

## Original Research Article

# Prevalence of menopausal symptoms and health-seeking behavior of school teachers with menopausal symptoms in Kumbakonam, South India

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## ABSTRACT

**Background:** Menopausal transition shows symptoms that vary from one woman to another, it includes vasomotor symptoms, sexual symptoms, and psychological symptoms. A determination of the most common medical problem in this broad occupational group serves as the premise for actions that help teachers to preserve their health and their ability to work in their profession. Objectives of the study were to estimate the prevalence of menopausal symptoms among peri and post-menopausal school teachers in Kumbakonam and to determine the health-seeking behavior of school teachers with menopausal symptoms.

**Methods:** A descriptive cross-sectional study was conducted among female teachers aged between 40-60 years in Kumbakonam. The random sampling technique was used, and a total of 264 teachers were included in the study. A semi-structured questionnaire was used to collect the sociodemographic details and the menopausal rating scale was used.

**Results:** The mean (SD) age of the participants was 51.67 (4.9). 49.25% were peri-menopausal, 50.8% were post-menopausal. Among the reported symptoms of peri-menopausal, irritability (68.5%), physical and mental exhaustion (66.1%), and joint and muscular pain (66.2%) were predominant. In post-menopausal women, preponderant symptom was 73.9% suffers from joint and muscular pain followed by sleep problems (70.2%), physical and mental exhaustion (63.4%). 31.8% of menopausal women sought health care services.

**Conclusions:** In this study it was found that 93.5% of menopausal women experienced atleast menopausal symptom. However, majority did not seek health care services. Implementing a health education could be a measure to enhance health-care seeking behavior. Improved awareness and access to healthcare services can improve proper health-seeking behavior.

**Keywords:** Menopausal symptoms, Prevalence, Health-seeking behavior

## INTRODUCTION

Menopause an inevitable phenomenon is an important landmark in the life of women experienced by 1.5 million women every year.<sup>1</sup> The World Health Organization defines menopause as the permanent cessation of menstrual periods that occurs naturally or is induced by surgery, chemotherapy, or radiation.<sup>2</sup> Middle age is the

bridge between young and old age which is more affinity towards physical and mental health regarding issues occupies the whole.<sup>3</sup>

According to the Indian Menopause Society, there are about 65 million Indian Women over the age of 45 years.<sup>4,5</sup> The transitional period is classified into three phases namely, pre-menopause, peri-menopause, and post-

menopause which indicates the entire life after menopause.<sup>6</sup>

Those turmoils coincide with a progressive decline of female hormones, culminating in a total shutdown from the ovaries resulting in various vasomotor, psychological, and urogenital symptoms.<sup>7,8</sup> There are also some serious medical concerns related to menopause firstly loss of bone density, which results in osteoporosis, and heart disease risk may grow due to age-related increases in weight, blood pressure, and cholesterol levels.<sup>3</sup> As women approach the period of menopause, an estimated 85% of women reported at least one menopausal symptom, and only 10% of the women seek health care.<sup>9,10</sup>

Since the reproductive and child health scheme was adopted, more studies done for the reproductive age group but little effort has been made to study the needs of women in their late reproductive years. An upward trend in life expectancy has led women to spend half of their lives after menopause.<sup>11</sup> Various studies revealed that menopausal symptoms predominantly affect women in the workforce because of the increasing stress in the working environment, as teachers have essential duties concerning qualification and education.<sup>12</sup>

A determination of the most common medical problem in this broad occupational group serves as the basis for measures that help to maintain the health of the teachers and their ability to work in their profession.

### ***Aim and objectives***

The present study aimed to estimate the prevalence of menopausal symptoms and to determine the health seeking behavior among school teachers in Kumbakonam, Tamil Nadu.

## **METHODS**

A descriptive cross-sectional study was conducted from June to September among middle-aged school teachers including government, government-aided and self-financing schools in Kumbakonam taluk. The period of study was from July 2022 to December 2022.

### ***Sample size***

Sample size was estimated using the formula for sample size for proportions, with the prevalence of menopausal symptoms by 25% obtained from a pilot study of 30 respondents in same area, with 95% confidence Interval and 5% absolute precision was calculated to be approximately was 288.

