A Comparative study on sexual dysfunctions before and after menopause

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ABSTRACT
Background: Sexual instinct which is the cause of numerous changes in an individual’s life could be influenced by different factors such as menopause and ageing. This study was designed to compare sexual dysfunction before and after menopause.

Materials and Methods: This was a cross-sectional study. Participants were 174 menopausal women who referred to medical health centers of Isfahan, Iran. Data were collected through self constructed sexual dysfunctions questionnaire in relation to their sexual activities before and after menopause. The reliability and validity of this questionnaire was determined by content validity and Cronbach’s alpha coefficient.

Findings: Findings showed that the relative frequency of sexual dysfunctions was 38% in the productive period and 72.4% in the menopause period. There was a significant association between sexual dysfunctions before and after the menopause period (p < 0.001). Sexual dysfunctions in these women in the productive and menopause period were 49.2% and 62.6% in desire disorder, 34.3% and 34.9% in dyspareunia, 26.8% and 75.3% in arousal disorder, 23.5% and 56.3% in orgasmic disorder and 16.4% and 15.6% in vaginismus, respectively.

Conclusions: A considerable percentage of women experienced sexual dysfunctions in productive and menopause periods, and menopause could be a factor to maintain or intensify sexual dysfunctions.

Key words: Menopause, reproductive, sexual dysfunction

INTRODUCTION

Sexual desire is a natural instinct which needs attention and it is impossible to neglect because it is presented since the birth of a child and it changes and flourishes according to his or her growth. The World Health Organization (WHO) has defined sexual health as a kind of coordination between mind, senses (feelings) and body that can affect the social and intellectual aspects of human personal growth. In other words, sexual desire is an important and integral aspect of the human personality.

However, sexual desire can be disrupted because of factors such as illnesses, drug usage, social problems, aging, menopause, and etcetera, which can lead to psychological disorders. Castelo-Branco et al. reported that the prevalence of these dysfunctions in middle aged women was 50%. Moreover, he reported that the prevalence of these dysfunctions will increase as a result of age.

Although, there are some physiological and pathological changes in the menopause period that result in these problems, the attitude of the women toward menopause has an important role in creating or eliminating these problems. In this regard, it has been seen that a large number of these women consider the menopause period...
as a period of freedom because of the culmination of the productive period the decrease of the responsibilities over the children, and no fear of pregnancy. Therefore, they feel comfortable and more active (regarding sexual interactions) compare to the pre-menopause period. However, for others this period may cause anxiety and be a sign of aging and the end of being pretty and attractive.[6] It seems that if they were sexually inactive or had undesirable psychological sexual condition during the productive period; the menopause period may decrease their sexual ability and any kind of sexual feeling in them.[7] Therefore, menopause can be a factor in intensifying or eliminating sexual problems in this period.

Some studies have been conducted on these problems during the menopause and productive periods. These problems result in high incidence of sexual dysfunctions and the declining of psychological health in families.

This problem has caused some negative attitudes and wrong social customs in relation to sexual relationships. Therefore, considering this problem and the limitation of such studies in our country, the present research was designed to compare women's sexual dysfunctions before and after menopause.

**MATERIALS AND METHODS**

This is a cross-sectional study which was done in Isfahan. The population under study included 174 menopausal women (living with their spouses), which referred to the medical health centers, after one year of being menopausal, to receive medical services.

Subjects in this study were randomly selected from 10 medical health centers, 4 of which were affiliated to medical health center number 1 (because 40% of families in the city of Isfahan are under the coverage of this center) and 6 were affiliated to medical health center number 2 (because 60% of families in the city of Isfahan are under the coverage of this center).

The exclusion criteria of the study were as follows:

1. Illnesses in the women or their spouses which affect sexual interaction including vasculitis, thyroids, illnesses of adrenal cortex, diabetes, blood pressure, lung or heart problems, central nervous system damages, infectious diseases and venereal system operations.

2. Using drugs which interfere with sexual interactions such as blockers of H2 receptor, psychotomilitary drugs, and heart and antihypertensive drugs, anti-convulsion drugs, narcotics, anti-cholinergic and anti-histamines.

3. Experiencing some stresses like the spouse cheating, fatal diseases or imprisonment of immediate relatives in the previous year.

4. Menopausal women who lived apart from their spouses at the time of the interview.

5. Women whose spouses had premature ejaculation or sexual disabilities.

The nominated women were invited to the health center and the eligible candidates were interviewed and they completed the questionnaire after being ensured of the confidentiality of the questions.

It should be mentioned that the participants were interviewed by midwives in the health centers and interviewers received explanations during a 2 hour session.

These interviewers were asked to have in mind that different participants may have different conceptions of the questions, and thus to make sure each question is understood correctly.

Finally interviewers asked the participants to give information about their sexual interaction during the menopause period and before it.

In this research, the pre-menopause (productive) period was considered to be between the ages of 15 to 50. Due to the fact that the pre-menopause period is so long and women have different sexual experiences in each stage of this period, the researchers and interviewers classified this period into several categories such as the first years of marriage, the delivery intervals, the school years of children and etcetera. This classification can help the participants to better remember their sexual interactions, make a careful conclusion from these interactions, and to state if their sexual interaction in these periods was satisfactory or disordered sexual interaction (in one or more stages).

The tools for gathering information included self constructed sexual dysfunctions questionnaire based on diagnostic measures of psychiatric disorders of USA (DSM IV- TR). This questionnaire which had 18 closed multiple choice (5-choices) questions, was designed to measure the dysfunctions of sexual desires phases, arousal, orgasm and sexual dysfunctions resulting from pain (dyspareunia – vaginismus) in the periods of before and after menopause.

