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Impact of Menopause on women's physical and mental health of Pallavpuram region of District Meerut, U.P (India)

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ABSTRACT

Menopause is a major event which occurs in the life of every woman causing physiological and mental impact. The data is collected from the Modipuram region of Meerut district of the state Uttar Pradesh. Data collection is done through a questionnaire design in google form format to assess the menopause impact on women mental and physical health. The most significant mental symptom is mood swing with 72% and most significant physical impact is irregular periods with 84%

Introduction

Menopause is one of the major biological changes in the life of a woman, which normally takes place in age 45-55. Menopause is a complex biopsychosocial transition shaped by geography, social determinants, and multimorbidity (Delanerolle *et al.*, 2022). It is a stage that concludes reproduction and introduces numerous physical and psychological transformations that may have a significant effect on the daily life and overall health. These problems are usually compounded in areas such as Pallapuram, Meerut where access to and awareness of healthcare may not be universal. Menopausal women often complain of hot flushes, joint pains, tiredness, mood fluctuation, and lower backs. Such changes may reduce the quality of life and interfere with family and social relationships. Research carried out in India has shown that both urban and rural women are struggling with the physical and psychological impacts of menopause. Menopause related mental health issues are often overlooked in low- and middle-income countries (Khadilkar *et al.*, 20210) but in rural or semi-urban areas such as in parts of Meerut, women might be more challenged by the lack of medical assistance, social stigma and awareness. Despite its importance as a major life transition, menopause is not discussed much in the communities. Women going through menopause must have access to high-quality healthcare, as well as supportive communities and systems. Unfortunately, in majority of nations, access to and understanding of menopause-related information and services continue to be significant challenges. (Nagavalli *et al.*, 2026)

It is important to learn about the specific experience of menopause by women in Pallavpuram, the impact of this phenomenon on their mental and physical well-being. Investigating these effects, we will be able to create specific awareness campaigns, better support networks, and improve the quality of life of women in this area. This research work will illuminate the menopausal experiences of women within the area of Pallavpuram, Meerut, and promote

valuable conversations and interventions in the most required areas. The study research on mental and physical symptoms of menopause in women living in the Pallavpuram area of Meerut, including Phase 1 and Phase 2. The research determines considerable mental health issues, mood fluctuations, depression, anxiety, and mental disabilities, as well as physical ones, such as hot flushes, sleep disorders, and bone density alterations. The results highlight that more awareness, earlier interventions and customized healthcare services to menopausal women are urgently required in suburban Indian societies. With the solution of these needs, we will be able to strive to enhance the welfare and quality of life of women going through this natural and yet difficult life stage.

Literature Review

Menopause is a major milestone in life of a woman, which comes with physical and mental health problems. In India, in Uttar Pradesh, the limited research has been devoted to its impact. The present review is a synthesis of the major research on the psychological and physical health outcomes of menopause among women in the region.

Physical Health Issues- Various literature points out the effects of menopause on the body such as fatigue, joint pain, weight gain and predisposition to other chronic diseases such as hypertension and diabetes. A study conducted in Allahabad and Etawah district revealed that these health problems affected rural women more probably because of the low access to healthcare (Sharma *et al.*, 2021; Patel and Kumar, 2022). Also, the postmenopausal women in rural Uttar Pradesh complain of increased incidences of osteoporosis and cardiovascular disease with reduced estrogen levels (Singh & Gupta, 2020).

Mental Health Challenges- Menopause is characterized by mental problems, including anxiety, depression, and mood swings. In a study by Prayagraj, it was discovered that more than 60 percent of the perimenopausal women were psychologically distressed

(Sharma *et al.*, 2021). According to the Meno Veda Survey (2022), 80 percent of women in Uttar Pradesh had their mental and physical health worsened during menopause, and rural women in the state were impacted by the negative stigma surrounding the discussion of menopause-related problems.