### ***Inclusion criteria***

All school teacher who is in the age group of 40 and 60 years, and at the stage of peri-menopause and post-menopause were included in the study.

### ***Exclusion criteria***

Women with induced menopause, hysterectomy, receiving any kind of hormonal replacement therapy in preceding six months were excluded from the study.

### ***Data collection***

After obtaining institutional ethical committee approval, permissions from District Educational Officer and Principal of respective school were obtained. Data collection was proceeded using stratified sampling technique. A total of 264 middle aged women under 40-60 years of age were interviewed using semi-structured questionnaire and menopause rating scale (MRS), the overall MRS score was generated by summing up the scores given for eleven symptoms. The subscale score was also generated by summing up the relevant scores for each symptom that were given in four-point Likert scale as none=0, mild=1, moderate=2, severe=3. followed by health seeking behavior questions.

### ***Operational definition***

#### ***Peri-menopausal***

The period immediately prior to menopause characterized by irregular menses without skipping cycles, experienced after the previously regular cycles when the endocrinological, biological and clinical features of approaching menopause.

#### ***Post-menopause***

The period can be defined as dating from the menopause, although it cannot be determined until after a period of 12 months of spontaneous amenorrhea has been observed.

#### ***Health seeking behavior***

Sequence of remedial actions that an individual undertakes to rectify perceived ill health, which includes self-care, change in diet, home remedies, rest, treatment compliance, consult with family, friends and neighbors, seeking either traditional or biomedical care.

### ***Description of the tool***

The data collection tool consists of three parts.

#### ***Part 1***

Socio demographic and general health information, knowledge on menopause, present menstrual history.

#### ***Part 2***

MRS is a self-reported subjective scale that has been used in different international populations and validated in

clinical and different epidemiological studies on menopause symptoms. The MRS was organized with multiple items graded from 0-3 (0- not present), (1-mild), (2-moderate), (3-severe, in which case the symptoms were so bothersome which disturb the daily activities of life) with three main groups - somatic symptoms: hot flashes, heart discomfort, sleep disturbances, muscle and joint problem; psychological symptoms: depression, irritability, anxiety, physical and mental exhaustion; and urogenital symptoms: sexual problems, bladder symptoms, dryness of vagina.<sup>13</sup>

### Part 3

Health seeking behavior of women. This part of the study was conducted with a structured questionnaire containing straight dichotomous and close-ended questions. This was designed after informal conversations with the menopausal women in the schools about their health seeking behavior.

### Data analysis

Data collected were entered in Microsoft excel 2016 for its completeness and correctness. Later subsequently analysed using statistical package for the social sciences (SPSS) 25 software package. Quantitative variables were presented as frequency, percentage, mean, and SD.

## RESULTS

### Socio-demographic characteristics of the study population

A total of 264 school teachers in the age group of 40-60 years, predominantly belonging to the age group of 51-55 years with 51.2%. The mean age of the women included in the study was 51.67 years  $\pm$ 4.9 SD.

The prevalence of menopausal symptoms is 93.5% with confidence interval (LL – UL).

Being school teachers, the majority 42.8% (113) of women working in the government sector as high school teachers with 64.8% (171). The majority 39% of women earn more than 40,000. The marital status of the women was also studied, 79.5% (210) of them are married and belonged to a nuclear family with 55.3% (146). Almost half 124 (47%) of the women had health insurance.

With regard to menopausal status, Figure 1 depicted that amongst 264 women, the majority 134 (50.8%) were post-menopausal women and 130 (49.2%) were peri-menopausal women.

### Profile and severity of menopausal symptoms among peri-menopausal women

The most prevalent symptom among the peri-menopausal women was irritability with (89) 68.5%, (86) 66.1%, and (86) 66.2% of the women suffering from physical and

mental exhaustion followed by joint and muscular pain. In accordance with the data obtained, 22 (16.9%) of the women categorized their irritability symptoms as severe in nature and 18 (13.8%) classified physical and mental exhaustion as severe in nature. Bladder symptoms recorded the least prevalence with only 24 participants (18.5%) presenting with such complaints.

