

# Determinants of mid-life Health Among Rural Women of Central India: A Cross-Sectional Study

**Manisha Jain, Swati Solanki, Divya Khare**

Department of Obstetrics and Gynecology, People's College of Medical Sciences and Research Centre, Bhopal

## ABSTRACT

India has about 130 million women in menopausal age of which nearly half reside in rural locations. With the concentration of health care facilities in and around urban areas, attaining adequate mid-life health care in rural settings poses a distinct challenge. The role of primary care providers thus gains paramount significance in rural settings. An observational, cross-sectional study conducted at the rural district health centre of central India. All women above 40 years of age were offered voluntary participation. All health care providers were interviewed using a set questionnaire. Data recorded and analyzed to assess the awareness and attitudes towards menopausal health. Descriptive statistical analysis methods were used. Results: The mean age for all women was 56 years. Lack of education (56%), long distance from the facility (55%), poor economic conditions (95%) and late reporting (70%) were common challenges. Overall, menopausal awareness among nursing and medical officers was good but the practices of screening for other medical conditions lacked in many (70% and 40% respectively). Conclusions: Promoting education, regular training of medical and paramedical staff at the periphery, the building of health care facilities close to community levels, health promotional activities and policy amendments are key to improve mid-life health in rural settings.

**KEY WORDS:** menopause, rural women, mid-life health, paramedical staff

## INTRODUCTION:

Menopause (defined as complete cessation of menstruation) forms a significant transitional phase in women's lives. It not only marks the transition from reproductive to nonreproductive phase but also accelerates the process of ageing and other medical disorders. Globally, there is an overall rise in average lifespan and women are spending as much as one-third of their lives post-menopause. As far as Indian women are concerned, the varied genetic and socio-demographic characteristics have led them to embark upon menopause at much earlier ages. At a stage when a woman is challenged by varied psychophysiological limitations of menopause, focussed and supportive attention by her healthcare provider gains paramount importance. Thus contact with her health care provider also serves as an important window of opportunity to offer screening of medical conditions common and prevalent at this stage of woman's life.

Illiteracy, diverse cultural beliefs, limited

socioeconomic resources, poor access to health care systems and poor patient motivation to seek health care commonly pose a distinct challenge to midlife health care provision in Indian rural settings. The current study was undertaken to study the various lacunae in menopausal health care in such a rural district of central India.

To study level of awareness about menopause among rural perimenopausal and postmenopausal women. To study awareness and attitude about menopause among nursing personals and general practitioners. To study the reasons of gap in midlife health.

## MATERIALS & METHODS:

This was an observational, cross-sectional, questionnaire-based study conducted over a period of six months by the Department of Obstetrics and Gynaecology of a Government Medical College of Central India in 2019. All women above 40 years of age attending the Gynaecology outpatient department of a district health centre were offered voluntary participation in the study. A total of 65 menopausal and perimenopausal women above 40 years of age were enrolled. About 30 nursing personnel and 20 medical officers working at the district health centre were also offered voluntary participation. After detailed information and consent, the women were interviewed

### Corresponding Author:

**Dr Manisha Jain**

Professor,

Department of Obstetrics & Gynecology,

People's College of Medical Sciences  
and Research Centre, Bhopal - 462037

Phone No.: 9669777600

E-mail: mnishu2002@gmail.com



using a pre-determined questionnaire to study their level of awareness about various health problems associated with menopause. Various female nursing personnel and general practitioners involved in health care delivery at district hospital were also interviewed using separate sets of questionnaires. All participants were free to opt-out of the study at any point in time. The data were recorded in tabulated format and the study was carried out.

All women were interviewed for the common symptoms if any they experienced and the duration of their symptoms. The various reasons for a delay in seeking health care were also noted if any. Nursing personnel were interviewed for their awareness about menopause, its definition, common presenting signs and symptoms and common medical conditions that can be screened in women approaching menopause. The medical officers involved in giving primary care to these women were also interviewed for their awareness about menopause, common clinical presentations, medical diseases that can be screened in these women and primary care modalities that can be offered to these women.

