

Menopausal Syndrome - an Overview

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Abstract

Menopause is the natural cessation of a woman's menstrual cycle, and marks the end of fertility. Most women experience menopause by the average age of 52, but pelvic or ovarian damage may cause sudden menopause earlier in life. Genetics or any disease conditions may also lead to early onset of menopause. Perimenopause and post menopause are the two different stages of menopause. The beginning of irregular menses to the first 12 months of amenorrhea is perimenopause and the period after menopause is post menopause. Women experience various physiological and psychological changes during their menopausal period which will affect their quality of life and health. The main objective of this review was to assess the literature concerning the various postmenopausal symptoms and prevalence. In many research they reported that the most common symptoms in menopausal women are somatic symptoms such as hot flushes, heart discomfort, sleep problem, muscle and joint pain. The psychological symptoms like depression, anxiety, irritability, physical and mental exhaustion, sexual problem, bladder problem and dryness of vagina are the urogenital symptoms. The menopause in women is stressful and produces many changes in vital parameters. The low intakes of dietary iron and calcium are common in menopausal women. As a conclusion of this study proper diet, improved life style, self-care, medical support and awareness program can help to reduce the postmenopausal symptoms and increase their quality of life.

Keywords: Post-Menopausal Women, Prevalence, Quality of Life, Symptoms

1. Introduction

During lifetime there are lots of changes that occur in women's life. One of the most critical stages of women's life is menopause. WHO defines menopause as the permanent cessation of menstruation resulting from loss of ovarian follicular activity. Diagnosis of menopause is not made until the individual has had 12 months of amenorrhea. Postmenopausal women have to face a lot of problems, both physically and psychologically. They have to cope with these changes and accept their new role in the society and family. Menopause can have a variety of symptoms related to hormonal deficiencies such as vaginal dryness, hot flushes and mood swings like irritability etc.

In fact, some studies have concluded that menopause is one of the major risk factors for major depressive disorder

The postmenopausal age period is between 40 and 60 years that marks the end of the reproductive phase of a woman's life¹. Menopause is defined by the World Health Organization as twelve months of amenorrhea after the last menstrual period is the result of complete or partial absence of oestrogen release from ovaries as well as depletion of ovarian follicles².

There are two different stages of menopause, a) Perimenopause- the beginning of irregular menses to the first 12 months of amenorrhea and b) Post menopause- the period from the last menses to the death. There are two types of postmenopausal period they were early postmenopausal and late post menopause. The

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first five years postmenopausal period are defined as early post menopause, which is followed by late post menopause.

Mishra³ states that basically life expectancy is higher for females when compared to males across the globe including India. Thus, in general, females spend 1/3rd of their life in postmenopausal phase. Randolph⁴ reported that women experience various physiological and psychological changes during their menopausal period which will affect their quality of life and health. According to Nisar and Sohoo⁵ these in turn are thought to increase the risk of various chronic diseases including heart diseases and osteoporosis. More than 80% of women experience physical or psychological symptoms in the year approaching menopause.

In a study by Ramteke *et al.*⁶ among the selected subjects' hot flushes were the most common vasomotor symptom which was seen in 68% of the subjects. Night sweats were seen in 47% of the subjects. Among psychosomatic problems sexual problems, physical exhaustion and sleep disturbances were commonest problems seen in 86%, 81% and 68% respectively. Among urinary problems dysuria (32%), urgency (04%) and incontinence (27%) were commonly seen in postmenopausal women. The most common sexual problem in postmenopausal woman was decreased interest in sexual activity which was seen in 87% women. The common medical problems studied in the women were joint pains and muscular pains, vision problems, dental problems, hypertension and diabetes. Hence 78% of the women were not doing any kind of exercise before or after menopause.

2. Postmenopausal Rating Scale

Based on this evidence review the postmenopausal symptoms were measured in many studies by using a menopausal rating scale (MRS). The scale was designed and standardized as a self-administrated scale to assess the symptoms of aging women under different conditions and to evaluate the severity of the symptoms. It also helps to measure the changes between pre and postmenopausal replacement therapy⁷. This scale contains 11 items and they are divided into three subscale as somatic symptoms, psychological symptoms and urogenital symptoms.

