# **Original Article**

# Knowledge and Perceptions Regarding Climacteric among Rural Women in Jammu District of UT of J and K, India: A Cross-Sectional Study

Kiran Bala, Riya Gupta<sup>1</sup>, Rajiv Kumar Gupta, Najma Akhtar

Departments of Community Medicine and <sup>1</sup>Ophthalmology, GMC, Jammu, Jammu and Kashmir, India

Submitted: 17-Dec-2021 Revised: 08-Mar-2022 Accepted: 28-Mar-2022 Published: 16-Sep-2022

# INTRODUCTION

Woman passes through many distinct phases during her lifetime. Whether it is to attain menarche, to give birth to a baby after 9 months of conception, or to attain menopause, all these hold a distinct meaning to her. Not only this, health demands and needs are also different for various phases through which she passes. With the increasing life expectancy and upward trends in the population of geriatrics, it is time to enhance our understanding of climacteric and its related health concerns.

There is a large spectrum of symptoms attributed/ associated with menopause. These symptoms can be

Access this article online		
Quick Response Code:	Website: www.jmidlifehealth.org	
	DOI: 10.4103/jmh.jmh_217_21	

Background: The word Climacteric is shrouded in a culture of silence in our country, more so in the vast rural swathes of India. This survey was carried out to assess the knowledge and perceptions regarding climacteric in rural females of the Jammu district. Materials and Methods: The present study was conducted in the Kot-Bhalwal health block of Jammu district. A sample of 215 was calculated assuming a minimum prevalence of 65% of menopausal symptoms. Using a two-step simple random sampling technique, a total of 245 postmenopausal women from four villages of the health block were interviewed using a semi-structured questionnaire. Results: Among the sources of information about climacteric, family and friends were prime sources followed by community elders. About one-third (35.10%) of the respondents had no discussion about climacteric with anyone. The majority of the participants had a positive perception of climacteric and described it as a feeling of relief. About 77.9% of study participants rated their health as poor to fair. However, about one-fourth of women had taken health checkups for menopause-related symptoms. None of the respondents had any clue about oncological screening. Conclusion: Despite positive perceptions, there is a need to dispel the misconceptions with rigorous awareness and counseling. The role of village-level health workers along with ANM at Sub Health Centers/ Health and wellness centers is the game-changer in this context. Every opportunity including Antenatal clinics should be utilized to educate as well as screen menopausal females for various health problems.

**Keywords:** Climacteric, knowledge, perception

condensed as that related to vasomotor, urogenital, cognitive, somatic symptoms and many others such as weight gain, and crying spells.<sup>[1,2]</sup>

The intensities of these symptoms may differ from woman to woman. There is a reflection that many women are not able to correlate these symptoms with menopause.<sup>[3]</sup> The experience and basic understanding of menopause vary widely globally. The cross-cultural

Address for correspondence: Dr. Najma Akhtar, Department of Community Medicine, GMC, Jammu, Jammu and Kashmir, India. E-mail: drnajmaakhtarpsm@gmail.com

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: WKHLRPMedknow\_reprints@wolterskluwer.com

How to cite this article: Bala K, Gupta R, Gupta RK, Akhtar N. Knowledge and perceptions regarding climacteric among rural women in Jammu District of UT of J and K, India: A cross-sectional study. J Mid-life Health 2022;13:163-8.

review of the literature by Melby, Lock, and Kaufert (2005)<sup>[4]</sup> reported a great variation in the rates and intensities of menopausal symptoms among different populations. Further, the finding of the review strongly emphasized the role of biological and cultural factors in influencing menopause-related perception and experiences.

In India, although, the health issues of women in the reproductive group (15–45 years) are taken care of via a wide network of dedicated health programs, health needs, and concerns of postmenopausal women have not gained much attention yet.<sup>[5,6]</sup> In the current scenario with increasing life expectancy, a woman is likely to spend about three decades of her life after menopause.<sup>[6,7]</sup> It, thus, becomes important to plan and develop some strategies to help these women cope with and through this phase of their life so that they can live with dignity and enjoy it to the fullest.

During the review of the literature, it was found that there was a dearth of studies on the perception about Climacteric in the northern zone of India and more so in rural females of UT of Jammu and Kashmir. It was in this context that the present study was envisaged among rural menopausal females to assess their knowledge and perception about climacteric.

# **MATERIALS AND METHODS**

164

This population-based study was conducted in Kot-Bhalwal Health Block of Jammu district of UT Jammu and Kashmir. Ethical clearance for this study was sought from the Institutional Ethical Committee, Government Medical College, Jammu district before the commencement of the study.

