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IMPACT OF NUTRITION SCREENING ON NUTRITIONAL STATUS & PERIMENOPAUSAL SYMPTOMS

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ABSTRACT

The purpose of this research was to determine the nutritional condition of perimenopausal women living in metropolitan Chennai, India, and to analyze the effect of nutrition education on their health problems. One thousand perimenopausal women living in metropolitan Chennai were surveyed for a cross-sectional research. The nutritional status of the subjects was determined by taking anthropometric measures, assessing their food consumption, and conducting biochemical investigations. In addition, conventional questionnaires were used to evaluate perimenopausal symptoms. The subjects were split into two groups, one of which attended nutrition classes and the other of which served as a control. The findings showed that many perimenopausal women had inadequate nutritional status, with deficits in calcium, vitamin D, and iron being particularly prominent. Hot flashes, mood swings, and insomnia are just some of the perimenopausal symptoms that many women have reported experiencing. The intervention group's food habits and nutritional awareness significantly improved when the nutrition education sessions were implemented. In addition, compared to the control group, individuals who received dietary instruction had a decrease in the intensity and frequency of perimenopausal symptoms.

KEYWORDS:- Nutrition Screening, Nutritional Status, Perimenopausal Symptoms, nutritional condition, biochemical investigations, food consumption

INTRODUCTION

In the course of their reproductive life, most women will reach menopause somewhere between the ages of 45 and 55. In 1816, Gardanne coined the term "menopause" (originally written as "mdnespauisic"). Historically, it was thought that menopause was caused by a decline in ganglionic regulatory activity. Later on, however, it was determined that the ovary served an endocrine function. As of 1910 (Marshall) Endocrine experts agree that the average age of menopause onset is 51 years old, with a range of ages

from 40 to 56. Having not had a period for 12 consecutive months is considered conclusive evidence of having had natural menopause [World Health Organization (WHO), 1996]. After 12 months of not having periods, the likelihood of them starting again is quite low, according to clinical epidemiological studies. In a 1989 study (Brambilla et al. In the 1990s, the 'natural menopause' was described by the World Health Organization (WHO) Scientific Group on Research on the Menopause as the permanent end of menstruation caused by reduced ovarian

follicular activity. Menopause is a natural aspect of a woman's life cycle that normally begins between the ages of 35 and 55.

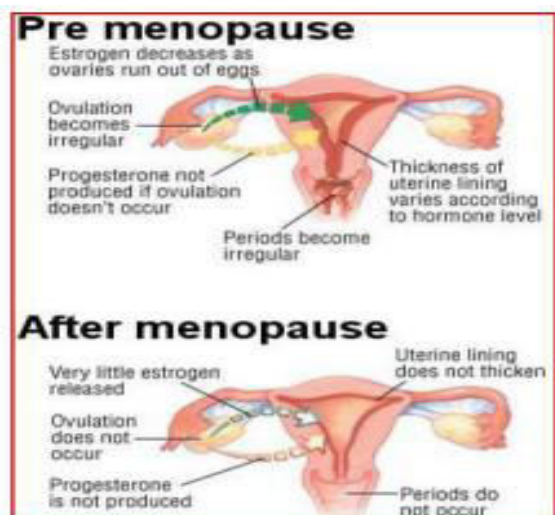


Figure 1 Reproductive system during Menopause

At this time, a woman's ovaries are at their smallest and are no longer producing the hormones that control her monthly cycle.

CONCEPT OF MENOPAUSE:

"Menopause is defined as the end of natural occurring menstrual cycles, which occurs 12 months after your last menstrual period."

It is the end of fertility, when women's bodies start to display the telltale signs of the aging process.

A woman's menopause is the most significant and normal moment in her life. Reproduction relies on the unique physiology of the female body. Both menarche and the menopause are monumental moments in a woman's reproductive life. The prime of one's reproductive years are over. Menopause is a natural part of a woman's life cycle; it signals the transition from reproductive to post-reproductive years. Menopause is defined as the absence of menstruation for

a total of 12 months or the equivalent of three cycles.

Women may have to endure longer menopausal periods in the future due to the rise in life expectancy. Menopause, which typically begins in a woman's third decade of life, is accompanied by a variety of physiological and psychological changes. Because of this, many people have a negative impression of menopause and its associated symptoms. This is the phase of life when the signs of aging first appear for most women. The rates of infertility and childbirth are at an all-time low. Menopause and menarche are the two most critical life events that occur throughout a woman's reproductive years. This marks the end of women's menstruation for good.