Health-Seeking Behaviour- The effect of menopause is aggravated by limited health-seeking behaviour in women and more so in rural regions. Most women in Uttar Pradesh do not consult doctors concerning menopause symptoms, and instead, they usually use traditional medications (Gupta and Sharma, 2021). Delayed care is caused by cultural taboos on talking about menopause, thus exacerbating physical and psychological effects. Menopause is a big problem that impacts physical and mental health of women in Uttar Pradesh and rural women are most susceptible to the condition not only due to lack of health care but also because of the societal stigma attached to it. Awareness, access to healthcare and support systems in the region are important to reduce the health effects of menopause.



Material and Methodology

Study Design: A descriptive survey was cross-sectional, aimed at determining the effects of menopause on the mental and physical well-being of women.

Study Area: The study was carried out in the phase 1 Area, Phase 2 Area, and the region of Pallavpuram, Meerut.

Population and Sample: It was a study that was conducted among women aged 40-60 years old, who either were in the perimenopausal or postmenopausal phase. These areas constituted the sample of 100 women chosen using a purposive sampling method.

Survey Instrument: The structured questionnaire was created according to the earlier validated scales of menopause symptoms (e.g., Menopause Rating Scale - MRS). This questionnaire was subdivided into two large parts:

Mental and Emotional Symptoms: Mood swings, depression, anxiety, irritability, cognitive changes (lapses of remembrance, brain fog), fatigue, loss of self-confidence and sleep problems.

Physical Symptoms: These include irregular periods, hot flushes, night sweats, vaginal dryness, weight gain, joint aches, urinary, changes in the skin, and loss of bone density.

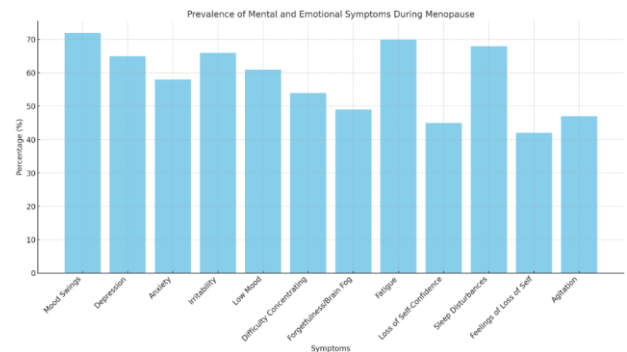
Data Collection: The face-to-face interviews were used to ensure that the responses were clear and accurate. Prior to administering the questionnaire, verbal consent was taken out of all the participants.

Data Analysis: The descriptive statistics (percentages and frequencies) were used to analyse the data to give the prevalence of various menopausal symptoms among the surveyed women. The survey had shown that most women had a mix of psychological and cognitive symptoms in menopause:

Mental as well as Emotional symptoms.

Symptom	Percentage Affected	Key Details
Mood Swings	72% of participants	-
Depression	65% of respondents	Many felt always sad and hopeless

Symptom	Percentage Affected	Key Details
Anxiety	58% of women	Often as excessive worry or nervousness
Irritability	66% of participants	Especially during interactions with others
Low Mood	61%	Always felt unhappy
Difficulty Concentrating	54% of participants	Severely impacts daily functioning
Forgetfulness and Brain Fog	49%	Frequent memory impairments and thinking problems
Fatigue	70% of women	Always tired despite enough sleep
Loss of Self-Confidence	45% of respondents	-
Sleep Disturbances	68% of women	Usually with night sweats and emotional distress
Feelings of Loss of Self	42% of participants	-
Agitation	47% of participants	-



Interpretation

Most Prevalent Symptom: The most reported symptom is Mood Swings (~72%). Fatigue (~70%), Sleep Disturbances (~68) come right after. These large values imply that menopause has great interruption in emotional stability, energy, and sleep patterns. It shows All these symptoms state that hormone changes (i.e. reduced levels of estrogen and progesterone) significantly influence emotional regulation and circadian behaviour of women.