Assuming a minimum prevalence of 65% of menopausal symptoms, at 95% confidence interval with a precision of 10%, the sample size calculated was 215. Considering a nonresponse rate of 10% final sample size calculated was 240.

The sample was selected using a two-step simple random sampling technique. In the first step, out of four health zones in the Kot-Bhalwal health block, one health zone was chosen randomly. In the second step, using the lottery method, one village was randomly chosen from the list of the villages catered by the selected health zone. Once the survey of the selected village was completed, another village was randomly chosen using the lottery method. Thereafter, all the eligible postmenopausal women in that area were contacted and interviewed using nonprobability purposive sampling till the final sample size was attained.

## **Inclusion criteria**

All those postmenopausal women who gave their written informed consent and had undergone natural menopause were eligible candidates for this study.

#### **Exclusion criteria**

- 1. Postmenopausal women who had undergone induced menopause and/or some serious illness or bedridden due to any acute/chronic diseases and/or accident
- 2. For those women who during the first visit, were not found at their respective houses or had locked houses, a second visit was scheduled, but if not found even after the second visit, such women were also excluded from the study.

Before the conduct of the actual study, a pilot study was conducted to assess any ambiguity in the questionnaire and the time it took to conduct each interview. The feedback so obtained in the pilot study was duly incorporated in the final questionnaire used in this study.

Data collection was conducted by house-to-house visits for 6 months. All the potential candidates were interviewed face-to-face using a semi-structured schedule after obtaining informed written consent. Data were collected by a single female investigator for ensuring comfort and cooperation for ease of interviewing and preventing gender bias. After building rapport with respondents, the questions were asked in the local dialect of the participants. Then the responses so obtained were transcribed back into the English language, and thereafter, responses were retranslated to the local language to reconsolidate and maintain clarity, wherever needed.

A semi-structured interview schedule was constructed after reviewing available literature from previous similar studies.<sup>[5,8-10]</sup> Questions mainly related to knowledge and perception about menopause, source of knowledge, healthcare-seeking behavior, and self-assessment of health.

The data collected were analyzed in terms of means with standard deviation and percentages for quantitative and qualitative variables, respectively.

## **Operational definitions**

#### Postmenopausal women or women

Any woman with last menstrual period as more than 12 months at the time of data collection.

## Induced menopause

The cessation of menstruation that follows either surgical removal of both ovaries or iatrogenic ablation of ovarian function.<sup>[11]</sup>

# RESULTS

In this study, we interviewed 245 postmenopausal women who met our eligibility criteria. About 97.55% of women in our study report entering menopause after 40 years. Most of the study respondents, i.e., 82.86% were having a monthly family income of <Rs. 10,000 [Table 1].

About 75% of the participants reported that they had not taken any health checkups for their menopausal symptoms. The most common reason reported by the women for health consultation and taking medication regarding menopause-related symptoms was joint pains (17.55%). None of the participants was taking hormone replacement therapy (HRT). All the study participants neither knew about oncological screening nor had undergone any such screening [Table 2].

As evident from Table 3, two-thirds of the participants described menopause as a feeling of relief/freedom from the menstrual period, monthly tension, washing clothes, spotting, etc. Among the various symptoms that participants correlated with menopause by the respondents, weakness was the predominant symptom reported by 18.37% of women followed by muscle and joint pains which was reported by 16.33% of participants. Only 5.3% of the participants opined self-assessment of health as very good. More than three-quarters of the study participants (78%) rated their health as poor to fair. Moreover, most of the study women (83.7%) reported that they did not know about the cause of menopause. Only 5.3% of the respondents reported very good as their health status after menopause [Table 3].

As presented from the frequency analysis [Figure 1], the most common source of menopause-related information was reported by study participants as their family, followed by friends and community elders. Out of 245, only 10.61% of women reported health professionals as a source of information. Many respondents (35.10%) had not discussed menopause with anyone. Some of the excerpts used regarding climacteric are cited in Table 4.



Figure 1: Distribution of respondents as per their source of knowledge about climacteric

Near 89% and 87.3% of the respondents reported suffering from muscle and joint pains and lacking energy/feeling tired [Table 5].

#### DISCUSSION

The topic of climacteric remains taboo in Indian women, especially with the culture of silence in the country's rural hinterlands. It was in this context that the authors set out to document the knowledge and perceptions about climacteric in the rural women of Jammu district.