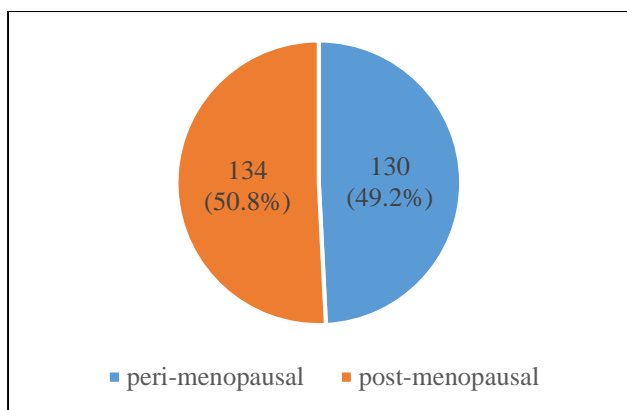
**Table 1: Socio-demographic characteristics of the study population.**

Variables	Frequency (n=264)	Percentage (%)
<b>Age group (in years)</b>		
40-45	36	13.6
46-50	73	27.7
51-55	98	37.1
56-60	57	21.6
<b>Occupation</b>		
Elementary school teacher	31	11.7
Middle school teacher	62	23.5
High school teacher	171	64.8
<b>Type of organization</b>		
Government	113	42.8
Government aided	100	37.9
Private	51	19.3
<b>Income</b>		
Below 10,000	18	6.8
10,000-20,000	28	10.6
21,000-30,000	62	23.5
31,000-40,000	53	20.1
More than 40,000	103	39.0
<b>Marital status</b>		
Married	210	79.5
Unmarried	19	7.2
Divorced/separated/widowed	35	13.2
<b>Type of family*</b>		
Nuclear family	146	55.3
Joint family	87	33.0
Extended family	29	11.0
<b>Health insurance</b>		
Yes	124	47.0
No	140	53.0

\*Living alone

### Profile and severity of menopausal symptoms among post-menopausal women

The predominance of joint and muscular pain affects 99 (73.9%) of post-menopausal women, followed by sleep problems, and physical and mental exhaustion with 94 (70.2%) and 85 (63.4%) respectively in descending order of prevalence of symptoms. Sexual problems recorded the least prevalence with only 31 participants 23.1% presenting with such complaints (Table 3).



**Figure 1: Distribution of study participants according to present menstrual status.**

**Table 2: Profile and severity of menopausal symptoms among peri-menopausal women (n=130).**

Menopausal symptoms	Mild n (%)	Moderate n (%)	Severe n (%)	Total n (%)
Hot flushes	21 (16.2)	10 (7.7)	16 (12.3)	47 (36.2)
Heart discomfort	18 (13.8)	11 (8.5)	8 (6.2)	37 (28.5)
Sleep problems	27 (20.8)	20 (15.4)	21 (16.2)	68 (52.3)
Depressive mood	45 (34.6)	8 (6.2)	26 (20)	79 (60.7)
Irritability	47 (36.2)	20 (15.4)	22 (16.9)	89 (68.5)
Anxiety	58 (44.6)	8 (6.2)	7 (5.4)	73 (56.2)
Physical and mental exhaustion	56 (43.1)	12 (9.2)	18 (13.8)	86 (66.2)
Sexual problems	22 (16.9)	6 (4.6)	7 (5.4)	35 (26.9)
Bladder problems	21 (16.2)	1 (0.8)	2 (1.5)	24 (18.5)
Dryness of vagina	22 (16.9)	9 (6.9)	0	31 (23.8)
Joint and muscular pain	46 (35.4)	20 (15.4)	20 (15.4)	86 (66.2)

According to the MRS, Table 4 showed the overall score of the peri-menopausal and postmenopausal women (MRS). Out of 264 teachers, 75 (28.4%) classified their symptoms as mild, 80 (30.3%) as moderate, and 46 (17.4%) as severe in nature.