## RESULTS:

Out of 65 enrolled, sixty women completed their interview. Demographic details like age, parity, educational status, gross family income, approximate distance from the health care facility, duration of their menopause and common symptoms were noted. All women ranged between the age group of 40 to 68 years. The mean age of women was 56 years (Table 1). The majority were multiparous with only 2 were primipara. About 50% were uneducated while 36% had some primary level of education. Approximately 25% resided within 5 km of health facility while a majority (55%) reported from distant peripheral rural places more than 25kms from the health centre (Table 2). Often, they travelled three to four hours to reach the facility. Very few (10%) reported within the initial 3 years of final menstrual period with common complaints being vague abdominal discomfort or backache or generalised tiredness (Table 3). A majority (90%) reported with urogenital symptoms with long-standing, huge uterovaginal prolapse being the major complaint. Often these were chronically neglected cases with decubitus ulcers, mucosal atrophy and irreducible prolapse. Generalised body aches with the inability to perform day to day activities were reported by almost all but none of them was aware that it could be related to their declining ovarian function or menopausal status. Vasomotor symptoms and sexual dysfunction were admitted by only a few after direct

questioning (Figure 1). None of them was clear about sleep disturbances and declining mental functions. Almost all belonged to poor socioeconomic status (95%) and expressed an inability to procure medicines other than freely available government supplies. The commonly reported reasons for neglected care and late reporting were gross ignorance, illiteracy, financial issues and distance from the facility (Table 4 & Figure 2). Often the accompanying family persons were daily wage workers or only bread earners of the families, further compounding their problem.

**Table 1:** Showing Age Distribution of Menopausal women.

Age(in years )	Number	Percentage
40 - 50	03	5%
50 – 60	42	70%
60-70	15	25%
More than 70 years	Nil	-
Total (Range 40-68 yrs)		n = 60

**Table 2:** Showing Distance from the facility.

Distance from facility	Frequency (n = 60)	Percentage
< 5 KM	15	25%
5- 25 KM	12	20%
>25 KM	33	55%

Twenty medical officers and thirty nursing personnel were interviewed using a separate set of questionnaires only after they expressed willingness to participate in the study. Questions were asked regarding the definition of menopause, and common symptoms women experience during such transition, which common medical conditions can be screened during such contacts with health care providers and common management approach opted by them (only for medical officers) while treating women above forty years. About 75% of nurses could define menopause correctly while almost all medical officers (95%) were aware as to when to call menopause. Generalised body ache and fatigue were reported to them as the most common complaints by women followed by urogenital symptoms (pruritus, prolapse, dysuria, urinary tract infections, prolapse). Vasomotor symptoms were rarely reported while it was extremely difficult to elicit complaints regarding sexual dysfunction and cognitive decline. Only 60% correctly identified common medical conditions (hypertension, diabetes, osteoporosis, gynaecological malignancies, breast cancer, depression) that can be screened and picked up early by adopting careful vigilance. On enquiry into