In order to answer each question based on Likert
spectrum, the choices of Never to Always (never, seldom, often, and always) were considered for assessing the intensity of sexual dysfunctions. If the participants mentioned dysfunctions in one or more phases, they had sexual dysfunctions; otherwise, they had no problems in their sexual functioning. In order to evaluate the validity of this questionnaire, content validity was used and in order to investigate its validity, retake exam and Cronbach’s alpha index (α = 0.875) were used. Moreover, in order to determine the distribution frequency of sexual dysfunctions in these women in productive and menopause periods, the McNemar test was used. Statistical significance was defined as \( p < 0.05 \).

**Findings**

Participants were between the age of 40 to 74 (mean = 54.67 ± 6.3 years), the pregnancy age range was from 0 to 16 (mean = 6.8 ± 3.14 years), the age range of menopause was from 30 to 56 years (mean = 47.6 ± 4.5 years), and the weight range was from 38 to 95 kilograms (mean = 66.12 ± 10.13 years). 18 of the women were employed and the others were either housewives or retired. Findings showed that the relative frequency of women’s sexual dysfunctions before and after menopause were 38.5% and 72.4%, respectively.

The frequency distributions of sexual dysfunctions in the productive period based on the intensity of disorder were as follows: dysfunctions in the desire phase (49.2%), dyspareunia (34.6%) arousal disorder (26.8%), orgasmic disorder (23.8%) and vaginismus (16.4%).

Furthermore, the frequency distributions of these disorders during the menopause period were as follows: arousal disorder (75.3%), sexual desire disorder (62.6%), orgasmic disorder (56.3%), dyspareunia (34.9%) and vaginismus (15.6%).

According to the results, 41.1% of the units did not mention sexual dysfunctions, and 56.9% mentioned sexual dysfunctions in the menopause period in the group which did not have any sexual dysfunction before menopause, and in the group which had sexual dysfunctions before the menopause period, 6% of the units reported the absence of these dysfunctions in menopause period and 94% reported these dysfunctions during the menopause period. A significant correlation was seen between sexual dysfunctions before and after menopause \( (p < 0.001) \) (Table 1).

**Discussion**

Based on the results of this study, the most common sexual dysfunctions in the productive period were the desire phase and the dyspareunia dysfunctions, and in the menopause period, the highest amount of dysfunction was seen in the arousal and the sexual desire phases. These problems in the menopause period can be due to the attitudes of these women toward the menopause phenomenon and sexual interaction, or some physiological changes resulting from decreasing of the hormone levels especially estrogen, and in productive period, they can be due to cultural and psychological problems.

As it was mentioned in this research, relative frequency of sexual dysfunctions before menopause was estimated as 38.5%, but Abdo et al. computed this number as 49%.

In the current research, relative frequency of sexual dysfunctions in the menopause period was computed as 72.4%. Kabudi reported 70% sexual response disorders in the two phases of desire and arousal in 141 menopause women. Olabolorun and Lawoyin reported the incidence of these dysfunctions 40.4%, and Valadares et al. reported 35%. The considerable difference between the obtained results in our country and other countries can be due to racial, religious, cultural and attitude differences.

About the relation of sexual dysfunctions before and after menopause, results showed that more than half of the women who did not have any sexual dysfunctions before the menopause period reported these dysfunctions during the menopause period, and in the group which had these dysfunctions before the menopause period, most women also reported sexual dysfunctions during menopause. Therefore, a significant correlation was seen between these periods. According to the results, it seems that sexual status before menopause is associated with sexual interaction status during menopause. Palacios et al. also had the same results in this field. They recognized that the study of their sexual history (background) in the productive period is the first step in diagnosing and curing the sexual dysfunctions of menopausal women.

| Table 1. The frequency distribution of sexual dysfunctions before and after menopause periods in units under study |
|---------------------------------------------------------------|
| After menopause | With sexual dysfunctions | Without sexual dysfunctions | Total |
|-----------------|--------------------------|-----------------------------|-------|
| Before menopause | 63 (94%) | 4 (6%) | 67 (100%) |
| With sexual dysfunctions | 63 (58.9%) | 44 (41.1%) | 107 (100%) |
| Without sexual dysfunctions | 126 (72.4%) | 48 (27.6%) | 174 (100%) |
Other studies also confirmed this finding. For example, Olaolorun and Lawoyin studied this phenomenon in urban populations of Nigerian women, they reported that sexual problems will be influenced by aging; so that, the women who were older had the highest problems premenopausal and postmenopausal.[11] Chedraui et al. reported that the sexual dysfunction of middle aged women will be influenced by the two factors of age and the post menopause status[14] These studies were in conformity with our findings. While, Gott and Hinchliff reported that aging and long lasting interactions are two affirmative factors increasing the sexual desire in the spouses. Therefore, people can have a suitable sexual interaction during their middle ages and elderly periods.[15]

In conclusion, the present research showed the relation of sexual dysfunctions before and after menopause periods and the high prevalence of these dysfunctions during menopause period. Therefore, according to the results, the staff of medical health center in the counseling and educational sessions regarding sexual interactions, recommend to these women who are in their menopause or productive period, to pay careful attention to the physiological changes of the menopause period and find ways to overcome these dysfunctions by referring to psychologists and counselors. In fact, through their instructions the staff should prepare women to accept the menopause period and remove any misconceptions they may have in this field.

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