Highly Common Symptoms: The prevalence of depression (~65%), Irritability (~66%), and Low Mood (~61) is also high. This validates that menopause is linked to affective disorders, such as depressive symptoms as well as mood lability. It indicates that lack of proper psychological support can result in many women developing clinical depression or anxiety disorder during or after menopause.

Cognitive Symptoms of moderate severity: Difficulty Concentrating (~54) and Forgetfulness/Brain Fog (~49) indicate that most of them continue to report cognitive problems. The typical menopausal complaints that occur in the brain are brain fog and memory lapses. Which implies the necessity of cognitive screening instruments when attending a gynaecological appointment or primary care visit by women in their middle years.

Minor and Yet important Symptoms: Comparatively lower reporting but still at a substantial rate was seen in Loss of Self-Confidence (~45%), Feelings of Loss of Self (~42) and Agitation (~47). These results are indicative of psychological identity crisis, probably created by physical aging, changes body image, as well as changing roles in society after menopause. That shows mental health counselling services that deal with self-esteem and identity issues in menopausal women are urgently required.

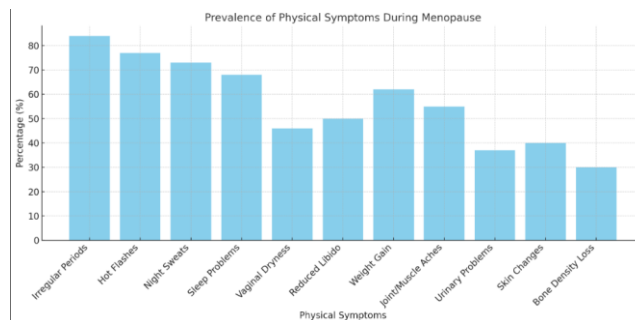
Broader analysis:

A. Holistic View: The symptoms cut across all three categories, emotional, cognitive and behavioural, indicating that menopause is not a medical singular phenomenon but a multi-faceted life process that affects the mental well-being profoundly.

B. Need for Integrated Care: Instead of isolated symptoms, whole programs of menopause management ought to be developed, which include Treating hormones with therapy, CBT refers to cognitive behavioural therapy involves the therapist educating the client about cognitions (thinking errors) and behavioural patterns (possibly dysfunctional), often triggering negative emotions that lead to anxiety and depression ,Sleep hygiene education ,Peer support groups ,Meditative exercises and stress management.

Physical Symptoms

At the menopausal transition, substantial physical changes were reported:



Deeper Insights:- The symptoms in the upper part of the graph (more than 70% of these) are mostly those that are concerned with hormonal regulation such as abnormal menstruation and thermoregulation (hot flashes). Sexual health and physical appearance issues (e.g., vaginal dryness, skin changes) were common, which means that both emotional and social effects are involved. Skeletal and musculoskeletal manifestations, such as bone density loss, are not as common but immensely dangerous in the long run and demand early treatment. The fact that menopause is accompanied by both physical and metabolic changes implies that it is not a single system of the body that is affected by the menopause.

Suggestion

Breaks the Silence Around Menopause: Many Indian communities have made menopause a taboo issue and women are not informed and supported. The project starts an open discussion on a natural biological stage, which contributes to lessening the stigma and misinformation. Its effect will be psychological acceptance and emotional validation, which minimizes shame or guilt that women can feel.

Favors Early Screening and Treatment:-The Research work promotes early healthcare-seeking behaviour by establishing the presence of typical mental (e.g., mood swings, brain fog) and physical (e.g., bone loss, joint pain) symptoms. Its impact will prevent potential long-term problems such as osteoporosis, depression, or cardiovascular diseases by preventing the onset of diseases in time.

Local Health Policy and Programs: The results can be of great use to health departments and NGOs in Meerut and other semi urban/rural regions. Its impact will be facilitated targeted medical planning e.g. menopause clinics in local primary health centres. Gives reasons why people should receive free counselling services, bone health screening services, and educational workshops.