Physical and emotional health, as well as hormone levels, often fluctuate throughout this time. This change might happen gradually or all at once. The ageing process starts at age 35 and continues until age 60. The ovaries lose their ability to produce eggs when they are surgically removed. Alterations in oestrogen and progesterone levels play a major role in the onset and progression of menopause.

During this phase, the ovaries release much less estrogen and progesterone. The female hormone oestrogen is crucial during menopause. When these hormones aren't produced in sufficient quantities, stress may manifest itself in profound ways, both physically and mentally, particularly in women. Women who have practiced yoga throughout menopause have reported feeling less pain and more joy.

Menopause is not an illness but a natural biological process, however it does raise the risk of cardiovascular disease and

osteoporosis. Symptoms include menstrual and sexual changes, hot flashes, vaginal dryness, and urinary problems. Appearance changes, mood fluctuations, sleep disturbances, heart palpitations, and backaches are other symptoms. In the United States, menopause typically occurs between the ages of 51 and 52.

According to research by the Indian Menopause Society, the median age at which Indian women experience menopause is 48. The average age of an Indian woman is between 30 and 35. Since menopausal health affects Indian women so directly, it deserves further study in this setting. Some women will go through menopause and endure menopausal symptoms and problems.

TYPES OF MENOPAUSE

Menopause occurs naturally at some point in every woman's life. The phrase "the transformation of life" is used to describe it in certain quarters. Menopause symptoms may emerge at different times for different women. Menopause may be a gradual process, with symptoms like irregular periods and hot flashes appearing over the course of many years. On average, American women enter menopause at the age of 52.

1. PERIMENOPAUSE

Menopause symptoms such as hot flashes, vaginal dryness, night sweats, the absence of menstruation, and permanent infertility begin during the "perimenopause" or "menopause transition" phase, when a woman's body transitions from regular ovulation and menstruation cycles. Symptoms may arise as early as a woman's twenties, while they occur more often in women over the age of 40.

During perimenopause, which often begins in a woman's late 40s, oestrogen and other hormone levels begin to drop, which may lead to irregular menstrual periods and symptoms like hot flashes and night sweats.

- Hot flashes
- Sleep disturbances-insomnia
- Night Sweats
- Elevated heart rate
- Mood changes - irritability, depression, anxiety
- Vaginal dryness or discomfort during sexual intercourse
- Urinary issues

To avoid pregnancy during this time, women should use birth control until one year has passed since their last period. A kind of progestin drug has shown promise in reducing menstrual bleeding and alleviating vasomotor symptoms.

Altering one's way of life is often recommended as a preventative measure against negative outcomes.

2. Earlier Menopause

The onset of menopause may be sped up by factors other than just becoming older. The slow onset of symptoms after a hysterectomy (uterus removal)

Oophorectomy (the removal of the ovaries) causes acute distress.

Due to genetics, surgery, or cancer therapies like radiation therapy and chemotherapy, ovaries may become underactive or inactive prematurely, a condition known as premature ovarian failure (POF).

Ovarian insufficiency or malfunction may also cause premature ovarian failure.

3. Menopause

The average age at which a woman experiences the onset of menopause is 51

or 52. A woman has entered menopause when her menstrual periods have stopped for a year or more for no apparent reason. The whole menopausal transition, from perimenopause through menopause to postmenopause, may happen in as little as one to three years. It's important to remember that menopause will seem different for every woman. Some women have no symptoms at all, while others may experience a wide range of symptoms.

4. Postmenopause

Women who have not had a period for 12 consecutive months are considered postmenopausal. Women who are menopausal or have gone through menopause may be distinguished by a very high FSH level in their blood. Menopause is the period of time after a woman has had her last menstrual cycle or, more accurately, when her ovaries have stopped producing eggs. Menstruation in postmenopausal women is notoriously erratic. Therefore, it is necessary to wait for an appropriately long time to be sure the cycle has completed. Women are considered infertile at this stage, although their chances of becoming pregnant have usually been slim (but not zero) for quite some time before this (Harlow SD,2012).

CAUSES OF MENOPAUSE

When it comes to regulating the menstrual cycle, progesterone is more helpful than oestrogen in preparing the body for pregnancy. When oestrogen and progesterone production decreases, this marks the beginning of perimenopause. Ovarian production of progesterone and oestrogen naturally declines in late adulthood. Fertility may be affected by premenstrual and menopausal symptoms years before the woman is aware of them.

Eventually, a woman's ovaries will cease generating any oestrogen or progesterone at all, and she will no longer experience menstruation. While the majority of women have a progressive reduction in menstrual flow, some women's periods continue as normal until they suddenly stop.

