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Prevalence Of Menopausal Complications And Its Impact On Quality Of Life Among Postmenopausal Women

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ABSTRACT

Background: A woman experiences a major transition during menopause, which is frequently accompanied by a range of physical and emotional symptoms. Workplace productivity, healthcare expenses, and healthrelated quality of life (HRQoL) can all be impacted by these symptoms.

Objective: This study sought to determine the frequency of menopausal problems and how they affected postmenopausal women's quality of life.

Methodology: Using a convenient sampling technique, 100 postmenopausal women were chosen for a cross-sectional study at Mahatma Gandhi Medical College and Research Institute in Puducherry. Participants assessed the intensity of symptoms and their significance by completing the Menopause-Specific Quality of Life (MENQOL) questionnaire and the Menopause Rating Scale (MRS). Using SPSS Version 18, the data were examined, and associations were evaluated using the Chi-Square test.

Results: The average menopause duration was 8.39 ± 6.0 years, and the individuals' mean age was 52.27 ± 6.03 years. The most common symptoms were hot flushes (66.3%), exhaustion (68.8%), and musculoskeletal discomfort (81.7%). 96% of individuals reported psychological symptoms, and 71% reported vasomotor symptoms. 56% had moderate to severe vasomotor symptoms, and 68% reported physical restrictions, indicating a major impact on quality of life.

Conclusion: menopausal symptoms notably lower productivity at work and quality of life. Improved healthcare assistance, employment adjustments, and efficient symptom management are required to promote well-being and lessen financial effects.

Keywords: *Postmenopausal Women, Menopausal Symptoms, Menopause-Specific Quality of Life (MENQOL), Menopause Rating Scale (MRS).*

1. INTRODUCTION

The World Health Organization defines menopause as the permanent cessation of menstruation brought on by the ovaries' diminished follicular activity [1]. Women who finish the 12-month amenorrhea phase enter the postmenopausal phase following their last menstrual cycle without breastfeeding or pregnancy[2]. A reduction in blood estrogen levels during menopause results in a number of symptoms and complications for women, such as vasomotor instability, decreased psychological function, forgetfulness, vaginal and urinary tract infections, and termination of reproductive capacity, which leads to the total cessation of ovarian[3] Different nations have varying levels of severity and frequency of these symptoms due to cultural and ethnic differences [4] .The natural age of menopause varies among populations due to a variety of factors,

including heredity, dietary habits, degree of activity, and regular exercise[5] . Menopausal Quality of Life (QOL) is significantly impacted by a number of issues, including low self-efficacy, widespread cultural conflicts, socioeconomic disparities, gender and belief inequalities, stressors, and awareness of its process [6]. Since every woman will experience menopause at some point in her life, it has been vital for the scientific community to look at the several facets of this significant time and how they affect women's health and quality of life (QoL)[7].

Menopausal symptoms, including mood swings, sleep issues, and hot flashes, have a major impact on many women's health-related quality of life (HRQoL). The impact of these symptoms on women's individual wellbeing has been the subject of numerous studies, Menopause's effect on lost productivity has not been thoroughly measured, particularly in the general population. Menopausal symptoms can promote presenteeism and absenteeism at work, when workers may not provide their full effort because of the discomfort or distress they create[2]. Productivity declines as a result, which may have serious economic repercussions.The financial burden is further compounded by the increasing use of healthcare services related to menopausal symptoms, including doctor visits, prescription drugs, and therapies[14]. Even though some research has evaluated the direct effects of menopausal symptoms on personal health outcomes, little is known about the financial toll that these symptoms take, especially when it comes to lost pay and productivity. This study aims to measure the overall economic impact of menopausal symptoms by assessing how they affect healthcare expenditures, workplace productivity, and health-related quality of life. Better support for those who are impacted by menopause may result from a more thorough understanding of the costs to society.