Educates Women and Empowers them: The results of the survey inform women on what to expect during menopause and therefore they are better equipped to self-care and make informed health choices. It will be boosts health literacy. Helps women to resort to some coping measures such as exercise, proper diet and stress reduction.

Sponsors Mental Health Advocacy: The emphasis on the common problems such as exhaustion, stress, and poor self-esteem supports the necessity of mental health services among midlife women. It will lessen the possibility of unattended depression or anxiety. Proposes the development of peer-support groups, or community therapy services, or tele-mental health services to women in remote communities.

Further develop Gender-Inclusive Research: The research on medicine does not pay much attention to midlife women. Your research work provides precious information on a forgotten group of people. This will support the argument of gender-sensitive health interventions. Encourages more participative and understanding public health strategies which are sensitive to the special stages of life of women.

Counsel: Family and Caregiver Education: The results also assist those who are married, their children, and caregivers to know how menopausal females experience life. It will stimulate the support of the family, enhance relationships and decrease emotional loneliness. It is not simply an academic requirement this is a socially relevant project that change agents of the rights of women to informed healthcare. Promotes society discourse of aging and hormonal well-being. Helps to increase the quality of life of hundreds of women.

Symptom	Percentage	Key Details
Irregular Periods	84%	Experienced by perimenopausal group participants.
Hot Flashes	77%	Common vasomotor symptom
Night Sweats	73%	Common vasomotor symptom
Sleep Problems	68%	Due to night sweats and emotional symptoms.
Vaginal Dryness	46%	Caused discomfort during sex in most cases.
Decreased Libido	50%	Noticeable decrease in sexual interest.
Weight Gain	62%	Due to metabolic changes.
Joint and Muscle Aches	55%	Musculoskeletal discomfort.
Urinary Problems	37%	Included incontinence or infections.
Skin Changes	40%	Dryness, thinning hair, texture changes.
Bone Density Loss Indicators	30%	Early osteoporosis symptoms like bone weakness.

Summary

This chart summons up the complex physical problems that women experience when they are in menopause. It states the necessity of the holistic health practice of hormonal balance, bone health, and cardiovascular risk management, emotional health, and sexual health promotion in this period of life when a woman faces the most significant change ever.

Result

This survey highlights how the entire region of Pallavpuram faces immense mental, emotional, and physical problems at menopause. Psychological disorders, such as mood swings, exhaustion and mental obstacles, were rampant. In the same way, physical symptoms like irregular periods, hot flushes, and bone density concerns were widespread, along with such symptoms like musculoskeletal pain. These results emphasize the multifacetedness of menopause and its severity, which is why the support is important whereas, the mental/emotional symptoms such as mood swings and sleep disturbances were highly prevalent; the physical symptoms such as abnormal periods and vasomotor disturbances seemed to be even bigger in occurrence. Significant overlap between sleep changes observed as a mental and physical issue is evident, indicating that there is a biopsychosocial model of menopausal transition in which emotional, cognitive, and physical symptoms are correlated. The cognitive problems (brain fog, concentration difficulties) which accompany the physical exhaustion and muscle/joint pain defined the mental health burden and signified systemic fatigue, both mentally and physically.

Conclusion

According to the results of this survey, it is evident that menopause is a serious health condition affecting women both mentally and physically in Pallavpuram in Meerut. The mental health issues are dominated by mood swings, depression, and cognitive disturbances, as well as sleep issues, whereas the major physical symptoms include hot flashes, vaginal dryness, musculoskeletal pain, and urinary problems. These findings demonstrate the urgency of the Awareness campaigns of managing menopause in the community, Male-specific psychological counselling and support groups, medical treatments, e.g. hormone replacement therapy (HRT) and other medical treatments, Prophylactic treatment, such as bone density screenings and cardiovascular screenings.

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