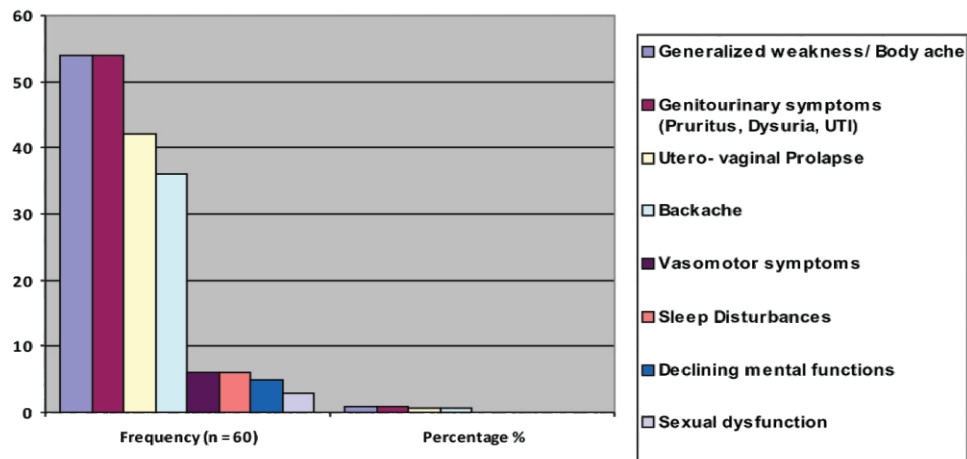


Figure 1: Showing common presenting symptoms.

Table 3: Showing common presenting symptoms.

common presenting symptoms	Frequency (n = 60)	Percentage %
Generalized weakness/ Body ache	54	90%
Genitourinary symptoms (Pruritus, Dysuria, UTI)	54	90%
Utero- vaginal Prolapse	42	70%
Backache	36	60%
Vasomotor symptoms	06	10%
Sleep Disturbances	06	10%
Declining mental functions	05	08%
Sexual dysfunction	03	05%

Table 4: Showing Reasons of late reporting.

Causes of late reporting	Frequency (n = 60)	Percentage
General Ignorance	52	70%
Illiteracy	35	60%
Distance from the facility	35	60%
Financial issues	35	60%
Lack of accompanying family persons	42	70%
Miscellaneous	06	10%

management options, 80% counselled women about lifestyle and dietary modifications, while 40% offered non-hormonal pharmacological and supportive treatments to their patients. None of them was prescribing HRT to any of their patients and would prefer to refer patients to specialist care (Table 3, 4 & 5; Figure 2).

## DISCUSSION:

India's consistently growing economy has resulted in an overall rise in average life expectancy with 20% female population falling above the age of

45years.<sup>[1]</sup> As per WHO (2018), the life expectancy of Indian female is expected to escalate from 70.3 years to 77 years by 2050.<sup>[2]</sup> The literature of past has shown that Indian women by their characteristic genetic, ethnicity, socio-cultural and demographic features attain menopause much earlier (46 years) compared to Caucasians (51years) and thus spend near about three decades of their life post-menopause.<sup>[3]</sup> Menopause, though simply defined as the permanent cessation of menses, for a majority of women it is an unfolding of many physical and psychological challenges and barely a smooth transition. WHO defines health as a

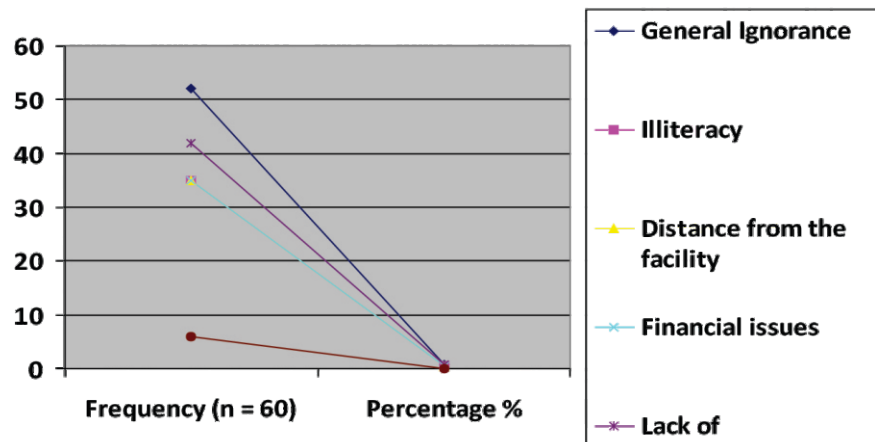


Figure 2: Showing reasons for late reporting.

Table 5: Showing Awareness and Attitude of Medical Officers and Nursing Staff.

