

# Menopause as a Stage of Life and a Guide to a Healthy Menopause Transition

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## Abstract

*Menopause is a normal physiological stage of life of a woman that occurs between 45 and 55 years of age group. When a woman enters menopause, her ability to conceive and her ovarian activity permanently cease. The menopausal transition is a crucial factor in many symptoms that are prevalent in middle age and may be linked to chronic illnesses and aging-related disorders. Appropriate identification and treatment of signs and symptoms of menopause help to prevent complications such as obesity, osteoporosis, heart disease, etc. A healthcare provider plays a major role in creating awareness and providing supportive services to women. Through a lifestyle approach, we can improve the quality of life of women during the menopausal transition.*

**Keywords:** Menopause, premenstrual syndrome (PMS), osteoporosis, dyspareunia, obesity

## INTRODUCTION

*“Menopause is not a disease—It’s a natural process that all women go through”.*

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By the age of 50, all women go through a stage of life known as menopause, which is unique to women [1, 2].

Menstruation has stopped permanently for at least 12 months, which is a symptom of the common, non-pathologic condition known as menopause. All menstrual females experience menopause as a result of non-pathologic estrogen depletion [3]. The menopausal transition typically begins between ages 45 and 55. Although it can continue up to fourteen years, it normally lasts seven years [4]. 51 is the average age for menopause [3]. Enhancing quality of life is one of the objectives of health for all [5].

Menopause signifies the end of a woman's ability to procreate and the permanent cessation of ovarian function. Several symptoms that are common in middle age and may be connected to chronic illnesses and aging-related disorders are heavily influenced by the menopausal transition. An evidence-based care strategy improves results while enhancing the quality of life [6].

## PREVALENCE

The menopause transition affects 1.5 million women annually, and it commonly results in unwelcome symptoms such as vasomotor symptoms, vaginal dryness, decreased libido, sleeplessness, weariness, and joint pain [7].

More than 51 million women in the United States are currently experiencing or have just experienced menopause, according to the National Center for Health Statistics. Globally, 1.2 billion women are anticipated to experience menopause by the year 2030 [8].

## MEANING

Menopause is the word used to describe the end of menses and ovarian function permanently. When a woman enters menopause, her ability to conceive and her ovarian activity permanently cease. The menopausal transition is a crucial factor in many symptoms that are prevalent in middle age and may be linked to chronic illnesses and aging-related disorders. An evidence-based plan of care enhances the quality of life while improving outcomes [9]. Menopause is characterized by the menstrual cycle ceasing for at least a year [10].

## STAGES OF MENOPAUSE

According to Hannah R and Noelina R [9], menopause can be described in four stages (Figure 1): (1) pre-menopause, (2) perimenopause, (3) menopause, and (4) post-menopause.

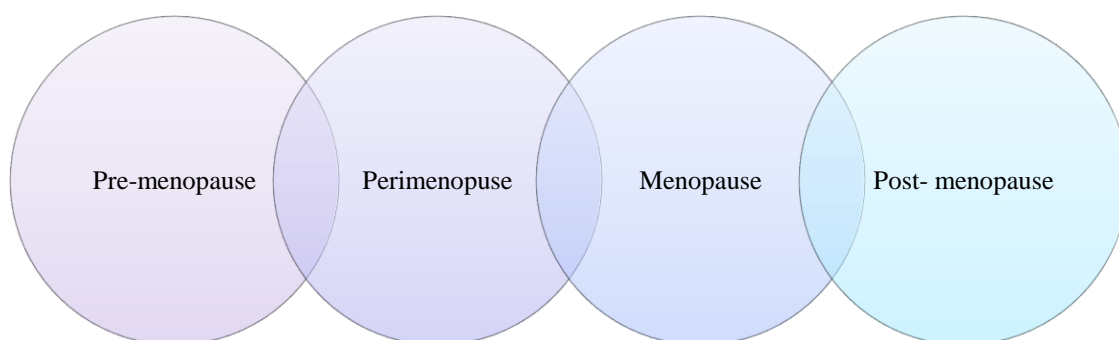
Menopause is a natural life transition that starts between the ages of 35 and 55. Throughout each stage of menopause, women encounter a variety of symptoms [11–13].