Mean age at menopause of the study participants was  $45.64 \pm 4.58$  years which was in congruence with those reported by Satpathy,<sup>[12]</sup> Sharma and Mahajan,<sup>[13]</sup> Sarkar *et al.*<sup>[14]</sup> and Mahajan *et al.*,<sup>[15]</sup> In the present study, the overall perceptions of the respondents regarding menopause of nearly two third (i.e., 66.12%) of the respondent were that of a feeling of relief at the cessation

participants	n (%)
Mean age (years)	56.49±9.90
Mean age at menopause (years)	45.64±5.8
Mean age at menarche (years)	12.9±3.8
Menopause	
Premature	6
Normal	239
Marital status	
Married	204
Divorced/separate/widow	41
Literacy	
Illiterate	4
Up to higher secondary	215
Graduate or above	26
Monthly income	
<10,000	203
>10,000-20,000	17
>20,000	25
Working status	
Employee	15
Housewife and own activities	230
Tobacco consumption	
Smoker	48
Tobacco chewing	0
Nil	197
Alcohol consumption	
Yes	100
No	0
Co-morbid condition	
None	151
HTN/CVDs	68
Diabetes	7
Bone disease	5
HTN+diabetes	5

CVDs: Cardiovascular diseases, HTN: Hypertension

Table 2: Responses of the study respondents to the	
knowledge, attitudes, and, practices questions	

Questions		Number of participants ( <i>n</i> )	
	Yes	No	
Do you know about the symptoms at the time of menopause		24	
Do you know postmenopausal bleeding is not normal			
Do you after menopause the risk of breast cancer/CVD etc., increases?		204	
Do agree physical exercise is beneficial after menopause		77	
Do you know about hormone replacement therapy	38	207	
Did you discuss menopausal symptoms with family elders/friends	159	86	
Do you know about any oncological screening tests like self-examination of breast/ mammography/PAP smear?		100	
Any gynecological checkup/health consultation for any climacteric-related problems in the past 5 years	61	184	
Have you undergone any oncological screening tests like self-examination of breast/ mammography/PAP smear?	0	100	
Are taking any allopathic/AYUSH medicine for menopause-related symptoms	58	179	
Have you taken hormone replacement therapy any time after entering menopause	0	100	
Do you want to have more knowledge on menopause		0	

CVD: Cardiovascular disease, AYUSH: Ayurveda, yoga,

naturopathy, unani, siddha, and homeopathy, PAP: Papanicolaou

# Table 3: Distribution of responses related to perceptions and understanding related to menopause

Parameter	Category	n (%)
Feeling about the cessation	Relief	162 (66.12)
of menses	Regret	49 (20.00)
	Mixed feeling	28 (11.43)
	Neutral	6 (2.45)
Symptoms correlated with	Weakening of eyesight	35 (14.28)
menopause	Muscle and joint pains	40 (16.33)
	Greying of hairs	21 (8.57)
	Weakness	45 (18.37)
Cause of menopause	No responses/don't know	205 (83.67)
	Natural	22 (8.245)
	Aging	6.7%
	End of fertility	2.2%
Self-assessment of	Very good	13 (5.3)
health after the onset of	Good	41 (16.7)
menopause	Fair	95 (38.8)
	Poor	96 (39.2)

of menses and related problems. These results were in consonance with those reported by Avis *et al.*,<sup>[8]</sup> Leon

*et al.*,<sup>[10]</sup> and another study from Nigeria.<sup>[16]</sup> However, these results were in contrast with those reported in studies conducted in India,<sup>[12]</sup> Korea,<sup>[17]</sup> and Malaysia.<sup>[18]</sup>

The results of the study revealed that for many of the respondents, the most common sources of information about climacteric were family and friends, whereas about one-third of the respondents had not discussed climacteric with anyone. These findings were in the line of agreement with those reported by a study from Ethiopia<sup>[9]</sup> which reported that friends, reading materials, and physicians were the main sources of information. In a similar study conducted among Japanese women,<sup>[19]</sup> the primary sources of menopausal-related information were friends (69%), magazines (57%), and physicians (26%). This difference could be due to study settings besides literacy levels, socioeconomic status, and accessibility to information among the respondents.

Only 5.3% of the respondents reported a very good self-assessment of health after menopause and all of them (100%) wanted to have more knowledge. Nagaraj *et al.*  $(2021)^{[20]}$  reported that the most common perception among respondents was that it meant the loss of fertility and freedom from menstruation.

About one-fourth (24.90%) of the respondents in the present study had received health consultation for menopause-related problems and similar findings were reported by Madhukumar *et al.*<sup>[5]</sup> A higher rate of 38.7% and 79.4% of health consultation was reported by Puri *et al.*<sup>[6]</sup> and Leon *et al.*<sup>[10]</sup> in their respective studies.