According to the World Health Organization (WHO), quality of life (QOL) is defined as an individual's perception of their current state of life in relation to the cultural and value systems in which they reside, as well as their expectations, objectives, worries, and standards [18]. These days, multidimensional QOL is acknowledged [19]. Women's post-menopausal life expectancy has increased as a result of changes in life expectancy. Every woman goes through menopause for at least one-third of her life [21]. Globally, the number of postmenopausal women is rising, according to statistics. Over 477 million women were in the postmenopausal stage in 1998; by 2025, this number is expected to rise to 1.1 Billion [23]. The effect of menopausal symptoms on quality of life differs by stage of menopause, with studies showing that vasomotor symptoms (e.g., hot flashes, night sweats) and physical symptoms have a greater impact on women after menopause, while psychological symptoms (e.g., mood swings, anxiety, and depression) are more prevalent during the menopausal transition and tend to decrease in the postmenopausal phase. This variation suggests that different stages of menopause present unique challenges that have varying effects on women's well-being.

2. METHODOLOY

This study design was a cross-sectional study. Study sessions were held in Mahatma Gandhi Medical College and research institute, Puducherry, where the subjects were assessed, data were collected. All participants were selected by convenient sampling method. The inclusion criteria for this study were the postmenopausal women's. A total of 100 Postmenopausal women's were included in this study. The exclusion criteria were premature menopause, receiving any kind of hormone therapy, presence of medical conditions like diabetes, hypertension, cardiac disease, and thyroid disorders .

Procedure:

We met postmenopausal women's and explained the procedure of this study. After receiving the consent form and demographic details from 100 participants, they were requested to fill the Menopause rating scale in 30 minutes. After confirming menopausal complications, 100 participants were asked to complete the Menopause-Specific Quality of Life Questionnaire to assess the impact of menopausal complications on their quality of life.

Menopause Rating Scale (MRS)

The Menopause Rating Scale (MRS) is a standardized tool used to assess the severity of menopause-related symptoms and their impact on a woman's quality of life. It consists of 11 items divided into three domains: somatic symptoms (such as joint pain and hot flashes), psychological symptoms (including mood swings, anxiety, and irritability), and urogenital symptoms (such as vaginal dryness and sexual problems). Each symptom is rated on a 5-point Likert scale, ranging from 0 (no symptoms) to 4 (very severe symptoms). The total score is obtained by summing the responses from all 11 items, with severity classified into four categories: 0–4 (no or very mild symptoms), 5–8 (mild symptoms), 9–16 (moderate symptoms), and 17 or above (severe menopausal symptoms). The MRS is widely used in clinical and research settings to evaluate the physical and mental health effects of menopause, helping healthcare professionals monitor symptom progression and treatment effectiveness.

Menopause specific quality of life questionnaire :

The Menopause-Specific Quality of Life (MENQOL) questionnaire is a tool designed to assess the quality of life in postmenopausal women by evaluating the impact of menopause-related symptoms. It consists of 29 items categorized into four key domains: vasomotor, psychosocial, physical, and sexual symptoms. The vasomotor domain includes symptoms such as hot flashes and nocturnal sweats, while the psychosocial domain addresses emotional and psychological challenges like

irritability and mood swings. The physical domain covers symptoms such as headaches, joint pain, and exhaustion, reflecting the broader impact of menopause on overall well-being. Additionally, the sexual domain assesses concerns like vaginal dryness and decreased libido, which can affect intimate relationships and quality of life. Each item is rated based on its level of bothersomeness using a Likert scale ranging from 0 to 7, where 0 indicates that the symptom was not experienced, and higher scores represent increasing levels of discomfort, from minimally bothersome (score of 2) to extremely bothersome (score of 7). This questionnaire helps healthcare professionals understand the specific challenges faced by postmenopausal women and tailor interventions to improve their well-being.