**Health seeking behavior of the participants**

Health-seeking practices were quite unsatisfactory in the teachers, 84(31.8%) of the respondents sought health care services for their menopausal symptoms (Figure 2).

**Table 3: Profile and severity of menopausal symptoms among post-menopausal women (n=134).**

Menopausal symptoms	Mild n (%)	Moderate n (%)	Severe n (%)	Total n (%)
Hot flushes	43 (32.1)	14 (10.4)	22 (16.4)	79 (58.9)
Heart discomfort	38 (28.4)	21 (15.7)	8 (6)	67 (50)
Sleep problems	40 (29.9)	30 (22.4)	24 (17.9)	94 (70.1)
Depressive mood	29 (21.6)	24 (17.9)	22 (16.4)	75 (60)
Irritability	35 (26.1)	13 (9.7)	34 (25.4)	82 (61.2)
Anxiety	46 (34.3)	11 (8.2)	24 (17.9)	81 (60.4)
Physical and mental exhaustion	28 (20.9)	30 (22.4)	27 (20.1)	85 (63.4)
Sexual problems	20 (14.9)	10 (7.5)	1 (0.7)	31 (23.1)
Bladder problems	23 (17.2)	18 (13.4)	14 (10.4)	55 (41)
Dryness of vagina	27 (20.1)	7 (5.2)	0	34 (25.3)
Joint and muscular pain	43 (32.1)	28 (20.9)	28 (20.9)	99 (73.8)

**Table 4: Overall score of the menopausal symptoms.**

The score of the menopausal symptoms (MRS)	Frequency (n=264)	Percentage (%)
None (0-4)	63	23.9
Mild (5-8)	75	28.4
Moderate (9-15)	80	30.3
Severe (>15)	46	17.4

Women turned to a wide range of sources, primarily their friends and families, for assistance with menopausal symptoms at (72) 17.3%, and general practitioners (50) at 18.9%. 14% (37) of those interviewed resorted to specialized doctors for assistance, followed by the media (9.1%), traditional leaders (5.7%), and pharmacists (1.5%).

Only (64) 25.4% of the women went to the specific treatment; 20.5% (54) of women went to seek care from a female doctor, and 28.9% (76) sought lifestyle modifications such as meditation and yoga (Table 5).

Figure 3 depicted the knowledge of women on services available at the hospital for menopausal symptoms, 71 (26.9%) of the study subjects does not know about the services available.

**Table 5: Health-seeking behavior of the study participants.**

Variables	Frequency (n)	Percentage (%)
<b>What do you do during menopausal symptoms?*</b>		
Take rest sometimes	77	29.2
Drink some cool/hot drink	1	0.4
Consult doctor	55	20.8
Consult nearby pharmacist	7	2.7
Don't do anything	65	24.6
<b>Specific treatment</b>		
Yes	67	25.4
No	197	74.6
<b>Type of treatment*</b>		
Consult general practitioners	11	4.2
Consult female doctor	54	20.5
Take herbal supplements	2	0.8
Self-medication	5	1.9
Lifestyle modifications such as exercises and yoga	76	28.9
Change in diet	66	25

\*Multiple responses

**Table 6: Reasons for not seeking health care services.**

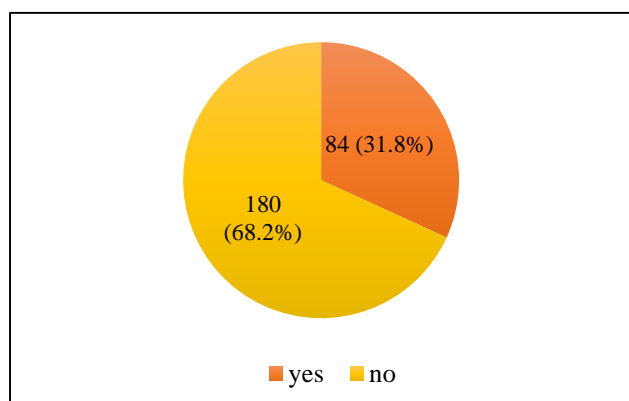
Reasons	Frequency (n)	Percentage (%)
<b>Think that is normal with age</b>	93	35.3
<b>Think there is no need the treatment</b>	27	10.2
<b>Much expenses</b>	11	4.2
<b>Embarrassed to consult the doctors/discuss with others</b>	12	4.5
<b>Don't feel like taking medicines</b>	5	1.9
<b>Not aware of the treatment</b>	13	4.9
<b>Family issues/lack of family support</b>	10	3.8
<b>Lack of time</b>	2	0.8
<b>Perceived side effects</b>	6	2.3