### Stage I (Pre-menopause)

The first phase of menopause is known as pre-menopause. It starts from adolescence and lasts into the initial perimenopause. Regular menstrual cycles are experienced by women and are regulated by reproductive hormones. If a woman has no problems with her fertility, she will be able to conceive.

Pre-menopause lasts for 30 to 35 years on average. In the week or two preceding menstruations, women may occasionally experience premenstrual syndrome (PMS) symptoms as a result of monthly hormonal variations. Among the most typical PMS signs are:

- Irritability
- Anxiety
- Headaches
- Abdominal cramps
- Breast tenderness



**Figure 1.** Four stages of menopause.

## **Stage II (Perimenopause)**

The second phase of menopause is known as perimenopause. The 3–5-year interval preceding menopause is brought on by changes in the levels of the hormones—estrogen and progesterone.

This stage typically lasts four years on average, but it can occasionally last just a few months or even up to ten years [10]. Because of the erratic hormone levels during this time, the following symptoms are most frequently experienced:

- Irregular periods
- Mood changes
- Hot flushes
- Night sweats
- Loss of libido
- Sleep disturbances-insomnia
- Night sweats
- Elevated heart rate
- Vaginal dryness or discomfort during sexual intercourse
- Urinary issues

It is advised to use birth control up until a year following the previous period to reduce the possibility of the woman becoming pregnant during this time. Moreover, progestin medication may be used to treat vasomotor symptoms and regulate menstrual bleeding. Lifestyle changes are frequently advised to help alleviate other unpleasant symptoms.

## **Early Menopause**

Menopause can occur sooner due to certain circumstances other than aging naturally:

- *Hysterectomy (uterus removed)*: symptoms appear gradually
- *Oophorectomy (ovaries removed)*: symptoms appear immediately
- *Premature ovarian failure (POF)*: Ovaries that are inactive or underactive as a result of cancer therapies including radiation therapy or chemotherapy, surgery, or genetics. Insufficient follicles, which develop as eggs, or ovarian malfunction can potentially be the cause of POF.

## **Stage III (Menopause)**

Most women start menopausal symptoms between the ages of 51 and 52 on average. If a woman has missed her period for 12 months in a row without having experienced any other factors, such as illness, medicine, pregnancy, or breastfeeding, then technically, menopause has occurred. It might take one to three years to get from perimenopause to menopause and into post-menopause. It is crucial to keep in mind that each woman is different and will go through menopause differently. Some women suffer few, if any symptoms, and for those that do, the symptoms might vary widely. Menopause typically occurs at age 51. From the perimenopausal stage forward, women continue to experience menopausal symptoms.

## **Stage IV (Post-menopause)**

After one year of the menopausal period or one year following the last menstrual cycle, the postmenopausal stage begins.

Hot flashes, night sweats, an increased heart rate, sleeplessness, and mood swings including irritability, despair, anxiety, urinary problems, and vaginal dryness are just a few of the symptoms that will persist during the postmenopausal phase and may cause pain during sexual activity. If appropriate therapy is not given, persistently low hormone levels may increase the chance of developing significant health issues. They include:

- Osteoporosis
- Incontinence
- Urinary tract infections
- Heart disease
- Dyspareunia

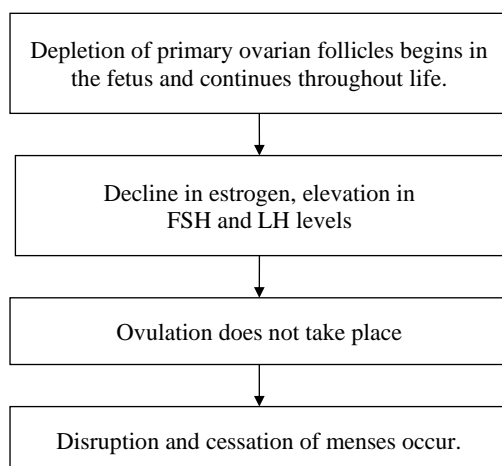
By fostering hormonal health, aging women can alleviate any symptoms and lower their chance of consequences.

### PHYSIOLOGY OF MENOPAUSE

Menopause is resulting in disruption and then a cessation of menses typically between the ages of 45 and 55 years [14].