3. DATA ANALYSIS

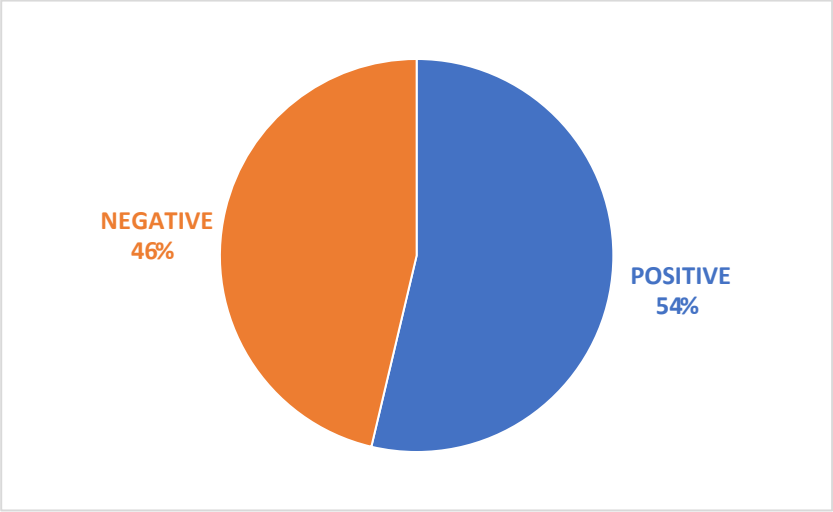
SPSS Version 18 was used to do statistical analysis. To investigate the discrepancies between the observed and expected data, the Chi-Square test was utilized. Previous studies have shown that among postmenopausal women, menopausal problems are related to lifestyle choices, menopausal length, and age at menopause. The association between these characteristics and menopausal problems was assessed using the Pearson Chi-Square test. A p-value of less than 0.005 was considered statistically significant**.**

4. RESULTS

The majority of participants in the study were in their early fifties, with a mean age of 52.27 ± 6.029 years among the 100 women evaluated. The fact that over half of the women were in the 51–60 age suggests that this is where the majority of the participants were. 8.39 ± 6.0 years was the average period since menopause, representing a varied group of women at various postmenopausal stages. 82 (81.7%) of the women reported having a body ache, the most common of the symptoms, suggesting that musculoskeletal pain is a common issue among postmenopausal women. Conversely, a rise in facial hair was the least common symptom, as just 10 (9.9%) people reported having it. The well-known vasomotor symptom of menopause, hot flushes, was another noteworthy symptom, affecting 66 (66.3%) of the women.

The effect of menopause on general vitality and physical well-being was further highlighted by the reports of 66 (66.3%) women experiencing a decline in physical strength and 69 (68.8%) women reporting a loss of energy. The physical domain scores were considerably higher in the postmenopausal (PM) group ($P < 0.002$), indicating a significant difference between premenopausal and postmenopausal women's opinions of their physical health.

GRAPH:1 DISTRIBUTION OF MENOPAUSAL COMPLICATIONS RESULTS.



GRAPH: 1 DISTRIBUTION OF MENOPAUSAL COMPLICATIONS RESULTS" graphically illustrates the percentage of positive and negative menopausal complications among the participants.This chart indicates that menopausal complications are fairly widespread, occurring in over half of the study's participants.

