Investigating the prevalence of menopausal complications and its related factors in women referred to Shahroud Health Centers in 2014

Investigando la prevalencia de complicaciones menopáusicas y sus factores relacionados en mujeres referidas a los centros de salud de Shahroud en 2014

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Abstract

Introduction and Objective: Epidemiological studies have shown that 65-85% of women experience menopausal complications. These complications can cause illness and disability, and decrease women's quality of life and endanger the health of the family and society. Therefore, it is important to address menopause and prevent and treat menopausal complications. The aim of this research was to investigate the most common menopausal complications and related factors in Shahroud.

Methodology: This descriptive cross-sectional study was performed on 350 women referred to Shahrood health centers in 2014. A questionnaire including demographic variables, age and duration of menopause, weight, and body mass index (BMI) was used for data collection. Data were analyzed using descriptive statistics and inferential tests through SPSS software.

Results: According to the results, 79.1% of patients had psychological complications, 61.1% had skin complications, 51.7% of them had urogenital complications, 70.9% had cardiac complications, 54% had musculoskeletal complications, and 82.6% had hot flashes. Hot flashes (82.6%) and psychological complications especially hopelessness (82.57%) and depression (80.28%) were the most common menopausal complications.

Conclusion: According to the results, although menopause is a physiological process, the changes that occur in a woman during this period have a negative effect on her temperament and cause depression and anxiety; for decreasing the rate of depression and increasing quality of life, adaptation is needed. Moreover, adequate awareness should be given.

Keywords: Menopause, Psychological Complications, Physical Complications, Shahroud Health Centers.

Resumen

Introducción y objetivo: los estudios epidemiológicos han demostrado que 65-85% de las mujeres experimentan complicaciones menopáusicas. Estas complicaciones pueden causar enfermedades y discapacidades, y disminuir la calidad de vida de las mujeres y poner en peligro la salud de la familia y la sociedad. Por lo tanto, es importante abordar la menopausia y prevenir y tratar las complicaciones menopáusicas. El objetivo de esta investigación fue investigar las complicaciones menopáusicas más comunes y los factores relacionados en Shahroud.

Metodología: este estudio transversal descriptivo se realizó en 350 mujeres referidas a los centros de salud de Shahrood en 2014. Se utilizó un cuestionario que incluía variables demográficas, edad y duración de la menopausia, peso, IMC para la recolección de datos. Los datos se analizaron mediante estadísticas descriptivas y pruebas inferenciales a través del software SPSS.

Resultados: de acuerdo con los resultados, el 79.1% de los pacientes tuvo complicaciones psicológicas, el 61.1% tuvo complicaciones en la piel, el 51.7% tuvo complicaciones urogenitales, el 70.9% tuvo complicaciones cardíacas, el 54% tuvo complicaciones musculoesqueléticas y el 82.6% tuvo sofocos. Los sofocos (82.6%) y las complicaciones psicológicas, especialmente la desesperanza (82.57%) y la depresión (80.28%) fueron las complicaciones menopáusicas más comunes.

Conclusión: según los resultados, aunque la menopausia es un proceso fisiológico, los cambios que ocurren en una mujer durante este período tienen un efecto negativo en su temperamento y causan depresión y ansiedad; para disminuir la tasa de depresión y aumentar la calidad de vida, se necesita adaptación. Además, debe darse una conciencia adecuada.

Palabras clave: Menopausia, complicaciones psicológicas, complicaciones físicas, centros de salud de Shahroud.

Introduction

Women are among vulnerable groups in every society. The woman's physiological condition basically puts her in high risk. These include puberty, pregnancy, breastfeeding, and menopause, which require women to be more attentive to health[1]. Epidemiological studies have shown that 65-85% of women experience menopausal complications[2]. Menopause is a definite stage in the lives of women they will inevitably face. The onset of menopause occurs gradually over a period of time called the transition period of menopause.

Menopause has a genetic aspect and occurs on average at 51 years of age. Increased life expectancy has led to a longer period of time for menopausal women[3]. Menopause has many early and late complications. These complications can be divided into two categories: 1. Problems due to the definitive effect of estrogen deficiency. 2. Problems caused by the potential effect of estrogen deficiency. Early complications include hot flashes, insomnia, sweating, anxiety, palpitations, headaches, decreased concentration, decreased libido, and late complications include: cardiovascular complications and osteoporosis[4].