**Table 7: Factors associated with the health-seeking behavior of the study participants.**

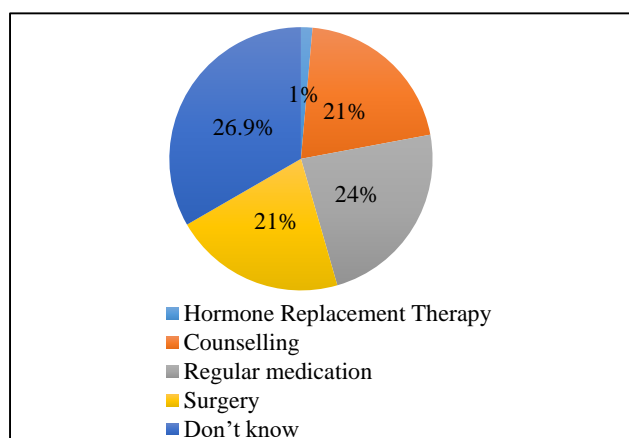
Variables	Yes, n=84 (%)	No, n=180 (%)	P value
<b>Age (in years)</b>			
40-45	4 (4.8)	32 (17.8)	0.002
46-50	34 (40.5)	39 (21.7)	
51-55	31 (36.9)	67 (37.2)	
56-60	15 (17.9)	42 (23.3)	
<b>Type of organization</b>			
Government	30 (35.7)	83 (46.1)	0.008
Government aided	43 (51.2)	57 (31.7)	
Private	11 (13.1)	40 (22.2)	
<b>Income</b>			
Below 10,000	5 (6)	13 (7.2)	0.376
10,000-20,000	7 (8.3)	22 (12.2)	
21,000-30,000	17 (20.2)	44 (24.4)	
31,000-40,000	17 (20.2)	36 (20)	
More than 40,000	38 (45.2)	65 (36.1)	
<b>Marital status</b>			
Married	69 (82.1)	141 (78.3)	0.636
Unmarried	6 (7.1)	13 (7.2)	
Divorced/separated	9 (10.7)	26 (14.5)	

Continued.

Variables	Yes, n=84 (%)	No, n=180 (%)	P value
<b>Type of family</b>			
Nuclear family	49 (58.3)	97 (53.9)	0.328
Joint family	22 (26.2)	65 (36.1)	
Extended family	12 (14.3)	17 (9.4)	
<b>Health insurance</b>			
Yes	48 (57.1)	76 (42.2)	0.024
No	36 (42.9)	104 (57.8)	
<b>Menopausal status</b>			
Peri-menopause	40 (47.6)	90 (50)	0.719
Post-menopause	44 (52.4)	90 (50)	



**Figure 2: Distribution of study population according to seeking treatment for menopausal symptoms.**



**Figure 3: Knowledge of services available at the hospital for treatment of menopausal symptoms.**

In Table 7, Chi-square depicted that age, type of organization, and health insurance had a significant association with the health-seeking behavior of the participants ( $p < 0.05$ ).

## DISCUSSION

A multi-centric school-based cross-sectional study was conducted to determine the prevalence of menopausal symptoms and health-seeking behavior of school teachers having menopausal symptoms in the age group 40-60 years

in Kumbakonam. The mean age of the women included in the study was 51.67 years  $\pm$  4.9 SD.