2.1 Somatic Symptoms

2.1.1 Hot Flushes

Studies of Stearns *et al.*⁸ showed that the most common complaints among the menopausal women was hot flushes affecting up to 80% of women within the first year of cessation of menses. Hot flushes is a sudden feeling of warmth, usually most intense over the face, neck and chest, and profuse sweating, commonly due to menopause. This symptom resolve in many women within a few years of menopause, but in some women it report for many years. Most of the research on hot flushes has focused on perimenopausal and early postmenopausal women. Although in few studies they revealed about hot flushes in later postmenopausal women and pointed out a significant prevalence of hot flushes in their population. The prevalence of hot flushes in postmenopausal women had not been well documented and there was no clear evidence, why hot flushes resolve in some women but continue for many years in others⁹.

2.1.2 Heart Discomfort

The estrogen withdrawal in menopause women has a detrimental effect on cardiovascular function and metabolism which may leads to CVD risk. The menopausal women experience some heart problems during this transition period like heart palpitation or increase in blood pressure, shortness of breath, pressure in the chest, etc. A study conducted with 500 postmenopausal women were screened for a detailed information regarding common menopausal symptoms. It was found that 30% of the population having heart palpitation complaint¹⁰. In recent study conducted with 199 menopausal patients reveals that 67% of the population reports heart burn complaints¹¹. So these studies recorded that heart discomfort are also plays a major role in menopausal symptoms and there are many studies which reports about the heart discomfort in menopausal women.

2.1.3 Sleep Problem

Women experience more detrimental effects on sleep in association with aging¹². Santoro *et al.*¹³ reported that when women enter into menopausal stage they reports many sleeping troubles and difficulties. This is because of their hormonal changes due to aging and transition.

Difficulties of sleep increase in women more than 50% of population by the post menopause. The treatment of sleep problems depends on the clinical findings. For example sleep apnea is treated with continuous positive airway pressure device.

2.1.4 Muscle and Joint Problem

Menopause may cause joint pain which can affect the knees, shoulders, neck, elbows, or hands. There are number of causes of joint pain during menopause including hormonal changes, dehydration, stress, weight gain, diet, poor posture, lack of exercise and increased sensitivity to pain. A study conducted with 199 post menopause patients reported that 90.45% of the study population having joint and muscular discomforts¹¹. Musculoskeletal diseases are prevalent in menopausal and aging women. For example the most common musculoskeletal disorder was osteoporosis which is largely a preventable and treatable disease. It can also be prevented and treated with menopausal hormone therapy (MHT)¹⁴ and also by simple and natural things like drinking plenty of liquids, strengthen the muscle and joints, correct the posture and nutrition supplementing (<https://www.avogel.co.uk/health/menopause/symptoms/joint-pain>)¹⁵.

2.2 Psychological Symptoms

2.2.1 Depression

The menopause can affect the mental health of the women due to their physiological and hormonal changes during this transition. Depression is one of the common problem in menopausal women. And also a study reveals that depression level is higher in employed postmenopausal women when compared to unemployed postmenopausal women¹⁶.

According to Ahlaawat *et al*¹⁷ depression was found to be present more in women belonging to the younger age group. In the age group of 41–45 years, 76.9% women had mild depression and 19.2% were with moderate depression. In the age group of 46–50 years, 60.6% had mild depression and 4.2% were with moderate depression, whereas in the age group of 51–55 years, 21.8% and 1.9% women had mild and moderate depression respectively and in the age group of 56–60 years 18.4% had mild depression and none presented with moderate depression. Data clearly show young postmenopausal women were

more in depression which is similar to a study by Unsal, *et al*¹⁸ in Turkey, in which depression was more in women who entered the menopause at early age (<39 years).

2.2.2 Irritability

Irritability is a prominent symptom in female specific mood disorder. Irritability can be experienced by the women during menstrual cycle, childbearing or menopause. Irritability may result from an elevated sensitivity to environmental events, decreased hormonal levels, changes in socioeconomic and/or marital status, culture, lifestyle factors, level of education, and history of depressive symptoms¹⁹. In contrast to depressive symptoms, the irritability was more associated with estradiol level²⁰. A study by Nath, *et al*²¹ reported that prevalence of irritability was 53.5% amongst the study participants.