Age-related menopause is a typical physiological process in which the number of primary ovarian follicles rapidly declines to levels insufficient to react to follicle-stimulating hormone (FSH). In turn, there is no LH surge and no ovulation, which prevents estrogen synthesis from increasing and menstruation from ceasing. In addition, LH and FSH continue to function normally and stay at high levels for years after menopause starts. Although some people may not experience symptoms beyond the cessation of periods, small levels of estrogen may still be created via conversion from testosterone released by the adrenal glands (Figure 2) [15].

Surgical procedures like a hysterectomy with bilateral oophorectomy can potentially cause menopause. Treatment for certain illnesses, such as endometriosis, breast cancer, and other cancers owing to chemotherapy drugs, can also result in menopause [16].



**Figure 2.** Menopause physiology.

### SIGNS AND SYMPTOMS OF MENOPAUSE

The menopause signs and symptoms are described in mentioned in Table 1 [11, 15–17].

**Table 1.** Menopause signs and symptoms

Vasomotor symptoms	Urogenital symptoms	Psychogenic symptoms
Hot flashes, Night sweats, Palpitations, and Migraines.	Vaginal atrophy, Urethral atrophy, and Sexual dysfunction	Anger/irritability, Anxiety/tension, depression, Sleep disturbance, Loss of concentration, and Loss of self-esteem/confidence.

## DIAGNOSTIC EVALUATION OF MENOPAUSE

Signs and symptoms are merely enough to confirm the menopause. But in some instances, FSH, estrogen, and thyroid-stimulating hormone (TSH) tests will be performed to confirm the diagnosis, because:

- Estradiol and FSH, as menopause cause a decline in estradiol levels and an increase in FSH levels.
- TSH, as hypothyroidism might result in symptoms resembling menopausal symptoms.
- In otherwise healthy women over 45 who exhibit menopausal symptoms, the following criteria can be used to make the diagnosis of menopause without the need for laboratory tests [18].
- Based on vasomotor symptoms and irregular periods, perimenopause.
- Menopause in women who are not using hormonal contraception and have gone at least a year without having their period.

Menopause in women who are using hormone therapy, such as those to manage heavy periods, might be difficult to identify [18].

## MANAGEMENT OF MENOPAUSE

As menopause is a natural physiological transition, no specific treatment is needed; symptomatic treatment can be planned according to the signs and symptoms.

### Medical Management

Symptomatic treatment may include:

- *Hormone therapy*: Estrogen therapy is the best way to treat menopausal heat flashes. Estrogen prevents the thinning of the bones [19, 20].
- *Low-dose vaginal estrogen*: With a vaginal lotion, pill, or ring, estrogen can be directly delivered to the vagina to treat vaginal dryness [20].
- *Low-dose antidepressants*: Menopausal hot flashes may be lessened by a subset of antidepressants known as selective serotonin reuptake inhibitors (SSRIs).
- *Gabapentin (Gralise, Horizant, Neurontin)*: In addition to being approved to treat seizures, gabapentin has also been shown to reduce hot flashes.
- *Clonidine (Catapres, Kapvay)*: Hot flashes may be somewhat alleviated by clonidine, a tablet or patch generally used to treat high blood pressure.
- *Medications to prevent or treat osteoporosis*: Medications to prevent or cure osteoporosis, including vitamin D supplements to help build bones, may be advised depending on the situation.

## COMPLICATIONS

Among the complications linked to aging and the postmenopausal era are;

- Heart diseases
- Osteoporosis
- Urinary problems
- Weight gain
- Type 2 diabetes

## NURSING MANAGEMENT

Menopause nursing care also focuses on the patient's symptoms [17, 21]. Possible nursing diagnoses:

- Altered sleep pattern
- Irritable
- Depressed mood
- Sexual dysfunction

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- Potential for infection
  - Low self-esteem
  - Muscle and joint pain
  - Risk for stress urinary incontinence
  - Excess sweating
  - Skin dryness
  - Painful sexual intercourse
  - Anxiety
  - Hot flashes
  - Risk for injury
  - Risk for infection