The study revealed that 68.5% (89) of peri-menopausal women experienced irritability as the most prevalent symptom followed by (86) 66.1%, and (86) 66.2% of the women suffering from physical and mental exhaustion and joint and muscular pain respectively. Supported by similar studies carried out by Ganitha et al and Myint et al in Tamil Nadu and Tampin showing similar results that irritability, and joint and muscular pain as the prevalent symptoms of peri-menopausal women.<sup>14,15</sup>

In the present study, bladder problems were least prevalent (17.7%) followed by dryness of the vagina 23.8% among peri-menopausal women. The results will be comparable with Du et al, where bladder problems and sexual dysfunction were the least experiencing symptoms with 2.01% and 2.68% respectively.<sup>10</sup>

Among the post-menopausal women, 73.9% (99) of joint and muscular pain were the most prevalent symptoms followed by sleep problems 94 (70.2%) and 85 (63.4%) respectively which is in accordance with Agarwal et al and Joseph et al, Shah et al joint and muscular pain, and physical and mental exhaustion was highly prevalent.<sup>16,17</sup> This is contradicted with Du et al during the postmenopausal stage, hot flushes/sweating (42.2%), fatigue (34.4%), and joint ache (33.8%) were the most common symptoms. The study conducted on post-menopausal women by Alhawat et al and Bairy et al, Ruchika et al supported these findings saying that 70% of the women suffered from muscular and joint pain.<sup>18,20</sup>

There are several ways of arresting menopausal symptoms as reported physical activity, healthy diet and alternative therapies. In our present study 84 (31.8%) of the women who had menopausal symptoms sought health care services. Similar studies show that 58.6% respondents were seeking medical advice for menopausal symptoms in Malaysia.<sup>21</sup> If they sought medical services, 20.5% (54) went to see a female doctor which is supported by Du et al.<sup>10</sup>

The majority of the menopausal women believed that there is no need of treatment for these symptoms and think that is normal with age with 10.2% and 35.3% respectively.

Postmenopausal symptoms are normal with age (68.0%) and they don't need to take treatment for these symptoms. The second most common reason was that they can't afford the expenses of medicines (19.5%) and some don't feel like taking medicines (12.5%) Ahlawat et al.<sup>18</sup>

The socio-demographic factors such as age, type of organization and health insurance found to be significantly associated with health seeking behavior which is supported by Du et al where the age is found to be associated with health-seeking behavior.

Limitations of the present study include, as this is a school-based study, it does not represent the component of society.

## CONCLUSION

Among middle-aged school teachers, menopausal symptoms were highly prevalent. However only a short percentage of teachers sought health care services because of menopausal symptoms. Most of them proceeded the female doctor and followed lifestyle modifications such as medication, physical activity and healthy diet. The majority of teachers were unaware of self-examination of breasts and a PAP smear examination.

## Recommendations

Therefore, it is urged that female experts and volunteers from various government health providers spread awareness of the importance of breast self-examination among middle-aged women and their families. Menopause knowledge, attitudes, and awareness of symptoms all need to be enhanced by health education for menopausal management is to be properly balanced between work, family, and health. Through appropriate counselling, it is necessary to eradicate the negative perception of menopause.

