Life Beyond Reproductive Years: Examining Menopausal Symptoms, Its Predictors and Management in India

Extended Abstract:

Introduction

Menopause signifies the permanent cessation of the menstrual cycle. However, the period leading up to menopause, known as perimenopause phase, begins well before menopause itself. During perimenopause, women may experience symptoms such as hot flashes, mood swings, anxiety, joint pain, heart discomfort, bladder problems, and vaginal dryness, indicating their approach towards menopause (Mahajan et al., 2012; Santoro et al., 2021; Santoro & Chervenak, 2004; Senanayake, 2000). Research has shown variability in the reporting of menopausal symptoms across different cultures, regions, and ethnic groups (Lock, 1998; Loh et al., 2005; Santoro & Chervenak, 2004). For instance, women of Asian origin, such as those from Japan and China, report fewer symptoms compared to women in Western countries (Avis et al., 2001; Beyene, 1986; FLINT & SAMIL, 1990; Lock, 1994; Lock & Kaufert, 2001). Culture significantly influences our diet, lifestyle habits, sexuality, healthcare, and various social factors, which can impact the menopausal experience and its associated symptoms (Pitkin, 2010).

Menopause in India has different perspectives. It is often considered a taboo subject in India and is rarely discussed. In contrast to the Western countries where woman's fear of menopause is associated with the loss of femininity, in India, women often consider menopause to be a normal process, associating it with ageing (A. Singh & Arora, 2005). Within the cultural context of filial piety and respect for older persons, women often gain more respect and power within the family as elders. Moreover, menopause frees women from the restrictions on attending various religious and cultural events (Kelly, 2011; A. Singh & Arora, 2005). In India, during menstruation, women are often prohibited from participating in these events, which are deemed pure specifically religious events, as menstruating women are considered impure or polluting. With the increasing life expectancy, more women will transition through perimenopausal and post-menopausal phases in India. The average age at menopause is lower in India compared to Western countries (Ahuja, 2016), indicating that the onset of menopause-related symptoms and ageing will begin early. Although research has indicated the prevalence of various morbidities, particularly gynecological issues, among menopausal women (Ranjan Pradhan et al., n.d.), many women do not report these symptoms or conditions, especially gynecological morbidities, due to factors such as aging, societal taboos, or the belief that menopause marks the end of menstrual problems (Dasgupta & Ray, 2009; Jai Prakash & Vinoda N Murthy, 1981; A. Singh & Arora, 2005; V. Singh & Sivakami, 2014). While some clinical studies address the symptoms and morbidities experienced during this stage, there is still a gap in research focused on identifying the predictors of these symptoms and their management using large scale data, showing a broader perspective. Most studies on menopausal symptoms are region-specific and focus primarily on the symptoms types (Agarwal et al., 2019; Bairy et al., 2009; Borker et al., 2013), without focussing on the particular predictors of menopausal symptoms or management of menopause for a healthy life.

Thus, in this context, this study aims to explore various menopausal symptoms among women, its variation and its predictors as well as the management of menopause among women in India using a large-scale dataset.

Research Methods

Data Source

The study used –data from Longitudinal Ageing Study in India (LASI) (NPHCE, 2020) Wave One to analyse different symptoms of menopause among the peri-menopausal women and also to study the gynaecological morbidities and its management among them.

Sample Size and Variables

Women aged 45 to 59 years were included in the analysis, as the mean age of menopause in India was found to be around 46 years. Moreover, questions related to menopause in LASI wave 1 were only addressed to women in this age group.

