problems."

In this study, older women declared that in times of crisis and distress, they should formulate appropriate solutions and try to use the support and help of others optimally. Participant 3 (a 65-year-old older woman) said: "Due to the problems we have, our minds are always occupied, and I really need to know how to calm my mind because I can't have good sex at all." Along with older women, sexual health care providers believed that problemsolving approaches were necessary for old age. In this regard, participant 6 (a sexual health care provider: a midwife) stated: "In my opinion, older women should be taught how to cope with their aging bodies and lack of abilities and have safe sex in the new conditions to reach peace."

The participants of this study also introduced the improvement of sexual involvement as an ability to promote sexual health. Determining sexual presets, agreeing with the sexual pattern compatible with the conditions, dynamic interaction with the spouse to discover sexual interests, and sexual empathy were mentioned as the subcategories of sexual involvement. Participant 3 (a sexual health care provider: a female reproductive health specialist) stated: "We should teach older women to strive for maintaining their relationships like other young

women; to be motivated, for example, to set times together in advance, to have romantic-sexual conversations, and such training can help maintain their sexual health and keep it from being disturbed with old age."

Moreover, in this study, the majority of the participants stated that they needed to separate the maternal/spousal duties and manage them to understand the needs and desires of their sexual partners. According to their opinion, paying attention to women's sexual attractiveness in dealing with sexual affairs and paying attention to desires and preferences during sexual action and reaction is one of the most important methods of managing sexual needs and desires. Participant 1 (a 65-year-old older woman) said: "As a woman, I need to be able to care for myself and do the things that many women do and look more beautiful and younger, but I don't have time."

Participant 2 (a 70-year-old older woman) said: "If there were fewer parenting duties, maybe I could focus more on myself and my relationship with my husband. Unfortunately, I am all involved in household chores and children's errands. I really need to be able to solve this problem, but I haven't been able to until now."

# Discussion

The present study was conducted to explain the unmet sexual needs of older women. According to the results, the existing health care services needed to be developed and improved since most participants considered the inadequacy of services, limited access to services, insufficient skills of sexual health care service providers, and care and treatment taboos to be the most critical problems in health systems. In other Iranian studies, such as those by Ghazanfarpour et al. (2018) and Moghasemi et al. (2018), researchers also emphasized strengthening the scientific skills of health care providers to improve the sexual health of older women. They also highlighted the necessity of employing specialized personnel in these centers for sexual health education. The present study aligns with these two studies while additionally emphasizing the establishment of a specialized sexual health clinic containing specialized physicians in health centers<sup>22,23</sup>.

Foreign studies have similarly confirmed these results. The study by Bauer et al. (2015), who conducted a systematic review in this regard, showed that despite the prominence of sex for many older people, dissatisfaction with the existing health care services and the lack of skilled experts could generate or maintain their sexual problems. They stated that in addition to the need to acquire skills, sexual health care providers in health centers needed to adopt strategies that create a suitable environment for negotiation about the needs and sexual desires of older people, especially older women; therefore, issues related to sexual health should be discussed without anxiety or discomfort. Thus, older people can enjoy optimal care and treatment<sup>24</sup>.

In a survey completed by 101 seniors on community-based services, researchers found that while nearly half of participants were willing to be asked about their sexual health, most were reluctant to discuss and raise specialized questions about sex. It should be noted that in this study, men had significantly more questions about sexual health than women<sup>25</sup>. In another study with 1,450 female participants cared for at a US military facility, women older than 65 were significantly less likely to benefit from sex education than younger women, as professionals lacked adequate knowledge about sex issues in old age<sup>26</sup>.

Finally, the results of the systematic review by Ezhova et al. (2020) showed that three groups of obstacles that hindered older people from seeking medical care services included cultural and social attitudes and beliefs regarding the sexual health of older people, health care professionals lacking proper education, and the poor quality of the relationship between patients and health professionals<sup>27</sup>. The results of the mentioned studies are consistent with our findings. The health system's inattention to older people is evident in all these studies. Therefore, according to the results of the studies above and the present study, we need development and improvement in the care and treatment levels in order to meet older women's sexual health needs.

Based on the results of the present study, older women needed respect for their sexuality. In this regard, several studies have discussed the importance of preserving sexual dignity in older people and considered neglecting it as overlooking sexual rights. Saadatmand et al., 2025 in their systematic review titled 'Perceived Needs of Older Women,' stated that older women in Iran and other Asian countries experience disruptions in safe sexual relationships due to the presence of children in the home. The researchers linked these disruptions to a cultural distancing from the dignity of sexuality and highlighted the role of health service providers in altering culturally derived attitudes<sup>28</sup>. Additionally, foreign studies emphasize the importance of respecting sexuality in old age as a key factor in maintaining sexual health.

The results of the study by Thomas et al. (2015) show that to achieve sexual satisfaction in old age, a variety of psychological factors, including romantic relationships with a spouse, having romantic conversations, and more empathy are needed. These researchers state that achieving sexual satisfaction and dignity is of particular importance for older women, particularly for women over 80 years old<sup>29</sup>. Skałacka et al. (2019) stated that in order to adapt to the aging process, instead of having active sex, older women gave importance to safe relationships, empathy, caressing, and romantic behaviors. In fact, they preferred society to accept such relationships as sexual relationships in old age. These researchers stated that older women sought to honor their sexual rights differently from relationships. However, they fail to realize it in some cases<sup>30</sup>. While conducting research, Curley et al. (2022) announced that in Western societies, many older people were sexually active; nevertheless, they perceived the stigma caused by social disapproval regarding sexuality in old age. They considered this issue to be the reason for the sexual dignity decline and the failure to achieve sexual rights in these societies<sup>31</sup>.