TABLE 1: DISTRIBUTION OF AGE OF THE PARTICIPANTS

Age	Frequency	Percentage
45-50	20	20%

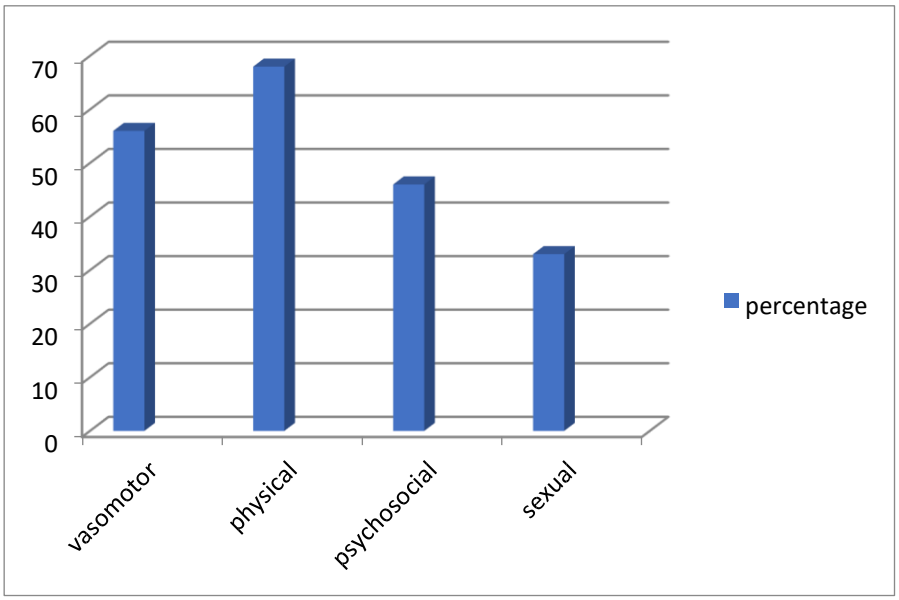
51-55	48	48%
56-60	32	32%

Table 1 shows the age distribution of the participants into three groups: 45-50, 51-55, and 56-60. Of these, the highest percentage (48%) is in the 51-55 age group, meaning that almost half of the participants are in this group. The 56-60 age group comes in second with 32% of the participants. The lowest percentage (20%) is that of the 45-50 age group.

TABLE 2: DISTRIBUTION OF MENOPAUSE SPECIFIC QUALITY OF LIFE QUESTIONNAIRE RESULTS

Domain	**Interpretation**	**Percentage**
Vasomotor	Moderate to severe impact	56%
Physical	High impact on daily activities	68%
Psychosocial	Moderate emotional disturbance	46%
Sexual	Reduced sexual well-being	33%

TABLE 2: specific menopause quality of life questionnaire outcome distribution shows the impact of menopause on four quality of life categories: vasomotor, physical, psychosocial, and sexual. Within each category is assessed the magnitude of its contribution to women's quality of life, with estimation of the proportion of individuals adversely affected.



GRAPH 2 shows the specific menopause quality of life questionnaire outcome distribution shows the impact of menopause on four quality of life categories

5. DISCUSSION

Menopause has become a major health concern for women. We used MenQoL to assess the quality of life of women experiencing menopausal symptoms. The four domains of MenQoL—vasomotor, psychological, physical, and sexual—were created in 1996[25]. Europe, China, and a few other developing nations have implemented MenQoL.Compared to a number of other research, our study population had significantly higher rates of menopausal symptoms.The majority of hot flushes in the United States were reported by 13 AfricanAmerican women (45.6%), followed by Hispanic women (35.4%), Caucasians (31.2%), Chinese women (20.5%), and Japanese women (17.6%). 65.5% of the women in our survey reported having hot flashes; Sydney and Holland reported findings that were nearly identical, and a another study from the same area revealed how frequently hot flushes occur.Body ache/joint pain was the most commonly reported symptom in our study; other research including Asian women revealed similar findings. Our study found that the frequency of psychological

symptoms was 96% and the frequency of vasomotor symptoms was 71.4%. These frequencies were greater than those reported from China 52% and 90%, respectively, but they were nearly identical to those reported from Thailand (72.3%) and 98.3%, respectively. In the current study, the frequency of physical and sexual symptoms was 99% and 66%, respectively. Similar results were reported from China, while the study from the United Arab Emirates showed substantially higher rates, at 69% and 37%, respectively. Compared to Western women, Asian women had a comparatively low prevalence of menopausal symptoms[21]. According to a study conducted in the USA there are notable variations in the prevalence of symptoms among ethnic groups. Compared to other ethnic groups, Caucasian women in this study had higher symptoms across the board, particularly psychosomatic symptoms. Overall, African-American women had a high frequency of vasomotor symptoms, although there were differences based on ethnicity. Compared to Caucasians, African Americans, or Hispanics, Chinese and Japanese Americans reported noticeably fewer symptoms[17].These varying frequencies can have a variety of causes. The Asian diet's strong phytoestrogen content appears to guard against menopausal symptoms. Nevertheless, not all research has found that symptoms are consistently less severe in Asian nations.[18] and sociocultural variables, financial strains, overall health, and personal perceptions all have an impact on menopausal symptoms. In addition to differences in ethnicity and other demographics, inconsistent results may also be explained by variations in study designs, sample sizes, age ranges, participant distribution of menopausal status, and instrumentation[14]