Menopause is a period of adjustment to the new biological status that occurrs in middle age for all women between the ages of 40 and 55; nowadays, due to increased life expectancy, women spend at least one third of their lives in menopause. Factors such as genetics, race, health and lifestyle influence the time it occurs.

Menopause is a menstruation stop for a period longer than one year and begins with changes in ovarian function[5]. As the menopause progresses to the post-menopausal period, which includes an irregular menstrual period for approximately 2 years, the production of ovarian hormones gradually decreases.

During this period, as the hypothalamic-pituitary-ovarian axis changes, the ovarian activity ceases; this leads to a significant decrease in ovarian estrogen level. The physiological effects associated with this hormonal change have adverse effects on this stage of women's life.

Studies have shown that changes in serum levels of this hormone during menopause are associated with changes in the postmenopausal women's body composition. This leads to a decrease in Lean body mass (LBM) and an increase and redistribution of adipose mass (FM) in the abdominal area. Fatless mass loss during this period has been attributed to several factors, including estrogen or progesterone deficiency, changes in muscle or adipose tissue metabolism, changes in dietary habits, lifestyle changes, environmental factors, genetic predisposition and aging[6].

On the other hand, weight gain and obesity in postmenopausal women is significant because in addition to increasing fat mass, it is associated with a change in its distribution to the abdominal area[7]. The results also showed that postmenopausal women had an increase in intra-abdominal fat mass by 21% and subcutaneous fat by 22% compared to women who were close to menopause. Physiologically, follicular dysfunction and decreased estrogen levels are associated with many symptoms[8]. These complications cause illness and disability, and decrease their quality of life and endanger the health of the family and society.

Although menopausal symptoms do not threaten women's lives, the long-term effects of estrogen deficiency that can lead to osteoporosis and brain and heart attacks endanger women's lives. On the other hand, this period is mostly associated with arthritis, hypertension, diabetes and other disorders. Increasing age and post-menopausal hormone levels along with decreased physical activity also prepares the ground for weight gain, especially fat mass, which leads to undesirable changes in body composition[9]. Because of the complexity of its symptoms and their side effects, the menopausal crisis affects the mental, social, emotional, social health and family relationships, since menopausal complications greatly reduce the quality of life of menopausal women. It is important to study these complications and their cause.

The overall aim of this article was to determine the prevalence of menopausal complications and its related factors in women referred to Shahrood health centers in 2014.

Materials and methods

This was a cross-sectional descriptive study. The population under study was women referred to Shahroud health centers in 2014. The sample size was estimated to be 350 people who were selected by sampling at convenience. Inclusion criteria were menopausal age (on menopause for more than or equal to one year) and female gender. Exclusion criteria included reproductive ages associated with menstruation. First during a session, the participants were familiarized with the type of project, its goals and the method of its implementation. Subjects were assured that the information received would be kept confidential and that the coding method would be used to examine the data. They were also allowed to withdraw if they did not wish to continue cooperation. A questionnaire including demographic variables, age and duration of menopause, weight, and BMI was used for data collection. Data were analyzed using descriptive statistics (frequency, percentage, mean and standard deviation), inferential tests (Chi-square, Fisher and independent t-test) at the significance level less than 0.05 by the use of SPSS, version 21, software.

According to the data (Table 1), 6% had very good economic status, 17.7% good, 64.6% moderate and 11.7% were weak.

Table 1. Frequency distribution of economic status in patients under study

Variable/ economic status	Frequency	Frequency percentage	Validity percentage	Accumulative percentage
Weak	41	11.7	11.7	11.7
Moderate	226	64.6	64.6	76.3
Good	62	17.7	17.7	94
Very good	21	6	6	100
Total	350	100	100	

According to the data (Table 2), 79.1% had insomnia, 80.28% had depression, 74.57% had fatigue, 66.85% had irritability, 20.85% had memory impairment, 78.85% had headache and 65.71% felt hopeless.

Table 2. Frequency distribution of psychological complications in the patients under study

Variable	Frequency	Frequency percentage
Insomnia	277	79.1
No insomnia	73	20.9
Total	350	100
Depression	281	80.28
No Depression	69	19.71
Total	350	100
Fatigue	261	74.57
No Fatigue	89	25.42
Total	350	100
Irritability	234	66.85
No Irritability	116	33.14
Total	350	100
Memory impairment	73	20.85
No Memory impairment	277	79.14
Total	350	100
Headache	276	78.85
No Headache	74	21.14
Total	350	100
Feeling hopeless	230	65.71
No frustration	120	34.28
Total	350	100

According to the data (Table 3), 61.1% of people had hair loss and 58.85% had wrinkles.

