

MENOPAUSAL WOMEN'S SEXUAL FUNCTION AND RELATED FACTORS IN WEST OF TEHRAN

Mina Amiri Pebdani (1)
 Simin Taavoni (2)
 Hamid Haghani (3)

(1) Instructor & Faculty Member, Department of Midwifery, Faculty of Medicine, Alborz University of Medical Sciences, Iran
 (2) Senior Lecturer & Researcher, Nursing and Midwifery Faculty, Tehran University of Medical Sciences (TUMS), PhD Student in Medical Education, Faculty of Medicine, TUMS Member of Research Institute for Islamic & Complementary Medicine (RICM) (TUMS), Tehran, Iran
 (3) Senior Lecturer, School of Management & Medical Information Science, TUMS, Tehran of Medical Sciences, Iran

Correspondence:

Simin Taavoni
 Instructor & Faculty Member, Department of Midwifery, Faculty of Medicine, Alborz University of Medical Sciences, Iran
 Telefax: 009821 66921228
 Email: staavoni14@yahoo.com

Abstract

Background: A lot of progress has been made in prevention and treatment of menopausal problems but still sexual function, which may be influenced by several factors, need more attention. It is essential to identify these factors in this period.

Aim: To assess related factors of sexual functioning in postmenopausal women.

Materials and Methods: In this descriptive cross-sectional study, 163 volunteer healthy married postmenopausal women, who had been visited in selected health centers in west of Tehran, were enrolled. Data was collected by using demographics questionnaire and Sabbatsberg Sexual Rating Scale (SSRS). Data were analyzed by using independent t-test, ANOVA and Pearson correlation coefficient. This study was approved by the

Ethics Committee of Tehran University of Medical Sciences (TUMS).

Results: The results showed that sexual function had a significant relationship with employment status, educational level, number of children, number of children at home, frequency of sexual intercourse per month and sexual satisfaction. On the other hand, sexual dysfunction had no significant relationship with women's age, husband's age, age of menopause, duration of marriage, number of children and economic status.

Conclusion: Sexual function in the postmenopausal period can be influenced by some social and personal characteristics. By understanding and knowing these characteristics, Health care providers could prepare suitable guiding and

counseling for each target group for improving their sexual function and quality of life.

Key words: Sexual function; Menopause; Sabbatsberg Sexual Rating Scale (SSRS)

Background

According to the report by World Health Organization, menopause begins 12 months after spontaneous cessation of menstruation as a result of inactivity of ovaries, which is accompanied by hormonal, biological and clinical symptoms (1) and today due to health care improvement and increased life expectancy, women spend a considerable time in this period (1-4). According to Iran's yearbook of statistics in 2007, 13.87 Percent of women were 45 to 60 years old (5). Menopause symptoms can be classified into three categories of vasomotor symptoms such as hot flash and night sweat, central symptoms such as insomnia and changes in memory and concentration and genitourinary symptoms such as vaginal dryness, dyspareunia, urinary tract infections and urinary incontinence (6).

Although a lot of progress has been made in prevention and treatment of menopausal symptoms till the end of 20th Century, what seems to have received little attention in this regard was sexual function and its related problems (7), while sexual function constitutes an important part of women's health, sense of well-being (8-10) and affects their quality of life (9). Despite the great importance of healthy sexual function, many studies have indicated some problems in this regard (11). A cross-sectional study in the U.S. (2004) on women over 50 to 79 years old reported that prevalence of vaginal dryness and dyspareunia among the studied women was 27% and 5.2%, respectively. Also a study in six European countries (2008) of reduced sexual activity of 50-60 years old postmenopausal women, was reported in 34%, and showed effect of age on it (2). Beigi et al. (2009) reported frequency of sexual dysfunction during menopause period as 72.4% (12). The prevalence of these complaints increases with rising age (13). The main causes of sexual dysfunction in this period include physiological changes, psychological problems (14) and lack of sexual knowledge. These factors make the critical menopause period very risky

because sexual disorders also mutually lead to reduced mental health of families through causing or exacerbating psychological problems (15). Regarding the Lopez study (2012), in a mid-aged Spanish sample, lower sexual function was related to menopausal and mood symptoms, several women and partner factors. Also they emphasized that further research is needed. (16) Regarding the Aida et al (2013) study, characteristics of the menopausal women that were statistically significant in those with sexual dysfunction were age, educational, race, and type of menopause. (17)

Considering the prevalence of sexual dysfunction in the menopause period and importance of maintaining sexual relations in this period, it is always important to have more study in this field (18). Since there was no documented study in the field of assessment of sexual function and related factors in menopausal women in Tehran, this study was carried out, to improve the health status of this vulnerable group of society.

Materials and Methods

In this cross-sectional study, which had been approved by the Research Ethics Committee of Tehran University of Medical Sciences (TUMS), and carried out in the selected health centers in west of Tehran, 163 volunteer healthy postmenopausal women aged 50-60 years old were involved during year 2011-2012. The subjects of the study were invited for a screening project of hypertension and diabetes. The subjects were recruited from the community through newspaper ads, flyers, and the internet, also their eligibility was assessed by using structured interview.

The inclusion criteria were age 50-60 years old, passing at least one year since menopause, not taking hormone replacement therapy, not having physical or mental diseases in women and their husbands, including diseases which affect sexual function, such as vasculitis, cardiovascular diseases, mental

diseases, neurological disorders, thyroid problems and cancers, no taking drugs that affect sexual function such as anti cholinergic drugs, psychotropic, neurology drugs and hormones, no recent stresses such as unfaithful spouse, death, serious diseases or imprisonment of close friends and relatives in the past year, not separated from spouse during the interview, not suffering from premature ejaculation or impotence among their husbands, being illiterate and having at least one intercourse during previous month.