In the present study, 83.6% of the respondents were not aware of the cause of menopause and it could well be correlated with lack of health-seeking behavior in these rural women. It needs to be emphasized that proper knowledge about climacteric would lead to improved health status as well as health-seeking behavior among these women.

None of the respondents in the current study had heard of HRT and this finding was in corroboration with the results reported by Agwu *et al.*<sup>[21]</sup> and Dutta *et al.* (2012).<sup>[22]</sup> However, another study conducted in Bhopal<sup>[23]</sup> among teachers reported awareness regarding HRT to the tone of 88%. The Higher educational status of the study participants can be stated as an explanation for higher awareness levels reported by the study.<sup>[23]</sup>

It was also found that none of the respondents were aware of oncological screening procedures. However, in contrast, Kaur *et al.* (2004)<sup>[24]</sup> reported that 16.9% of the respondents were aware of the PAP swear and 4.2% had undergone PAP swear at least once. The explanation for this varied result could again be that study by Kaur

# Table 4: Excerpts used by some participants to explainthe cause of climacteric

"As aging proceeds, it has to end someday, and it should end ." ". likewise, it ends abruptly after the age of 40, as it started." "It happens to all ... it is a natural phenomenon to make old woman free from Kapda (clothes)"

"This makes clean (pure)....."

".when children grow old, women get dry."

"My mother told me that when your children will get married, your periods will end."

Table 5: Distribution of study participants based on reporting of menopausal symptoms (n=245)		
Menopausal symptoms	Number of participants, n (%)	
Hot flushes	152 (62)	
Difficulty in breathing	111 (45.3)	
Night sweats	180 (73.5)	
No interest in sex	196 (75.4)	
Sleeping difficulty	202 (82.4)	
Panic attacks	180 (73.5)	
Feeling low or depressed	182 (74.3)	
Headaches and irritability	188 (76.7)	
Lack of energy	214 (87.3)	
Muscle and joint pains	218 (89)	

*et al.*(2004)<sup>[24]</sup> conducted a study in Chandigarh where respondents were likely to be more literate and aware about screening procedures as compared to resource-poor settings in the present study.

Among the menopausal symptoms, three-quarter of respondents had feeling of nervousness, night sweats, sleeping difficulty, panic attacks, feeling low or depressed, lacking energy and muscles and joint pains. These findings are in consonance with the results reported by Subrahmanyam and Padmaja<sup>[25]</sup> and Rahman *et al.*, (2011).<sup>[26]</sup>

Authors recommend support mechanisms in form of mahila swasth sangathans, nongovernmental organizations, etc., to cater to the health problems of Climacteric in these rural women. The role of health care providers like accredited social health activist, anganwadi worker (AWW), auxiliary nurse midwife (ANM), etc., is critical to impart health education regarding climacteric besides screening for Co-morbidities and referrals in case of need.

To counter myths and misconceptions, community women's groups and health workers need to be roped in. Antenatal clinics can be utilized to cater to these women who happen to visit along with their daughter/ daughters-in-law for their health checkups. Middle-aged women need to be encouraged to engage in exercises, Yoga, meditation, and a balanced diet to prevent or cope better with their health-related issues. The main strength of the study was that data was collected by face-to-face interviews at private places like houses of the respondents or nearby fields where they were working, keeping the participants in their comfort zone to speak freely their minds. Since data collection was done by the same investigator throughout the study period, standardization of the interview questions was taken care of. However, owing to the small sample size and study site where this research was conducted, the findings of this study may not be representing the whole of India but findings can be helpful for authors conducting similar studies in other parts of North India. The interview schedule used in this study was prepared by review of the literature but is not a validated tool which is one of the limitations of this study. This limitation was tried to minimize by conducting a pilot study before the final use of the study instrument. The inherent flaws associated with cross-sectional study design can be stated as another limitation of this study.

#### CONCLUSION

The experiences and perceptions among rural women in the present study were mostly positive and were of relief. Family and friends were the prime sources of information about menopause but none of the respondents had undergone any oncological screening.

There is a need to research on large scale focusing on the health status and needs of this vulnerable group. It will aid in sensitizing the health policymakers and stakeholders about the health concerns of these women thereby, improving the quality of life and healthcare access to this group of population.

#### Acknowledgement

Highly grateful to all the women who share their experiences and contributed to this study.

# Financial support and sponsorship

Nil.

#### **Conflicts of interest**

There are no conflicts of interest.