Some women experience menopause prematurely (before the age of 45), which causes their ovaries to stop producing eggs. Ovarian failure is a condition that may affect women of any age, despite its rarity. There are several potential causes of menopause in its early stages.

- Enzyme deficiencies
- Down's syndrome
- Turner's syndrome
- Addison's disease
- Hypothyroidism
- Removal of the ovaries (bilateral oophorectomy surgery)
- Radiotherapy to the pelvic area
- Chemotherapy
- Hysterectomy surgery (the uterus - womb - is surgically removed)

SIGNS AND SYMPTOMS OF MENOPAUSE

The transition towards menopause is different for every woman. They could feel none of the symptoms at all, or they might experience all of them.

The following symptoms are common in perimenopausal and postmenopausal women:

1. Irregular Menstruation

During perimenopause, in particular, menstrual cycles may become unpredictable. Periods stop occurring altogether or become very heavy or irregular, or unusual spotting or bleeding occurs, during particular months. Once a

woman no longer has menstruation, menopause is considered complete, and any further bleeding warrants medical attention. It may still be fertile throughout perimenopause.

2. Hot Flash and Night Sweats

Sweltering heat permeates the whole body from the top of the head and neck all the way down to the upper chest. Possible reactions to this feeling of heat include flushing (paleness of the face and upper chest), rapid heart rate, and profuse sweating. Hot flashes may last anywhere from a few seconds to several minutes, and might happen multiple times a day or once a week. The likelihood of contracting the flu increases in hot, stuffy environments. The term accurately describes what happens when hot flashes wake you up in the night. However, the majority of studies indicate that a woman's changing hormone levels are to blame for her hot flashes and nocturnal sweats.

3. Elevation of Heart Rate

During menopause, your heart rate increases rapidly, giving you the sensation of palpitations or a racing heart. A little difficulty breathing could stand out. You may have increased sweating and a higher heart rate in the absence of other symptoms, such as hot flashes or night sweats. Insomnia is a common symptom of menopause because hot flashes, increased perspiration, and a raised heart rate may occur at any time of day or night.

4. Mood Swings

Hormonal imbalances may produce a broad variety of mood changes, including irritability, tiredness, and inability to concentrate. Women are more likely to have depressive symptoms during perimenopause if they have ever been

diagnosed with depression. Some of the most frequent symptoms are a loss of interest in once-favorite activities, significant weight loss or gain, sadness, despair, irritability, and weariness.

5. Sleep Disturbance/ Insomnia

Numerous women had difficulty sleeping throughout menopause. Night sweats and hot flashes disrupt sleep because they cause the body's core temperature to increase suddenly. Stress, anxiety, and despair are just a few of the numerous factors that might prevent you from getting a restful night's sleep.

6. Vaginal Discomfort

The vaginal lining and tissues become drier, thinner, and less elastic as oestrogen levels decline, which may cause unpleasant vaginal symptoms. Lack of natural lubrication may lead to itching, discomfort, and vaginal pain. Some women say that it affects their sexual desire, arousal, and pain.

7. Urinary Tract Infections

Vaginal changes may cause the urinary tract's lining to become drier, thinner, and less elastic. Lack of muscle control (urinary leakage) is a possible side effect, especially during vigorous activity like coughing or laughing. UTIs, or infections of the urinary tract, are also more common.

RISK FACTORS OF MENOPAUSE

Several age-related health issues have been linked to the low and decrease of oestrogen associated with menopause.

Menopause increases the risk that women will experience:

- Osteoporosis
- Heart disease
- A poorly working bladder and bowel

- Greater risk of Alzheimer's disease
- Poor skin elasticity (increased wrinkling)

My muscles' general weakness and lack of tone Vision loss (breakdown of the small patch in the center of the retina that is the center of vision) may occur for a variety of reasons, including cataracts (clouding of the lens of the eye) and macular degeneration (deterioration of the retina).

CONCLUSION

Menopause symptoms may be alleviated with the aid of alternative treatments like eating foods rich in phytoestrogens and engaging in physical activities like stretching and laughing. The results show that elephant foot yam and pomegranate are well-tolerated and efficient in reducing menopausal symptoms and, to a lesser degree, increasing blood levels of follicle-stimulating hormone (FSH), luteinizing hormone (LH), and estradiol (E2). As a safer and less expensive alternative to HRT, this option would be preferable for the treatment of menopause-related symptoms. Midlife and older women can make well-informed decisions about how to approach menopause by learning about the physiological changes that occur, assessing menopause-related symptoms and treatment options, and learning about disease risk-reduction strategies, the importance of phytoestrogen, and exercise.

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