The assessment of the study included two main parts. In the first part personal characteristics, including age, time of last menstruation, number of coitus, number of children, number of children in home, education, occupation, and economic status of the volunteers, and spouse age. In the second part Sabbatsberg Sexual Rating Scale (SSRS), which is a valid and reliable questionnaire (19) and its Persian version has been previously used in various studies in Iran (20, 21), measure sexual function by assessing the domains of sexual desire, activity, satisfaction, arousal or pleasure, orgasm, and the importance of sex. Each domain have two items, therefore it has six for assessing different aspects of sexual function in the previous month, while the others assessed different aspects of sexual function in comparison to previous years. The response options were on a 5- point Likert scale rating system and the responses to each question were summed and converted to a percentage, producing a "sexual rating" between zero and 100.

After a detailed explanation of the procedure of study, written informed consent was obtained from the subjects, then, they filled out questionnaires of personal information and SSRS. Finally, the scores were calculated and analyzed by independent t-test, ANOVA and Pearson correlation coefficient (α was considered 0.05). All the statistical analyses were performed using SPSS16 software.

Results

The mean age of menopause in study subjects was 48.1 ± 4.1 . Most of the participants (42.9%) were 50- 52 years old, and had one or two times of sexual intercourse per month (49.2%). The majority of women (41.4%) had a high school diploma, 69.9% were housewives and 65.1% had a moderate economic status. The mean age of their husbands was 59.41 ± 5.2 . (Table 1)

Table 1: Personal characteristics:

Variables		N (%)
Occupation Status	Housewife	114 (70.2)
	Others	49 (29.8)
Education Status	Under diploma	72 (43.8)
	Diploma	51 (31.2)
	Academic	40 (25)
	Mean and SD	
Age		54.2 ± 3.3
Menopause Age		47.3 ± 5.3
Spouse' s age		47.3 ± 5.3
Duration of Marriage		33.03 ± 5.95
Number of Children		3.6 ± 1.7
Number of Children living with parents		1.63 ± 1.11
Number of Coitus in the month		3.28 ± 2.56

The relationship of the considered factors and sexual function was as follows: according to independent t-test, ANOVA and Pearson correlation, women's employment status ($p < 0.01$), educational level ($p < 0.001$), number of children ($p < 0.02$), number of children at home ($p < 0.03$), frequency of sexual intercourse per month ($p < 0.001$) and their sexual satisfaction ($p < 0.001$) had a significant relationship with sexual function (Tables 2 -3). According to the relationship between educational level and sexual function, the results of Scheffe test demonstrated Sexual function of those who had academic education was better than others ($p < 0.02$). On the other hand, sexual dysfunction had no significant relationship with women's age, husband's age, menopause age, duration of marriage, number of children and economic status.

See Table 2: Variables, Sexual Function and Test Results - next page

Table 3: Number of coitus, Sexual satisfaction, Sexual Function and Test Results:

Variables	Pearson Correlations Results
Number of coitus in month	R = 0.46
	P < 0.001
Sexual satisfaction	R = 0.46
	P < 0.001

Table 2: Variables, Sexual Function and Test Results

Variables	Characteristics	The mean score of Sexual Function	Standard Deviation	Test Results
Age	50 - 55	28.6	15.7	P - value* = 0.94
	56 - 60	29	18.1	
Spouse's age	50 - 55	35.7	16	P - value** = 0.17
	56 - 60	27.9	14.9	
	≥ 60	25.1	18.3	
Menopause Age	< 40	20.4	20.48	P - value** = 0.49
	40 - 50	29.8	17.4	
	≥ 50	28.7	16.4	
Duration of Marriage	20 - 30	33	14.5	P - value** = 0.17
	31 - 40	16	24.7	
	≥ 40	22.8	29.1	
Education Status	Under diploma	19.8	14.3	P-value** = 0.001
	Diploma	26.8	14.5	
	Academic	38.9	15.6	
Occupation Status	housewife	25.5	15.3	P-value* = 0.01
	Other	36.5	16.7	
Number of children	0 - 3	33.1	17.7	P - value* = 0.02
	≤ 4	23.1	12.7	
Number of children in the home	Exist	38.1	18.4	P - value* = 0.03
	absence	26.5	15.3	

Discussion

Sexual function is a complex combination of physical, mental and environmental factors (22). In this study in opposition of Castelo (2003) (23) and Beigi et al (2008) (12) there were no correlations between age and sexual function. Referring to correlation between Educational Level and Occupational status, with sexual function our result was similar to Beigi et al (12) and Denerestain et al(2003) (24) and referring to correlation between economical status, our results were like Beigi et al, (12) and Gerber Et al. (25).

Conclusion

Sexual function in postmenopausal period can be influenced by some social and personal characteristics. By understanding and knowing these characteristics, Health care providers could prepare suitable guiding and counseling for each target group for improving their sexual function and quality of life.

The results of the present study indicated the effect of factors such as level of education, employment, number of children, number of children at home, frequency of

sexual intercourse and sexual satisfaction on sexual function. Undoubtedly, having adequate sexual knowledge plays a key role in improvement of sexual function in such women. The effect of sexual knowledge was not studied in this paper, since women with an academic degree showed better sexual function. Hence, it can be recommended for the staff of health care centers to remind postmenopausal women about their development with age and reaching the time of menopause and the importance of sexual function in

their life. Thus, they should hold continuous training courses by qualified instructors and experts in order to improve sexual knowledge and health of these target groups for improving their quality of life.

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