Awareness and attitude of Medical Officers and Nursing Staff	Medical officers (n = 20)		Nursing Staff (n=30)	
Awareness about Menopause	19	95%	24	80%
Screen for common medical conditions ( DM, HT, Osteoporosis, Gynecological Malignancy, Breast Cancer, Depression )	12	60%	18	60%
Counsel about lifestyle and Dietary Modifications	16	80%	12	40%
Offered Non – pharmacological treatment	08	40%	-	None
Offered Hormone therapy	Nil	None	-	None
Referred to gynecologist / othercenter	10	50%	27	90%

state of complete physical, mental and social well-being and not mere absence of disease or infirmity.<sup>[4]</sup> Holistic mid-life health for all women thus becomes an important health target to all health care providers.

Menopause or complete cessation of menstruation is a routine phenomenon for women across the world. But often, the physical and psychological experiences related to menopause are influenced by various socio-cultural practices, economic status, social development and family support received by women.<sup>[4]</sup> In our study the mean age of participants was 54 years (Range: 40-68yrs), almost all were multiparous (99%) and about one third received some primary level of education. Almost all belonged to poor socioeconomic status (95%). In a study by Khan et al, the mean age of participants was 58.14 yrs, with maximum belonged to the group 56-60 years and only 2.3% reporting during 40-45 years<sup>[1]</sup>. In the current study, about  $\frac{3}{4}$  of women resided far off from the facility (> 25 km) and required some transport or family support to reach the health centre. In a study by Khan et al, the majority of the women in both rural and urban areas were unemployed or homemakers and

were dependent on their children<sup>[1]</sup>. A report by Government of India stated that among elderly women, about 70% women are dependent on their children, 20% depended on their spouses, 3% on grandchildren and more than 6% on others including the non-relations<sup>[5]</sup>.

Biologically ageing ovaries with consequent drop in estrogen levels pose menopausal women to multiple sets of problems. Vasomotor symptoms (hot flashes, night sweats), urogenital dysfunctions, cognitive decline, sexual disorders, lack of energy (sarcopenia), backache, osteoporosis with increased risk of cardiovascular morbidity and genital and extra-genital malignancies are common accompaniments at this stage. Indian rural women, however often regard menopause as freedom from socio-cultural restrictions, reproductive burden and physical discomfort arising out of monthly menstrual bleeds.<sup>[1]</sup> Many grow old facing the adversity of gender discrimination, domestic violence, financial inequality and other domestic hardships often suffering in silence and keep neglecting their symptoms until they start affecting their day to day lives.<sup>[1]</sup> In our study, 70% of all women



were into menopause for more than ten years with only 10% reporting in the initial 3 years of menopause. Alizadeh et al reported that the experiences at menopause are influenced by awareness about menopause, age at menopause, education, employment, stress, environmental conditions, cultural norms, social factors and social communications related to menopause.<sup>[6,7]</sup> In our study, urogenital symptoms with fatigue were most commonly (90%) reported symptoms.

Karmarkar et al opined that physical symptoms such as lack of energy occurred in 93% followed by aching in muscles or joints and difficulty sleeping in 84% while low backache in 69% of women.<sup>[8]</sup> Ignorance about menopause (90%), poor socioeconomic status (95%), need of a person to accompany (80%) and distance from the facility (55%) were major factors responsible for poor healthcare-seeking behaviour, in our study.