Joint and muscular pain were the most commonly reported symptoms in Ibrahim et al.'s study, followed by sleep problems and hot flashes[13]. The high frequency of joint and muscle discomfort, they added, was probably caused by obesity, a sedentary lifestyle, and inadequate nutritional supplements. In a similar vein, joint and muscle pain has been identified by several other studies as the most prevalent menopausal experience. According to these results, the frequency and intensity of musculoskeletal pain associated with menopause may be greatly influenced by lifestyle choices and general health[10].

Menopausal symptoms have been shown to have a detrimental effect on health-related quality of life (HRQoL) in a variety of cultural contexts and using a range of assessment instruments. It has been demonstrated that symptoms like hot flashes, night sweats, mood swings, trouble sleeping, and cognitive changes impair general wellbeing and day-to-day functioning. Studies employing a variety of evaluation instruments, such as the SF-36, WHOQOL-BREF, and the Menopause-Specific Quality of Life (MENQOL) questionnaire, have corroborated these findings, demonstrating that menopause impacts social, emotional, and physical well-being. Our analysis adds to this corpus of literature by emphasizing a crucial finding: productivity loss is more strongly linked to the effects of menopause than to any one symptom. . Reduced working performance, absenteeism, and presenteeism seem to be the most notable manifestations of the cumulative effect, even while individual symptoms surely contribute to discomfort and a lower quality of life. This realization implies that in order to address the wider effects of menopause on women's everyday life, interventions that try to reduce productivity loss—like flexible scheduling, workplace accommodations, and symptom management programs—may be especially helpful.

According to the research, women's health, quality of life, and the general well-being of society are all significantly impacted by menopausal symptoms. The study found that menopausal symptoms affect 53.7% of women, with an average of five symptoms per person. Health-related quality of life (HRQoL) is significantly impacted by these symptoms, which might include hot flashes, night sweats, mood swings, sleep issues, and cognitive challenges. According to the study, menopausal symptoms not only impair one's personal wellbeing but also reduce one's ability to work effectively and use medical resources more frequently. Severe symptoms may make it difficult for women to continue working efficiently, which could have negative economic effects including higher absenteeism and worse performance at work. The study also emphasizes the financial strain that rising medical consultations, treatments, and related expenses are placing on healthcare systems. The study emphasizes the need for more focus on efficient treatment and management techniques because of the symptoms' high frequency and severity. Reduced estrogen levels, bone loss, muscle atrophy, and an elevated risk of cardiovascular disorders are just a few of the physiological changes that postmenopausal women face. To prevent these consequences and promote general health and well-being, frequent physical activity especially aerobic and resistance exercises is crucial. Addressing these symptoms should be a top priority for doctors and other healthcare professionals in order to enhance patient wellbeing and lessen the wider economic and societal effects. There is potential for both better individual health outcomes and societal economic gains by acknowledging the importance of menopause-related health issues and expanding treatment options.

6. CONCLUSION

The average score for every dimension indicates that among the participants in our study, menopausal symptoms were linked to a decline in quality of life. Additional research must be carried out in the more populous communities in various parts of the region

7. AUTHOR CONTRIBUTION

Karishma Sharin designed the study, data collected, analysed and interpreted. K. Senthil drafted the article, critical revision of the article.

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CONFLICTS OF INTEREST: The author state no conflicts of interest.

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