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## REFERENCES

- Zhang Y, Zhao X, Leonhart R, Nadig M, Wang J, Zhao Y, et al. A Cross-Cultural Comparison of Climacteric Symptoms, Health-Seeking Behavior, and Attitudes towards Menopause Among Mosuo Women and Han Chinese Women in Yunnan, China. *Transcult Psychiatry*. 2019;56(1):287-301.
- World Health Organization. Menopause. Available at: <https://www.who.int/news-room/fact-sheets/detail/menopause>. Accessed on 30 October 2022.
- Gaikwad M, Gupta SA, Sharma M, Verma N, Shalini S. A cross-sectional study to assess the prevalence of menopausal symptoms among middle aged female teachers in schools of Raipur city. *Int J Community Med Public Health*. 2020;7(4):1560-4.
- Kalhan M, Singhania K, Choudhary P, Verma S, Kaushal P, Singh T. Prevalence of Menopausal Symptoms and its Effect on Quality of Life among Rural Middle Aged Women (40–60 Years) of Haryana, India. *Int J Appl Basic Med Res*. 2020;10(3):183-8.
- Madhukumar S, Gaikwad V, Sudeepa D. A Community Based Study on Perceptions about Menopausal Symptoms and Quality of Life of Post Menopausal Women in Bangalore Rural. *Semantic Scholar*. 2012;74176060.
- What Is Menopause? National Institute on Aging. Available at: <https://www.nia.nih.gov/health/what-menopause>. Accessed on 30 October 2022.
- El Hajj A, Wardy N, Haidar S, Bourgi D, Haddad ME, Chammas DE, et al. Menopausal symptoms, physical activity level and quality of life of women living in the Mediterranean region. *PLoS One*. 2020;15(3):e0230515.
- Pathak N, Shivaswamy MS. Prevalence of menopausal symptoms among postmenopausal women of urban Belagavi, Karnataka. *Indian J Health Sci Biomed Res*. 2018;11(1):77-80.
- Dienye PO, Judah F, Ndukwu G. Frequency of symptoms and health seeking behaviours of menopausal women in an out-patient clinic in Port Harcourt, Nigeria. *Glob J Health Sci*. 2013;5(4):39-47.
- Du L, Xu B, Huang C, Zhu L, He N. Menopausal Symptoms and Perimenopausal Healthcare-Seeking Behavior in Women Aged 40–60 Years: A Community-Based Cross-Sectional Survey in Shanghai, China. *Int J Environ Res Public Health*. 2020;17(8):2640.
- World Health Organization. WHO Scientific Group on Research on the Menopause in the 1990s (1994: Geneva S, Organization WH. Research on the menopause in the 1990s: report of a WHO scientific group. Available at: <https://apps.who.int/iris/handle/10665/41841>. Accessed on 30 October 2022.
- Gebretatios H, Ghirmai L, Amanuel S, Gebreyohannes G, Tsighe Z, Tesfamariam EH. Effect of health education on knowledge and attitude of menopause among middle-age teachers. *BMC Womens Health*. 2020;20(1):232.
- Heinemann K, Ruebig A, Potthoff P, Schneider HP, Strelow F, Heinemann LA, et al. The Menopause Rating Scale (MRS) scale: A methodological review. *Health Qual Life Outcomes*. 2004;2:45.
- Ganitha G, Premalatha PB, Kannan I. A Study of the Age of Menopause and Menopausal Symptoms among Women in a Rural Area of Tamil Nadu, India.

- J South Asian Federation Menopause Soc. 2017;5(2):87-91.
15. Myint MH, Ravi Y, Abdalqader MA, M N, Wahab MA. Health Seeking Behaviour of Women with Menopausal Symptoms in Tampin, Negeri Sembilan, Malaysia. *Ann Romanian Soc Cell Biol*. 2021;4965-74.
  16. Agarwal A, Kiron N, Gupta R, Sengar A, Gupta P. A study of assessment menopausal symptoms and coping strategies among middle age women of North Central India. *Int J Community Med Public Health*. 2018;5.
  17. Joseph N, Nagaraj K, Saralaya V, Nelliyanil M, Rao PJ. Assessment of menopausal symptoms among women attending various outreach clinics in South Canara District of India. *J -Life Health*. 2014;5(2):84-90.
  18. Ahlawat P, Singh MM, Garg S, Ramalingam A. Prevalence of postmenopausal symptoms, health seeking behaviour and associated factors among postmenopausal women in an urban resettlement colony of Delhi. *Int J Health Sci Res*. 2016;6(4):51-6.
  19. Bairy L, Adiga S, Bhat P, Bhat R. Prevalence of menopausal symptoms and quality of life after menopause in women from South India. *Aust N Z J Obstet Gynaecol*. 2009;49(1):106-9.
  20. Singh A, Pradhan SK. Menopausal symptoms of postmenopausal women in a rural community of Delhi, India: A cross-sectional study. *J Midlife Health*. 2014;5(2):62-7.
  21. Abdullah B, Moize B, Ismail BA, Zamri M, Mohd Nasir NF. Prevalence of menopausal symptoms, its effect to quality of life among Malaysian women and their treatment seeking behaviour. *Med J Malaysia*. 2017;72(2):94-9.

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