India with a population of 1.2 billion, has about 10% population (100 million) aged over 50 years<sup>[2]</sup>. The menopause in women labelled as a biomarker or escalated risk marker for common non-communicable diseases (hypertension, diabetes, CHD, stroke, osteoporosis, malignancies) also serves as an important window of opportunity to screen and initiate preventive and promotive health measures in women. Unfortunately, though the contact with health care worker or visit to the health facility in rural settings is rarely a health-seeking act towards their menopausal symptoms. More than often the consult is for unrelated health issues or only an opportunistic contact. In resource-limited settings and rural India where nursing personnel and general medical practitioners often form the primary backbone of health delivery system, it gains paramount significance that primary health care providers and nursing personnel be aware and able to provide adequate menopausal care to such women. In our study, we interviewed 30 nursing personnel and 20 general practitioners about their knowledge, attitude and practices towards menopausal women (Table 5). About 3/4th of nursing personnel and almost all (95%) medical officers could define menopause correctly. However, only 60% of medical practitioners and 30% of nursing personnel knew that these women can also be screened for other medical conditions common in such women. Though 80% of medical practitioners were utilizing the opportunity for dietary and life-style counselling only 40% were prescribing non-hormonal medications. None of the nurses or medical doctors was using the opportunity to screen such women for malignancy common at this stage such as breast and

cervical malignancy. In their study, Umakant et al concluded that most of the paramedical staff lacked knowledge about menopause including HRT and often considered menopause as natural phenomenon rarely requiring any medical assistance<sup>[9]</sup>. About two-thirds of the Indian population resides in the rural area of which approximately half are females. As per reports, 130 million women in India are in menopausal age further emphasising the need to strengthen primary preventive and promotive mid-life health at community levels close to the women residing in peripheral areas<sup>[10]</sup>.

## CONCLUSION:

Midlife health among rural women contributes significantly to the overall health status of the nation. Spreading awareness, promoting healthcare-seeking behaviours among such women through public awareness camps, incorporation of media, policies amendments and involving health care workers at grass root level in providing menopausal care would help in promoting the overall health of the nation and would bring about a reduction in mortality and morbidity of non-communicable and malignant diseases associated with menopausal status.

## LIMITATIONS OF THE STUDY:

Most of the questions were answered using the recall method. Larger population-based studies may be warranted to reflect true status in general population.

## REFERENCES:

1. Khan S, Shukla M, Priya N, Ansari M A. Health seeking behaviour among post-menopausal women: a knowledge, attitude and practices study. *IJCHPH*. 2016;3(7):1777-1782.
2. Meeta M, Digumarti L, Agarwal N, Vaze N, Shah R, Malik S. Clinical practice guidelines on menopause: An executive summary and recommendations: Indian menopause society 2019–2020. *J Mid-life Health*. 2020;11(2):55-95.
3. Ahuja M. Age of menopause and determinants of menopause age: A PAN India survey. *IMS J Midlife Health*. 2016;7(3):126–131.
4. Namazi M, Sadeghi R, Moghadam Z B. Social Determinants of Health in Menopause: An Integrative Review. *Int J Women's Health*. 2019;11:637–647.
5. Government of India. 2011. Provisional Population Total; Census. Available at: <http://censusindia.gov.in/2011-provresults/indiaatglance.html>.

6. Alizadeh M, Sayyah-Melli M, Ebrahimi H, Shishavan MK, Rahmani F. Social determinants and reproductive factors of the menopausal symptoms among women in Tabriz-Iran. *Soc Determ Health*. 2015; 1(1): 2–8.
7. World Health Organization. Social Determinants of Health in Menopause. Available from: [http://www.who.int/social\\_determinants/en/](http://www.who.int/social_determinants/en/). Accessed March 1, 2018.
8. Karmakar N, Majumdar S, Dasgupta A, Das S. Quality of life among menopausal women: A community-based study in a rural area of West Bengal. *J Mid-life Health*. 2017;8(1):21-7.
9. Valvekar U, Viswanathan S. Knowledge of qualified paramedical staffs in understanding the symptomatology and hormonal replacement therapy in menopause. *IJCRR*. 2016;8(7):8-12.
10. Sengupta A. The emergence of the menopause in India. *Climacteric* 2003; 6(2):92-5.

Cite this article as: Jain M, Solanki S & Khare D: Determinants of mid-life Health Among Rural Women of Central India: A Cross-Sectional Study. *PJSR*. 2021;14(2):8-13.  
Source of Support : Nil, Conflict of Interest: None declared.