### **Nursing Management**

- Collect history and assess the woman for signs and symptoms.
- Check vital signs.
- Provide appropriate information about the menopausal transition.
- Give psychological support.
- Encourage them to take a balanced diet that is calcium-rich.
- Administer medications as prescribed by the physician.
- Encourage them to take Calcium and Vitamin D supplements as per the advice.
- Encourage the woman to practice diversional activities like imagery, muscle relaxation, meditation, and deep breathing exercises to get relief from stress and anxiety and to promote sleep.
- Encourage sleep by offering warm beverages, an extra blanket, and a warm bath prior to bed.
- Tell the patient to refrain from consuming stimulants before bed, such as caffeine-containing beverages and stressful activities.
- Advice to use lubricants during sexual intercourse.
- Encourage them to practice range of motion exercises.
- Encourage the woman to drink an adequate amount of water to maintain hydration.
- Advise the woman to maintain a healthy weight.
- Advise the woman to consult the physician if signs and symptoms are severe.
- Educate the patient about the risk factors such as obesity, heart disease, etc., and their preventive strategies.
- Include the spouse/partner in the care of a woman.
- Advise the woman to practice Kegel exercises.
- Inform the patient to avoid the use of douches, sprays, or irritating soaps.
- Counsel the woman for chronic anxiety or depression.
- Encouraging women to adopt healthy lifestyle practices including abstaining from alcohol, giving up smoking, and following a heart-healthy diet rich in whole grains, fruits, and vegetables will help them to fight off heart issues.

### **LIFESTYLE MODIFICATIONS**

1. *Maintain a healthy diet:* Menopause does not cause weight gain but overweight may cause vasomotor symptoms and other complications. Hot flashes significantly improved with a 10% weight loss in one research of 40 overweight/obese women, and there was a connection between weight loss and a decrease in the frequency of hot flashes [22].
2. *Consume a balanced diet:* In addition to the balanced diet, women need to avoid triggers of vasomotor symptoms like spicy foods. Include calcium and Vitamin D-rich foods to improve bone density.

3. *Phytoestrogens*: Plant-based phytoestrogens which help to relieve the severity of menopausal symptoms are [23]:
  - *Isoflavones*—good sources include soy products (tofu, tempeh, soybeans), beans (such as lima beans, chickpeas, and lentils), and red clover
  - *Lignans*—good sources include flaxseed (also called linseed), fruit, vegetables, and grains
  - *Coumestans*—good sources include sprouting seeds such as alfalfa.
4. Avoid alcohol and smoking [24].
5. Practice regular exercises. Exercises help to maintain optimum body weight.
6. Practice relaxation techniques. Helps to prevent and get relief from vasomotor symptoms.
7. Yoga helps to manage symptoms and promotes sleep.
8. Cognitive behavior therapy—Group and individual cognitive therapy help to manage vasomotor symptoms and promote well-being [25].
9. Exercises for deep breathing—Even though doing 15 minutes of slow, deep abdominal breathing twice a day may help to lessen the anxiety that comes along with hot flashes, it does not affect how severe they are [25].
10. Medicinal plants—To help treat menopausal symptoms like sleep disturbance, mood changes, libido changes, hot flushes, and night sweats, an herbalist or naturopath may prescribe herbal medicines.
11. Hypnotherapy—There is some evidence that hypnotherapy helps to improve certain menopausal symptoms such as hot flushes [26].

## CONCLUSION

A healthcare professional is crucial in raising awareness and offering women's support services. We can enhance the quality of life for women going through the menopausal transition by adopting a healthy lifestyle.

## REFERENCES

1. Peacock K, Ketvertis KM. Menopause. 2022 Aug 11. In: StatPearls [Online]. Treasure Island (FL): StatPearls Publishing; 2023.
2. Ghazanfarpour M, Kaviani M, Abdollahian S, Bonakchi H, Najmabadi Khadijeh M, Naghavi M, et al. The relationship between women's attitude towards menopause and menopausal symptoms among postmenopausal women. *Gynecol Endocrinol*. 2015;31(11):860–5. doi: 10.3109/09513590.2015.1056138.
3. Yanikkerem E, Koltan SO, Tamay AG, Dikayak Ş. Relationship between women's attitude towards menopause and quality of life. *Climacteric*. 2012 Dec;15(6):552–62. doi: 10.3109/13697137.2011.637651.
4. National Institute on Aging. What is menopause? Available from: <https://www.nia.nih.gov/health/what-menopause>.
5. Kulasingam S, Moineddin R, Lewis JE, Tierney MC. The validity of the menopause-specific quality of life questionnaire in older women. *Maturitas*. 2008;60(3–4):239–43. doi: 10.1016/j.maturitas.2008.07.002.
6. Ellington K, Link T, Saccomano SJ. Menopause: A primary care perspective. *Nurse Pract*. 2022;47(2):16–23. doi: 10.1097/01.NPR.0000806384.48601.29.
7. World Health Organization. Research on the menopause in the 1990s (Report of a WHO scientific group, WHO Technical Report Series, 886). Geneva: World Health Organization; 1996.
8. Syed Alwi SA, Lee PY, Awi I, Mallik PS, Md Haizal MN. The menopausal experience among indigenous women of Sarawak, Malaysia. *Climacteric*. 2009 Dec;12(6):548–56. doi: 10.3109/13697130902919519.
9. Menopause now. The four stages of menopause and their symptoms by Hannah R. and Noelina R; Updated: Nov 22, 2019. Available from: <https://www.menopausenow.com/articles/the-4-stages-of-menopause>.

