



The impact of anxiety on sexual satisfaction in menopausal women¹

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Abstract

Purpose: This study was carried out in order to determine the anxiety levels of menopausal women on their sexual satisfaction.

Method and material: This descriptive study. The study was carried out at a menopause clinic of a state hospital between June and August 2011. Data were collected by questionnaire: the Golombok Rust Inventory of Sexual Satisfaction (GRISS) and the State Trait Anxiety Inventory.

Results:The mean age of the participants was 49.2 ± 7.6 years old and nearly half of the women 46-50 age group. Half of the women in our sample had a chronic disease, 46.4% of women had sexual intercourse twice a week and 85.1% of them were housewives. In our research it was found that the women's sexual satisfaction was low, and their state anxiety levels were moderate level. There was a moderate positive correlation between the women's sexual satisfaction scores and their anxiety levels. Increased levels of both state and trait anxiety in women reduces their sexual satisfaction.

Conclusion:In this study, it was shown that women's anxiety levels were middle and their sexual satisfactions were decreased during menopause. For this reason menopausal women's should recommended give information about sexual and psychological consultancy services.

Keywords: Women; sexual satisfaction; menopause; anxiety; nursing.

1. Introduction

The menopause is a complex process of change in which psychological change is experienced along with physical and anatomical changes. The changes related to sexual life that arise with the menopause are not only disorders in sexual function but are also multi-dimensional changes covering emotions, behaviour and actions (Masliza et al 2014; Kaufert et al 2008). During the decrease in oestrogen levels that occurs in the transition period of the menopause, dryness and somatic changes of the vagina, changes in the vascular and urogenital systems, bone loss, mood and sleep disorders and a decrease in cognitive functions occur (Otunctemur et al 2015; Ayaz 2013). Women complain about a decrease in libido and arousal, and of a deficiency in vaginal lubrication in connection with these changes (Kaufert et al 2008; Sehhatie-Shafaie et al 2014; Constantine et al 2015). In a study conducted in Turkey, 72% of the women stated that they had concentration

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problems, 62% were irritable and tense, 60% were unhappy and 68% had a lack of sexual drive (Varma et al 2006). In a study by Perez-Lopez et al (2014); The prevalence of sexual unsatisfaction was 75.6%.

Though the reasons for the psychological symptoms that arise during the menopause are not clearly understood, it is suggested that hormonal changes may have a direct effect; they could be secondary to physical symptoms or may arise due to the psychological impact, and even changes in body image and an increase in sleep disorders might have a role in the development of depression (Kaufert et al 2008; Perez-Lopez et al 2014). No matter which hypotheses are supported, it is agreed that the anxiety and depression that are experienced during the menopause are the combination of psychological and physical changes (Kaufert et al 2008; Sehhatie-Shafaie et al 2014; Perez-Lopez et al 2014; Alexander et al 2007). Many studies the prevalence of symptoms of depression and anxiety and their influence during the menopausal transition and the postmenopausal period [Perez-Lopez et al 2014; Alexander et al 2007; Mauas et al 2014; Li et al 2008; Schnatz et al 2010; Pinar et al 2015]. Schnatz et al., (2010) studied the prevalence of symptoms of anxiety in the women in this study was 76.7% vs. 52.9% ($p=0.07$). In the study conducted by Perez-Lopez and et al (2014); Forty-five percent of the women had depressed mood.

There is a relationship between anxiety and sexuality in women at menopause (Gracia et al 2007). Women can be experienced complaints such as hot flashes, insomnia during menopause These complaints may negatively affect their sexuality by creating anxiety (Gracia et al 2007; Yangin et al 2008). According to some previous studies; findings such as depression, anxiety, irritability, fatigue, insomnia, forgetfulness and decrease of libido have been met during this period (Tot 2004; Bezircioğlu et al 2004; Bryant et al 2012). There are also studies indicating that menopause do not affect women regarding with depression and anxiety (Li et al 2008; Pinar et al 2015).

There have been a few sexual satisfaction studies performed on menopausal women in Turkey (Tuğrul et al 1993; Varma et al 2006). In addition, there are some deficiencies in the studies related to the menopause. Sexual satisfaction during the menopausal period was not examined at the same time as anxiety levels in these studies. The results of this study will reveal the relationship between anxiety levels and sexual satisfaction in menopausal women, and will assist various units, like institutions serving menopausal women and research centres, in planning their services. So, in this descriptive study, the aim was to determine the anxiety levels of menopausal women on their sexual satisfaction.