In LASI, there is no direct question related to menopausal symptoms. The classification of menopausal symptoms has been carried out by using the Menopausal Rating Scale (MRS) classification (*About MRS - ZEG Berlin GmbH*, n.d.). It consists of symptoms reported by women, and not the diagnosed cases or filled by the physicians. The MRS has classified menopausal symptoms into three categories- somatic, psychological and urogenital. Based on this classification, the ***'menopausal symptoms'*** in LASI was classified into seven categories such as women with ***no symptoms, women with psychological, somatic, urogenital, psychological &somatic, psychological & urogenital, urogenital & somatic and all symptoms.*** The ***somatic symptoms*** included women who had hot flushes, ever had chest pain/ discomfort, trouble in falling asleep in past one month and pain and stiffness in joints in past two years. The ***psychological symptoms*** included women who had mood swings/irritability, feel depressed, severe fatigue/exhaustion in past two years. Lastly, the ***urogenital symptoms*** included women who had vaginal bleeding, foul smelling vaginal discharge and dry vagina causing painful intercourse.

In LASI, there are also information available on women-specific morbidities among menopausal women in the age group 45-59 years for the last twelve months period. For this study, women having ***women-specific morbidities*** has been divided into three categories- women with ***'no problems', 'gynaecological morbidities'*** were considered to be those women who had been diagnosed with specific reproductive-related issues such as vaginal bleeding, foul smelling vaginal discharge, uterus prolapses, fibroids/cysts, dry vagina causing painful intercourse and ***'other morbidities'*** including hot flashes, mood swings/ irritability and others. While menopausal management involves various components, LASI limits its data solely to ***'treatment/consultation' for women-specific morbidities***. Therefore, this study utilized that data to examine the management of menopause and related concerns among women.

The ***independent variables*** included different socio-demographic variables like age, place of residence, highest level of education, MPCE quintile, religion, social group, region and current marital status; reproductive variables like number of pregnancies, hysterectomy; presence of acute disease like anaemia (in past two years); chronic diseases like ever diagnosed with hypertension and diabetes; and behavioural- related variables like ever smoked/used smokeless tobacco and ever consumed alcoholic beverages.

Methodology

Bivariate analysis was carried out to understand the proportion of menopausal symptoms among women and across different socio-demographic characteristics and to understand different women-specific morbidities and treatment seeking behaviour across different socio-demographic characteristics.

Binary logistic regression was carried out to identify the specific predictors of menopausal symptoms among women age 45-59 years. This analysis is used to model the dichotomous outcome variable such as presence of absence of menopausal symptoms. It explains the log odds of the outcome, which are modelled as a linear combination of the predictor variable. The formula for basic binary logistic regression is:

Logit(y)= ln (Odds)= ln(P/1-P) =α+βx

For the regression analysis, the ***dependent variable (menopausal symptoms)*** was classified into a binary variable i.e. women not having any symptoms, coded as 0 and women having any symptoms, coded as 1.

The statistical analyses were carried out by using Stata MP 16.0 software.

Conceptual Framework

The conceptual framework (Figure 1) was formulated based on the insights gleaned from existing literature. This framework elucidates the mechanisms underlying menopausal symptoms and its management among women in India. It is hypothesised that menopausal symptoms are influenced by various factors at individual and at socio-cultural level. It is assumed that the individual and socio-cultural factors affect the variations in the occurrence of menopausal symptoms among women and further determine the management of menopause. The menopausal symptoms may be managed differently by different individuals; some women may ignore the symptoms perceiving the symptoms to be normal and not seek any medical treatment for it or some may depend on traditional home remedies. Alternatively, some women may choose to consult a healthcare professional considering the severity of symptoms. Ultimately, some may choose to treat the symptoms and others may opt against any form of treatment, which may ultimately affect their overall health status.