2.2.3 Anxiety

The fluctuation of estrogen and another hormone progesterone in the body can cause feelings of anxiety or depression. Hormone therapy, antidepressants, psychotherapy, or supplements for better mood are some possible treatments for menopause related anxiety (<https://centerforanxietydisorders.com/treatment-programs/menopause-anxiety>). A study conducted by Heidari *et al*²² in 2017 with 300 postmenopausal women reported that 71.3% in study population complaints anxiety. Multidimensional sexual self-concept and depression anxiety stress scale 21 (DASS-21) questionnaire was used in this study to collect the information. Poomalar and Arounassalame²³ found the prevalence of anxious mood as 67.2% and 78.8%, respectively. Study by Nobahar *et al*²⁴ reported that among 120 postmenopausal women, anxiety levels were mild (46.7%), moderate (50.8%), and severe (2.5%); additionally, 79.2% had lower stress and 20.8% had greater stress.

2.2.4 Physical and Mental Exhaustion

Fatigue is defined as a feeling of extreme exhaustion and complete lack of energy. Fatigue is an emotionally and mentally draining common problem throughout the menopause. Menopausal fatigue is often thought to be the result of hormone imbalances. In a current study, physical and mental exhaustion were found to be 79.89%,

while a study conducted by Pal *et al*²⁵. at Maharashtra found physical and mental exhaustion being the highest symptom that were 86.6% and 85.4%, respectively. As a conclusion in another study, psychological distress is associated with vasomotor symptoms, fatigue, and change of body composition (obesity). Psychological symptoms, along with vasomotor symptoms, express a key link to negative attitudes toward menopause. Therefore, interventional strategies that target psychological distress may promote coping with midlife transition and improve mental health among menopausal women²⁶.

2.3 Urogenital Symptoms

2.3.1 Sexual Problem

As the results of the reviewed articles reported that, sexual disorders in menopause can be affected by some of the individual. Therefore, there are many policies and programs were developed for improving the quality of life of women in menopause and it should be aimed at eliminating sexual dysfunction, correcting attitudes and negativity. The sexual dissatisfaction and dysfunction are highly prevalent in perimenopausal and postmenopausal women²². In a study conducted by Dombek *et al*²⁷. in 2016 reported that the rate of sexual dysfunction was 70.3% among postmenopausal women.

2.3.2 Bladder Problem

Hillard²⁸ stated that after the menopause immediately there was occurrence of physiological and anatomical changes. The bladder symptoms, such as frequency, urgency and incontinence and their prevalence seem to increase around the menopause. Both estrogen and progesterone level have an effect on the urogenital tract problems which are reviewed. So that estrogen replacement would have a positive effect on bladder symptoms. The second most common problem found in one of the study was bladder problem (87.93%) from the selected population, which is quite higher than the results observed in a study done by Surendar *et al*²⁹ at Puducherry (63.17%) and Pal *et al*²⁵. at Maharashtra (56.6%).

2.3.3 Dryness of Vagina

In menopause women vaginal dryness is the first reported symptom, due to a reduction in urogenital mucus

production. Due to the less production of estrogen during menopause the skin and supportive tissues of vagina become thin and less elastic. These common symptoms are experienced by many women during this period. The pH (acidity) of the vaginal secretions and the normal discharge are associated with estrogen level. Half of the women (n = 471) reported problematic vaginal dryness, a third (n = 316) reported itching in a study by Huang *et al*³⁰.

3. Conclusion

The menopausal symptoms are highly preventable and the physical symptoms (joint and muscle pain) among menopausal women were the most commonly reported one followed by psychological symptoms. It may be due to improper diet intake which leads to micronutrient deficiency. The proper management of the symptoms caused by menopause and its associated comorbidities may reduce the negative impact which cause psychology problem in menopausal women. Physical activity, routine physical check-up and investigations, dietary counseling and treatment accordingly may reduce the symptoms of menopause, thereby improving quality of life. It was concluded that proper diet, improved life style, self-care, medical support and awareness program can help to reduce the postmenopausal symptoms and increase their quality of life.

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