2. Purpose

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3.Method and material

Setting and sample

This research was organized as descriptive study. The setting of the study consists of women attending the menopause polyclinic of a hospital located in Ankara, the capital city of Turkey, between June and August 2011. The sample was composed of 334 voluntary participants who were eligible under the criteria of the study and were willing to participate. Of these, 39 (11.6%) did not complete the questionnaire, and were excluded. Thus, the analyses were carried out using 295 valid questionnaires. Inclusion criteria for the participants were that they had had sexual life during the past month, that their FSH level was higher than 40u/l, that they were not known to have an oncological disease and that they were undergoing a natural, rather than a surgical, menopause.

Determination of sample size research: A sample table named "Estimating the proportion of a population with a certain accuracy" was used in determining the sample size of the study (Lemeshow et al., 2000). A proportion (75%) reported by a worker (Schnatz et al 2012) was used as a finding of the prevalence of the phenomenon examined (sexual unsatisfactory rates) in the population. The declared rate is accepted as 5% on the tabature. A 95% confidence level and 3% relative precision were considered in the study and the sample size reported on the table was found to be 323 (Lemeshow et al., 2000).

Research criteria

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Data collection

Data were collected using a personal data form developed by the authors, the Golombok Rust Inventory of Sexual Satisfaction and the State Trait Anxiety Inventory. The participants completed the data collection tools individually, and each participant spent about 15 minutes filling out the forms.

Golombok Rust inventory of Sexual Satisfaction

The Golombok Rust Inventory of Sexual Satisfaction (GRISS) was developed by Rust and Golombok, (1986). It is a scale tool for assessing the quality of sexual intercourse and sexual dysfunction. Each of the male and the female versions consist of seven domains, five of which are present in both. The authors used only the form of the questionnaire for women. The tool measures sexual satisfaction. The domains common to the two forms are avoidance, satisfaction, communication, sensuality and frequency of intercourse. In addition to these, the female form includes domains for vaginismus and anorgasmia, and the male form includes domains for premature ejaculation and impotence. The responses in the domains were assessed by a five-point Likert scale consisting of 'never', 'rarely', 'sometimes', 'mostly' and 'every time' options. In the evaluation of the scale, scores obtained from both total and sub-dimensions can be used. High scores point to deterioration in sexual functioning and relationship. The Cronbach's alpha value for women was .91 In Turkey, the evaluation of the validity and reliability of GRISS was performed by Tuğrul, Öztan & Kabakçı (1993). The cronbach alpha value in this study was .81.

State -Trait Anxiety Inventory

Anxiety was measured using two instruments. The Turkish STAI (T-STAI), which is a translation by Öner, & Le-Compte (1985). Of the State Trait Anxiety Inventory (STAI) of Spielberger, Gorsuch, & Lushene et al., (1983), was used to determine the anxiety of the subject. Alpha coefficients for the subscales were above .70 (Gorsuch, & Lushene et al., 1983). Kuder Richardson credibility; 0.83 to 0.87 for trait anxiety scale and 0.42 to 0.85 for state anxiety scale (Öner, & Le-Compte 1989)

The T-STAI is a 40-item self-reporting questionnaire that includes 20 items for each of the state anxiety and trait anxiety subscales. Respondents are asked to indicate their level of agreement on a four-point Likert scale with 1 meaning 'definitely agree' and 4 meaning 'definitely disagree'. State anxiety is defined as transient manifest feelings of insecurity, while trait anxiety denotes a relatively stable personality characteristic. Each subscale is summed to give a possible score between 20 and 80. The points to be obtained from the anxiety scale show low-level anxiety if the point is 36 and under, moderate-level anxiety if the point range between 36 and 42, high-level anxiety if the point is more than 42.

Evaluation of Data

The data were evaluated using the SPSS 15.0 program (Statistical Package for Social Science; Chicago, IL, USA). The inventories were evaluated with the original evaluation criteria. In the statistical analysis of the data, frequency and percentage, mean and standard deviation were used. Correlation analysis was used in the investigation of the relationship between general GRISS and general State Trait Anxiety Inventory. The range of relationships in the correlation was

described as follows: 0–0.25 was considered to be a very weak relationship; 0.25 – 0.50 a weak to moderate relationship; 0.50 – 0.75 a good relationship; and 0.75 – 1.00 a very good relationship (Coşansu 2014). The significance level was recorded as $p < 0.05$.

Ethical considerations

Before the data were collected, written consent was obtained from institutions; participation was voluntary and the respondents' willingness to complete the instrument was an indication of consent. In addition, the researchers provided all the women with the details and goals of the investigation, and an explanatory note was added to the front cover of the data collection form. The ethical consent that was required for the performance of the research was obtained from the Ethics Committee of the Faculty of Medicine of Ankara University (Number: 21536, Date: 13.09.2010).