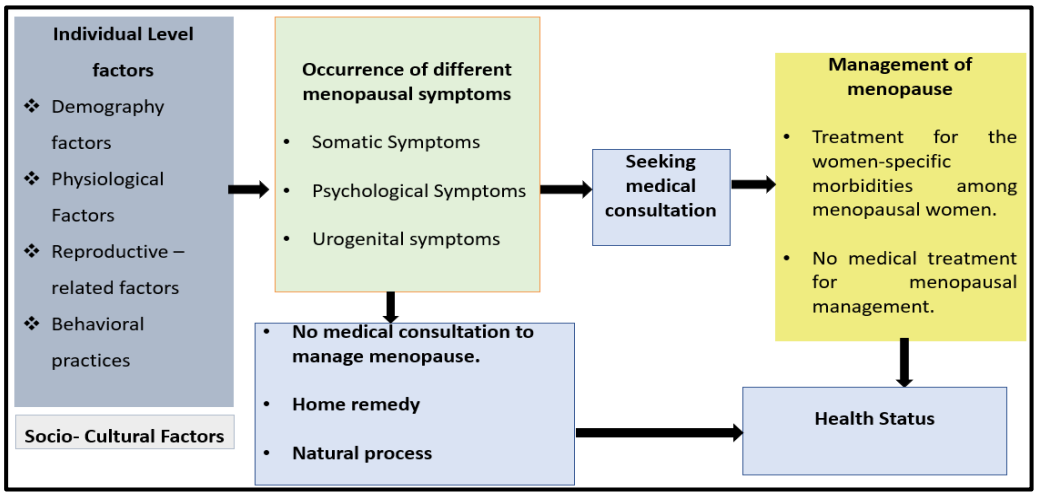

Figure 1. Conceptual Framework showing mechanisms of menopausal symptoms and its management among women in India.

Findings

It is widely assumed that women in India experience fewer menopausal symptoms; however, this study highlights that majority of women in India (80 percent) in the age group of 45-59 years have had some form of menopausal symptoms. 'Psychological and somatic symptoms' had highest prevalence while urogenital symptoms were found to have the lowest prevalence of less than 1 percent which might be due to the stigma associated in discussing reproductive and gynaecological issues. Regional variations were observed in both women reporting menopausal symptoms as well as the treatment-seeking behaviour for morbidities among menopausal women. The menopausal symptoms were more prevalent in the Eastern region while more women sought treatment to manage menopause in the Southern region. These variations could be attributed to diverse cultural and social norms influencing how menopausal symptoms are reported and managed. Besides socio-economic factors (such as increasing age, living in rural areas, lack of formal education, being part of the wealthy quintile, and residing in the Eastern region), other important predictors of menopausal symptoms were various reproductive-related factors (such as having 2 or more pregnancies, undergoing a hysterectomy), acute or chronic diseases (including a history of anaemia, hypertension, and diabetes), and behaviour-related factors (such as smoking or using smokeless tobacco). Women typically seek treatment only when their conditions, particularly gynecological morbidities, become severe. The treatment seeking for 'gynaecological morbidities' such as fibroids/cysts, uterine prolapse was high than 'other morbidities' such as mood swings, hot flashes and others. The study also highlights a disparity in treatment-seeking behaviour, with majority of the women seeking treatment for gynecological morbidities coming from affluent, urban backgrounds with higher education levels indicating the affordability and accessibility of treatment as a deciding factor. Many women delay seeking treatment until it become severe morbidities, therefore treatments for less severe morbidities including dry vagina, vaginal discharge, mood swings, and hot flashes are less common compared to treatments for more serious conditions like uterine prolapse and fibroids/cysts. Thus, in majority of the women continue to suffer in silence and seek medical help only when the problem becomes serious. This indicates that in a patriarchal society like India, women often neglect their health problems until it becomes a serious issue and then resort to treatment. As there is a culture of silence around women reproductive issues in India, women in general may feel uncomfortable discussing these issues with others. The findings from the study also imply that some level of medicalisation of menopause might be happening in India especially among the urban-rich women which needs further investigation. The questions concerning the types of treatments pursued, the extent of awareness and counselling offered prior to treatment, and the impact of treatment costs on its access are important and require more in-depth analysis. Thus, to achieve 'health for all', it is important that India's health policies should address women's health beyond their reproductive years.

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