10. Daily N. The anatomy and physiology of menopause. Available from: <https://nykdaily.com/2021/02/the-anatomy-and-physiology-of-menopause/>.
11. Women Health Research Institute. Stages of menopause. Available from: <https://menopause.obgyn.msu.edu/content/stages-menopause>.
12. Freeman EW, Sammel MD, Lin H, Gracia CR, Pien GW, Nelson DB et al. Symptoms associated with menopausal transition and reproductive hormones in midlife women. *Obstet Gynecol*. 2007 Aug;110(2 Pt 1):230–40. doi: 10.1097/01.AOG.0000270153.59102.40.
13. Santoro N, Epperson CN, Mathews SB. Menopausal symptoms and their management. *Endocrinol Metab Clin North Am*. 2015 Sep;44(3):497–515. doi: 10.1016/j.ecl.2015.05.001.
14. Geraghty P. Physiology of menopause. In: Geraghty P, editor. *Each woman's menopause: an evidence based resource*. Cham: Springer; 2022. doi: 10.1007/978-3-030-85484-3\_4.
15. Polo-Kantola P, Rantala MJ. Menopause, a curse or an opportunity? An evolutionary biological view. *Acta Obstet Gynecol Scand*. 2019 Jun;98(6):687–8. doi: 10.1111/aogs.13628.
16. Kroon V, Boyd L. Menopause: choices for women. *Aust Nurs J*. 2001;8(7):suppl 1–4.
17. Fenton A, Panay N. Menopause and the workplace. *Climacteric*. 2014 Aug;17(4):317–8. doi: 10.3109/13697137.2014.932072.
18. National Library of Medicine. Menopause: diagnosis and management. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK552590/>.
19. Mayo Clinic. Menopause – Diagnosis and treatment. Available from: <https://www.mayoclinic.org/diseases-conditions/menopause/diagnosis-treatment/drc-20353401>.
20. Kaunitz AM, Manson JE. Management of menopausal symptoms. *Obstet Gynecol*. 2015 Oct;126(4):859–76. doi: 10.1097/AOG.0000000000001058.
21. Nurse Labs. 6 menopause nursing care plans. Available from: <https://nurseslabs.com/menopause-nursing-care-plans/>.
22. Nonhormonal management of menopause-associated vasomotor symptoms: 2015 position statement of the North American Menopause Society. *Menopause*. 2015;22(11):1155–72; quiz 73–4. doi: 10.1097/GME.0000000000000546.
23. Better health channel. Menopause and complementary therapies. Available from: <https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/menopause-and-complementary-therapies>.
24. Gold EB, Sternfeld B, Kelsey JL, Brown C, Mouton C, Reame N, et al. Relation of demographic and lifestyle factors to symptoms in a multi-racial/ethnic population of women 40–55 years of age. *Am J Epidemiol*. 2000;152(5):463–73. doi: 10.1093/aje/152.5.463.
25. Cancer Australia. Management of menopausal symptoms in women with a history of breast cancer. Available from: <https://www.canceraustralia.gov.au/resources/clinical-practice-guidelines/menopausal-guidelines>.
26. Christmas M, Janssen I, Joffe H, Upchurch D, Santoro N, Kravitz HM. Menopause hormone therapy and complementary alternative medicine, quality of life, and racial/ethnic differences: The Study of Women's Health Across the Nation (SWAN). *Menopause*. Dec 2022; 29(12): 1357-1364. DOI: 10.1097/GME.0000000000002087.