#### References

- Shaw RW, Patrick W, Stanton SL. Gynaecology. 2<sup>nd</sup> ed. Edinburgh: Churchill Livingstone; 1997. p. 373-83.
- Shifren JL, Schiff I. Menopause. In: Berek JS, editor. Berek and Novak's Gynecology. 15<sup>th</sup> ed. Philadelphia: Lippincott Williams and Wilkins; 2012. p. 1233-49.
- 3. Kaur M. Post-menopausal symptoms: Reports from urban women. Indian J Cont Nsg Edn 2021;22:53-6.
- 4. Melby MK, Lock M, Kaufert P. Culture and symptom reporting at menopause. Hum Reprod Update 2005;11:495-512.
- Madhukumar S, Gaikwad V, Sudeepa D. A community-based study on perceptions about menopausal symptoms and quality of life of postmenopausal women in Bangalore rural. Int J Health

Sci Res 2012;2:49-56.

- Puri S, Bhatia V, Mangat C. Perceptions of menopause and postmenopausal bleeding in women of Chandigarh, India. Internet J Fam Pract 2007;6:1-6.
- Vijayalakshmi S, Ramesh C, Eilean VL. The menopausal transition among northern Indian women. Nitte Univ J Health Sci 2013;3:73-9.
- Avis NE, McKinlay SM. A longitudinal analysis of women's attitudes toward the menopause: Results from the Massachusetts Women's Health Study. Maturitas 1991;13:65-79.
- Tsehay DS, Mulatie MM, Sellakumar GK. Determinants of menopausal symptoms and attitude among middle-aged women: The case of Dangila Town, North West Ethiopia. Innovare J Soc Sci 2014;2:15-20.
- Leon P, Chedraui P, Hidalgo L, Ortiz F. Perceptions and attitudes toward the menopause among middle aged women from Guayaquil, Ecuador. Eur J Menopause 2007;57:233-8.
- Research on the menopause in the 1990s. Report of a WHO Scientific Group. World Health Organ Tech Rep Ser 1996;866:1-107.
- Satpathy M. A Study on age at menopause, menopausal symptoms and problems among urban women from Western Odisha, India. Int J Sci Res Publ 2016;6:422-7.
- Sharma S, Mahajan N. Menopausal symptoms and its effect on quality of life in urban versus rural women: A cross-sectional study. J Midlife Health 2015;6:16-20.
- Sarkar A, Pithadia P, Goswami K, Bhavsar S, Makwana NR, Yadav S, *et al.* A study on health profile of post-menopausal women in Jamnagar district, Gujarat. J Res Med Dent Sci 2014;2:25-9.
- 15. Mahajan N, Aggarwal M, Bagga A. Health issues of menopausal women in North India. J Midlife Health 2012;3:84-7.
- 16. Adewuyia TD, Akinade EA. Perception and attitudes of Nigerian women towards menopause. Procedia Soc Behav Sci

2010;5:1777-82.

- Kim MK, Seo SK, Chae HD, Hwang KJ, Kim T, Yoon BK, et al. Perceptions of postmenopausal symptoms and treatment options among middle-aged Korean women. Yonsei Med J 2017;58:533-9.
- Wong LP, Nur Liyana AH. A survey of knowledge and perceptions of menopause among young to middle-aged women in federal territory, Kuala Lumpur, Malaysia. J Health Transl Med 2007;10:22-30.
- Lock M. Ambiguities of aging: Japanese experience and perceptions of menopause. Cult Med Psychiatry 1986;10:23-46.
- Nagaraj D, Ramesh N, Devraj D, Umman M, John AK, Johnson AR. Experience and perceptions regarding menopause among rural women: A cross-sectional hospital-based study in South Karnataka. J Midlife Health 2021;12:199-205.
- Agwu UM, Umeora OU, Ejikeme BN. Patterns of menopausal symptoms and adaptive ability in a rural population in South-east Nigeria. J Obstet Gynaecol 2008;28:217-21.
- Dutta R, Dcruze L, Anuradha R, Rao S, Rashmi MR. A population-based study on the menopausal symptoms in a rural area of Tamil Nadu, India. J Clin Diagn Res 2012;6:597-601.
- Sultan S, Sharma A, Jain NK. Knowledge, attitude and practices about menopause and menopausal symptoms among midlife school teachers. Int J Reprod Contracept Obstet Gynecol 2017;6:5225.
- Kaur S, Walia I, Singh A. How menopause affects the lives of women in suburban Chandigarh, India. Climacteric 2004;7:175-80.
- Subrahmanyam N, Padmaja A. Menopause related problems among women in a rural community of Kerala. Int J Innov Res Dev 2016;5:60-4.
- Rahman S, Salehin F, Iqbal A. Menopausal symptoms assessment among middle age women in Kushtia, Bangladesh. BMC Res Notes 2011;4:188.