The present study is in line with the study by Saadatmand, Curley, Thomas, and Skałacka. Therefore, it seems that all societies need to undergo a vast transformation in order to promote the sexual health of older people. Establishing sexual relations freely, away from any coercion and violence, and taking into account individual independence is one of the other aspects of sexual dignity in the present study, which was mentioned by participants as an essential need. In this regard, the results of studies in two American states show that older women, due to experiences of harm and coercion in their sexual relationships, often have a desire for independence and relationships free of any violence 32-34. Therefore, taking into consideration these studies, it

appears that older women in different societies and cultures have perceived a wide range of harm and, therefore, need to achieve their rights.

Another finding of the study indicates that in order to achieve an optimal level of sexual health, older women should be empowered and able to adapt to the changes of old age. They should be able to identify their sexual problems through awareness and, with the help of coping strategies, make an effort to eliminate the problems affecting their sexual affairs. These women need to identify all the conflicts of maternal/spousal roles and achieve an optimal level of sexual health through proper management. Confirming these findings, the results of a qualitative study by Connor et al. (2023) show that older people need to invest in their sexual life and manage sexual conflicts caused by old age. Sometimes, they have challenges concerning sexual adaptation. In this regard, these women are required to be well aware of their roles and the actual sexual behaviors of themselves and their sexual partners<sup>35</sup>.

Thorpe et al. (2015) showed that most older people had high awareness of their sexual needs, expressed their changed sexual desires despite the complications of old age, and could properly overcome the challenges of that period. On the other hand, some women need to gain more knowledge about themselves, understand mental and physical reactions in old age and their sexual challenges, and focus more on emotional intimacy in order to adapt to old age<sup>36</sup>.

In the study by Hashemi Parast et al. (2021), the decline of sexual life, traces of life's sufferings, sexually discouraging behaviors, and stereotyped ideas about sexuality were identified as obstacles to expressing sexual desires in older people. In this study, the necessity of adopting management strategies by women to improve sexual relations and remove existing obstacles was emphasized<sup>37</sup>. In the present study, the conflicts of the maternal/spousal roles were raised as significant obstacles in achieving desirable sexual relations and, therefore, should be controlled. In this regard, the results of the study by NeJhaddadgar et al. (2020) showed that living with married or unmarried children was a crucial factor that negatively affected sexual performance. Accordingly, women who lived with their children had less sexual satisfaction than women who lived only with their husbands<sup>38</sup>.

Moreover, the study by Karraker (2014) showed that the presence of young children at home affected marital relations negatively since couples had limited time to spend with each other<sup>39</sup>. Older women who lived with their children and grandchildren had numerous problems in their sexual relations with their spouses, which required education, awareness, and knowledge to manage the resulting conflicts and their impact on women's sexual relations. In this study, it was also stated that, in order to improve older people's sexual ability, promote their sexual health regarding sexuality in old age, and overcome common taboos, related structured training should be provided. Such training needs to be conducted by sexology professionals.

The results of the study by Cybulski et al. (2018) similarly confirm the positive relationship between receiving education and awareness and desirable sexual relations in older people<sup>40</sup>. Obviously, in line with the present study, the above studies propose empowerment as a solution for resolving sexual problems in old age. Acquiring self-management skills and empowerment are essential, particularly for Iranian women who are highly involved in family affairs, and they place various social restrictions on themselves when they experience old age. Attaining this skill makes this group of individuals capable of controlling emotional reactions that are against sexuality issues and maintaining their sexual health.

Based on the results, the most important limitations of the present study were that none of the women had been married for less than 20 years, and none were over 75 years old, single, in their second marriage, or childless. It is suggested that future studies include women with these characteristics to obtain more diverse data.

# Conclusions

According to the results of the present study, older women's most significant unmet sexual needs included the development of sexual health services in health and treatment sectors, maintaining the dignity of sexuality to achieve sexual rights, and empowerment to resolve sexual conflicts and aging changes affecting sexual performance. These results can help design and provide effective management and support programs in order to improve older women's sexual health. In this regard, it is recommended that health policymakers design interventions to provides sexual health services. The role of social policymakers in eliminating taboos and social stigmas related to the sexuality of older women is also emphasized.

#### Data availability

All necessary data related to the research presented within the article. However, upon request, corresponding author can provide any additional data if needed.

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# **Author contributions**

MB and FS, MSE and ZH were involved in the study conception, design, and drafting of the manuscript. MB, FS and MSE would be responsible for interviews with participants, descriptions, and data analysis. All authors have read and approved the final version of the manuscript.

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## Declarations

# Competing interests

The authors declare no competing interests.

# **Ethics approval**

The Ethics Committee of the Isfahan University of Medical Sciences in Isfahan, Iran, approved the protocol of this study (code number: IR.MUI.NUREMA.REC.1401.157).

# Consent for participate

All ethical considerations were taken into account based on the Declaration of Helsinki. The researcher explained the research objectives and the data collection process to the participants. Informed consent was obtained from them, and they were given the opportunity to withdraw from the study at any stage. In this study, participants' rights, respect, and dignity were respected.

#### Additional information

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