Table 3. Frequency distribution of dermatologic symptoms in patients under study

Variable	Frequency	Frequency percentage
hair loss	214	61.1
No hair loss	136	38.9
Total	350	100
Skin wrinkles	206	58.85
No wrinkles on the skin	144	41.14
Total	350	100

According to the data (Table 4), 17.7% of patients had painful intercourse, 29.1% had vaginal and vulvar pruritus, 36.0% had abnormal bleeding and 63.14% had urinary incontinence.

Table 4. Frequency distribution of urogenital complications in the patients under study

Variable	Frequency	Frequency percentage
Painful intercourse	62	17.7
No Painful intercourse	288	82.28
Total	350	100
Itching of Vagina and vulva	102	29.1
No itching of the vagina and vulva	248	70.9
Total	350	100
Abnormal bleeding	126	36
No abnormal bleeding	224	64
Total	350	100
urinary incontinence	221	63.14
No Urinary incontinence	129	36.85
Total	350	100

According to the data (Table 5), 70.9% had hypertension and 42.28% had dyspnea.

Table 5. Frequency distribution of cardiovascular symptoms in the patients under study

Variable	Frequency	Frequency percentage
blood pressure	248	70.9
No blood pressure	102	29.1
Total	350	100
Shortness of breath	148	42.28
No shortness of breath	152	57.72
Total	350	100

According to the data (Table 6), 54.0% of people had muscle or bone pain.

Table 6. Frequency distribution of musculoskeletal complications in the patients under study

Variable	Frequency	Frequency percentage
Muscle or bone pain	189	54
No muscle or bone pain	161	46
Total	350	100

According to the data (Table 7), 82.6% of people had hot flashes.

Table 7. Frequency distribution of hot flashes in the patients under study

Variable	Frequency	Frequency percentage
Hot flashes	289	82.6
No flushing	61	17.4
Total	350	100

Based on the data (Table 8), the relationship between factors associated with some menopausal symptoms was less than 0.05 at the significance level.

Table 8. Frequency distribution of factors associated with some menopausal symptoms

Variable	Psychological Complications	Skin Complications	Urogenital Complications	Cardiovascular Complications	Musculoskeletal Complications	Hot flashes	P
Age	Older age	Older age	Older age	Older age	Older age	Older age	0.001
BMI	-	Higher BMI	Higher BMI	-	Higher BMI	lower BMI	0.001
Age of first pregnancy	lower Age of first pregnancy	lower Age of first pregnancy	lower Age of first pregnancy	lower Age of first pregnancy	lower Age of first pregnancy	lower Age of first pregnancy	0.001
Menopause Age	-	lower Menopause Age	lower Menopause Age	Higher Menopause Age	-	higher Menopause Age	0.001
Menopause Duration	Longer	Longer	-	-	Longer	Longer	0.003
Gravid	more	more	more	more	more	more	0.001
Abdominal circumference		higher	higher	-	higher	-	0.001
marriage age	-	lower	lower	-	lower	-	0.001
Menarche age	-	lower	lower	higher	-	higher	0.038
Early puberty	-	lower	lower	higher	lower	-	0.001
History of breastfeeding	lower	lower	-	lower	lower	lower	0.001
smoking	More	more	-	more	lower	lower	0.015
Exposure to smoking	more	more	-	more	-	lower	0.002
Location	-	-	City	city	village	-	0.013
economic situation	Low	Low	moderate	moderate	moderate	low	0.001

Discussion

Menopause reduces women's quality of life and affects all aspects of a person's health, including vasomotor, psychosocial, physical, and sexual aspects. The quality of life of women is severely threatened in the period of menopause by the increase of symptoms. In the current research, the prevalence of painful intercourse (17.7%), itching of vagina and vulva (29.1%), abnormal bleeding (36.0%), memory impairment (20.85%) and shortness of breath (42.28%) was less than 50%. Menopausal complications such as insomnia (79.1%), depression (80.28%), fatigue (74.57%), irritability (66.85%), headache (78.88%) and hopelessness (65.71%), hair loss (61.1%), wrinkles (58.85%), urinary incontinence (63.14%), blood pressure (70.9%), muscle or bone pain (54.0%) and hot flashes (82.6%) were reported over 50%.