4. Results

Women's Characteristics

The personal data of the participants are presented in Table 1. 85.1% of the women had housewives. The mean age of the participants was 49.2 ± 7.6 years old and nearly half of the women 46-50 age group and about half married. About half of the participants were married between the ages of 21-30. 46.4% of women had sexual intercourse twice a week and 85.1% of them were housewives and half of the women in our sample had a chronic disease.

Table 1: Some characteristics of the women

Characteristics	n	%
Work status		
Employed	44	14.9
Housewife	251	85.1
Mean age of the participant	49.2±7.6 years	
Age		
40-45	33	11.2
46-50	121	41.0
51-55	114	38.6
56-60	27	9.2
Age at marriage		
20 and below	21	7.1
21-30	146	49.5
31-35	84	28.5
36 and over	44	14.9
Duration of menopause		
1 year	74	25.0
2 years	62	21.0
3 years	53	18.0
4 years	45	15.3
5 years	61	20.7
Frequency of sexual intercourse		
Three to five times a week	38	12.8
Twice a week	137	46.4
Once a week	104	35.3
A few times a month	16	5.4
Chronic diseases		
Have a chronic disease	149	50.5
No chronic disease	146	49.5

State Trait Anxiety Scores

In Table 2, the mean scores of the women on the STAI and its subgroups are presented. The mean score for state anxiety was found to be moderate level (37.53 ± 11.45), and the mean score of trait anxiety was found to be low level (32.26 ± 8.44). The state anxiety scores of women having sexual intercourse once in two weeks during the menopausal period were found to be 53.80 ± 12.62 and the trait anxiety scores were found to be 45.00 ± 12.45 ($p < 0.05$).

The relationship between frequency of sexual intercourse during the menopausal period, satisfaction with sexual life, and state trait anxiety levels was found to be statistically significant ($p < 0.05$).

Table 2: The distribution of scores on the STAI subscale

	\bar{X}	SD	Min.	Max.
State Anxiety	37.53	11.45	20.00	80.00
Trait Anxiety	32.26	8.44	20.00	65.00

Sexual Life Scores

In Table 3, the mean scores of the women on the GRISS scale and its subgroups are presented. A GRISS score for a particular sub-dimension of five or higher means that a problem exists in that sub-dimension. The domains with an inventory mean score of five or more are sexual frequency (5.76 ± 1.50), satisfaction (6.46 ± 3.45), sensuality (8.08 ± 3.82), vaginismus (5.88 ± 3.80) and anorgasmia (12.27 ± 3.32), and the domains with an average score of 5 or less are communication (4.72 ± 2.38) and avoidance (4.44 ± 3.88). The total mean score for the inventory was found to be 57.94 ± 20.84 .

GRISS scores for women in the 40-45 age group were found to be 47.54 ± 21.65 . The scores were 54.64 ± 20.96 in the 46-50 age group, 62.79 ± 18.91 in the 51-55 age group and 65.03 ± 20.25 in the 56-60 age group, and the relationship between age group and total GRISS score was determined to be statistically significant ($p < 0.000$). When the GRISS scores were evaluated according to the duration of the menopause, they were found to be 52.89 ± 22.67 in women who had been undergoing the menopause for a year, and 63.98 ± 16.92 in women who had been undergoing the menopause for 4 years; the relationship between the sexual satisfaction of women and the duration of their menopause was found to be statistically significant ($p < 0.000$).

Table 3: The distribution of scores on the GRISS subscale

GRISS scale and subgroups	\bar{X}	SD	Min.	Max.
Sexual frequency	5.76	1.50	1.00	8.00
Communication	4.72	2.38	0.00	8.00
Satisfaction	6.46	3.45	0.00	16.00
Avoidance	4.44	3.88	0.00	15.00
Sensuality	8.08	3.82	0.00	16.00
Vaginismus	5.88	3.80	0.00	38.00
Anorgasmia	12.27	3.32	3.00	16.00
Total GRISS score	57.94	20.84	10.00	112.00

The Relationship between Anxiety Level and Sexual Satisfaction

The correlation coefficient between the sexual satisfaction and the state anxiety scores of the women was found to be 0.309, between the sexual satisfaction and the trait anxiety scores of the women it was found to be 0.192, and between the state anxiety and the trait anxiety scores of the women it was found to be 0.546. All of the correlation coefficients obtained are statistically significant but fairly low ($p < 0.01$), (Table: 4).

Table 4: The Relationship between Anxiety Level and Sexual Satisfaction

Anxiety levels	Sexual satisfaction	
	r	p
State anxiety	0.309	$p < 0.01$
Trait anxiety	0.192	$p < 0.01$

5. Discussion

The menopause is a complex process of change in which psychological change is experienced along with physical and anatomical changes. The changes related to sexual life that arise with the menopause are not only disorders in sexual function but are also multi-dimensional changes covering emotions, behaviour and actions. This study was carried out with the aim of determining the situations of the anxiety levels of menopausal women on their sexual satisfaction. In our research it was found, while problems were found in the sexual frequency, satisfaction, sensuality, vaginismus and anorgasmia dimensions of the GRISS inventory for the women, and their state anxiety levels were found to be moderate. The mean score for state anxiety was found to be moderate level, and the mean score of trait anxiety was found to be low level. The reasons for this are discussed in the following sections. Several aspects of professionalism led to this situation.

Levels of State -Trait Anxiety by dimension

The menopause affects women physically and also psychologically and socially. During the menopausal transition, anxiety increases three times in comparison to the premenopause (Alexander et al 2007). According to Pérez-López et al (2014) and Mauas et al. (2014) depressed mood is associated with the severity of menopausal symptoms (somatic and psychological). The state anxiety scores of the women participating in our study were at a moderate and low level (Table 2). In the study conducted by Mauas et al. (2014), the anxiety levels of the women were found to be at a state anxiety score moderate level, and trait anxiety score low which is similar to our study.

The relationship between frequency of sexual intercourse during the menopausal period, satisfaction with sexual life, and state trait anxiety levels was found to be statistically significant ($p < 0.05$). A study conducted by Li, et al (2008) also supports our findings indirectly. Furthermore, the study conducted by Çoban, et al. (2008) also supports our findings indirectly. In this study it was found that women who have a bad relationship with their husband experience more menopausal complaints. Therefore, it might be unavoidable that a woman with menopause will have a high level of anxiety during a period like the menopause in which many changes occur.

Levels of Sexual Life by dimension

In studies female sexual dysfunction (FSD) in menopausal women had a reported prevalence ranging from 40% to 80%. FSD levels increase with menopausal women (Mauas et al 2014; Schnatz et al.2010). In the subgroups of the Golombok Rust Inventory, problems were detected in the sexual frequency, satisfaction, sensuality, vaginismus and anorgasmia sub-dimensions, but no problem was found in the communication and avoidance sub-dimensions. In findings similar to ours, in the study conducted by Varma et al., (2006), problems were found in the frequency of sexual intercourse, touching and anorgasmia sub-dimensions (Varma et al 2006). In the results of our study, a high result is found in the sub-dimension related to touching (i.e. sensual contact). This can be interpreted to mean that sexuality is still being placed within a matrix

of shame, so that sensual contact is still not considered important in the sexual life or is considered to be taboo; the result of this is that a healthy sexuality and sexual happiness cannot be experienced. It was found that the total GRISS scores for the women participating in our study increased in parallel with their age, and that the sexual satisfaction of the women decreased with increasing age ($p=0.000$). Similar results were obtained in studies conducted in Turkey and also Malaysia, and Canada (Masliza et al 2014; Kaufert et al 2008; Schnatz et al 2010; Çoban et al 2008).

The Relationship between Anxiety Level and Sexual Satisfaction

A positive correlation was found between sexual satisfaction and the state and trait anxiety levels of the women participating in our study ($p<0.01$). Women's sexual satisfaction was found to decrease with increasing anxiety levels (Spielberger 1983; Pazmany et al 2013). According to Api (2005), a significant decrease occurs in the sexual activity and libido of women after the menopause, and they also feel anxious due to the reluctance that they experience. The study conducted by Schnatz et al., (2010) Among to among women who reported a decrease in sexual desire, the prevalence of anxiety was 76.6% (36 of 47) vs. 45.7% (16 of 35) for women who reported no decrease in sexual desire ($p=0.01$).

In our community, there is a false belief that the sexual life of a woman completely ends during the menopause and that she becomes no different from a man. However, there is no upper age limit for sexual activity, and since there is no longer a possibility of getting pregnant, the chance emerges for a woman to experience sexual activity just to satisfy her desires (Api 2005).

6. Conclusions and recommendations,

In conclusions, in our study we found that there is a positive correlation between sexual life scores and women's state-trait anxiety levels, and that women's sexual satisfaction decreased with increasing levels of anxiety.

In the study, while problems were found in the sexual frequency, satisfaction, sensuality, vaginismus and anorgasmia dimensions of the GRISS inventory for the women, and their state anxiety levels were found to be moderate. Therefore, it is recommend that women are informed during the menopausal period about sexuality, and that psychological consultancy services are provided. Informing women's husbands and families about the problems that can be experienced during the menopausal period would enhance their social support, and qualitative studies that may reveal the reasons for women's low sexual satisfaction should be performed.

Limitations of the study

The research was conducted on women living in a region of Health Center. Therefore, the findings of the research could be generalized only to the group.

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