Although women may find it advantageous to end menstruation and fertility, the menopausal symptoms such as hot flashes, headaches, sleep disturbances, and mood disorders can affect women's quality of life during this period. The present research showed that 79.1% had psychological complications, 61.1% had cutaneous complications, 51.7% of patients had urogenital complications, 70.9% had cardiac complications, 54% had musculoskeletal complications and 82.6% had hot flashes. They were associated with several factors including age of menarche, early puberty, cigarette smoking, breastfeeding history and drug use history. The most common symptoms of menopause were hot flashes and sweating (50.7%) in the research of Krakkam and Seker, conducted on the rural women in Turkey[10]. However, in the research of Fa et al., conducted on the Taiwanese women, only 16.7% of women had hot flashes[11].

In the present research, the most common problems in the postmenopausal women were related to psychological complications and hot flashes. Hot flashes are the most common and objective menopausal phenomena that appear as a sudden onset of redness of the scalp and neck skin with severe heat sensation in the body and with excessive sweating. The present research was consistent with a study conducted by Jahanfar et al. in Tehran. These studies also reported hot flashes as the most menopausal complications[19].

In this study, depression was identified with 80.28% of the most common menopausal complications in the menopausal women in Tehran. These results suggested that psychological problems in the menopausal age and later are related to most of the individual's social and hormonal profile. Depression in menopause depends on a variety of causes. Personal and cultural issues and previous history of depression, level of education and regular exercise, presence of premenstrual syndrome, presence of spouse, economic status, smoking, occupation and adjustment to life status are among the effective factors. Depression leads to the disruption of the normal pattern of sleep, and in menopause, the pattern of sleep and wakefulness changes. Entoyjoice et al. stated that in-

creasing age and decreasing ovarian steroids, endocrine abnormalities stimulated sleep with depression. In Freeman's study, depressed women also had more hot flashes and had difficulty in maintaining sleep. In a research done by Kah et al. (2000), it was found that women at age 48 were more likely than men to suffer from depression; the cause of these stresses was linked more to the decline in sex hormones. A study conducted by Chardon et al. in Sweden, the researchers found that the most important menopausal complication was related to the quality of life, psychological problems and the most effective factor in reducing them was spouse's support.

Also, the prevalence of psychological complications was high in this study. Hot flashes can cause them discomfort, insomnia, and low self-confidence, and these symptoms can be compounded by depressive disorders. In his research, Soling pointed out that contrary to what was thought to be the vasomotor as the most common problem in menopausal women, mental and psychological changes had the highest frequency and severity[18]. In a research, Carpenter et al. found that hot flashes affected work, social activity, leisure time, sleep, mood, concentration, communication with others, sexual activities, enjoyment of life, and overall quality of life [12]. Jimenez and Perez reported that the most common symptoms of this period were hot flashes, fatigue, irritability, emotional instability, and depression, which was close to the results of the current study[13].

A study carried out by Freeman et al. showed that the risk of depressive symptoms increased during menopause[14]. In Kumari's study, high levels of depression in menopause have also been reported. Psychological problems, fatigue, and reduced energy are common problems[15]. In their study, Clayton and Ninan have considered the risk factors for depression in menopausal transition to be low literacy level, pre-menopausal depression, stressful life events, unhealthy lifestyle, negative attitude towards old age, early menopause and abnormal hormone changes[16].

In the present research, the least complaints were related to memory impairment (20.85%) and painful intercourse (17.7%).

Conclusion: According to the results of this study, it was concluded that hot flashes (82.6%) and psychological complications especially hopelessness (82.57%) and depression (80.28%) are the most common menopausal complications associated with various factors. According to the present study, although menopause is a physiological process, the changes that occur in a woman during this period have a negative effect on the mood of postmenopausal women and cause their depression and anxiety. Reduced depression and increased quality of life in menopause require adaptation; this needs adequate information. Some measures such as appropriate nutrition, adequate mobility, timely diagnosis of internal diseases and care prevent the progression of diseases. Providing adequate training, nutrition and exercise are the obstacles of reduction of the person's physical ability. Therefore, by appropriate training and timely follow-up of women and with appropriate screening, the physicians can take the most important steps in improving women's health and reducing women's physical and mental problems and prepare them for their different periods of life, such as menopause, to suffer less from mental disorders.

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