

## Assessment of Postmenopausal Symptoms among women Residing in Urban Slums

Vijayalaxmi Mangasuli <sup>1</sup>, Mayur Sherkhane <sup>2\*</sup>

1. Department of Community Medicine, Basaveshwara Medical College & Hospital, Chitradurga, India
2. Department of Community Medicine, SDM College of Medical Sciences and Hospital, Shri Dharmasthala Manjunatheshwar University, Dharwad, Karnataka, India

### ARTICLE INFO

#### Original Article

Received: 01 March 2022

Accepted: 25 December 2022



#### Corresponding Author:

Mayur Sherkhane  
drmayurss@gmail.com

### ABSTRACT

**Background:** Menopause is a normal physiological change and an important transition in women's life. Onset of menopause has important implications on women's fertility and health. Menopausal symptoms vary in severity and may decrease quality of life. This is, because the majority of women still do not take treatment for these symptoms as most Indian women have a history of self-denial and neglect. This study is conducted to find the prevalence of postmenopausal symptoms among women residing in urban slums.

**Methods:** This was a community based, cross-sectional study conducted among 334 postmenopausal women (45-60) residing in urban slums by systematic random sampling. Menopause Rating Scale (MRS) was used to assess postmenopausal symptoms. Pre-designed, pre-tested proforma was used for collecting data to identify the factors affecting it. General physical examination was carried out and anthropometric measurements were recorded. Data were analysed using SPSS software version 20. Results were expressed as descriptive statistics (Mean (SD), Frequency (%)) and Chi-square test was used to find the association between two attributes.

**Results:** 69.76% of participants had mild symptoms, 23.95% moderate symptoms and only 2.1% suffered from severe symptoms. Prevalence of somatic symptoms was 93.11%, psychological symptoms 85.33% and urogenital symptoms was 33.53%. 44.31% of women from class 4 of SES suffered from mild to severe symptoms, followed by class 3 with 20.06% (p=0.00005). 73.86% from nuclear families and 66.67% for three generations in their families suffered from mild symptoms (p=0.0001).

**Conclusion:** The prevalence of somatic postmenopausal symptoms was high compared to psychological and urogenital using MRS. Factors like age, poor socio-economic status, marital and educational status played a role in postmenopausal symptoms. Measures should be taken for early recognition of symptoms and treatment. To achieve this, the government, private, and voluntary organizations can establish postmenopausal clinics as soon as possible at the earliest at all levels of healthcare.

**Keywords:** Menopause Rating Scale, Menopause, Slums, Symptoms, Urban, Women.

#### How to cite this paper:

Mangasuli V, Sherkhane M. Assessment of Postmenopausal Symptoms among women residing in Urban Slums. J Community Health Research 2022; 11(4): 256-261.

**Copyright:** ©2022 The Author(s); Published by Shahid Sadoughi University of Medical Sciences. This is an open-access article distributed under the terms of the Creative Commons Attribution License (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

## Introduction

WHO has defined postmenopausal women as “women whose menstruation has stopped for one year or stopped having periods as a result of medical/surgical intervention (hysterectomy/oophorectomy) or both” (1). It is an inevitable part of a woman's life which every woman has to face (2).

Women experience many somatic, psychological, vasomotor and sexual symptoms during menopausal transition. Some of the symptoms can be severe enough to affect their daily activities (3). These changes make them vulnerable to physical health problems and mental health disorders (4). Menopausal symptoms include mood changes, bloating, pains, headaches, hot flushes, night sweats, tiredness, insomnia, weight gain, depression, irritability, forgetfulness, lack of concentration, urinary frequency, vaginal dryness and sexual problems (5).

According to World Health Report, menopause occurs in the age between 45 and 55, where women spend a significant part of their lives in postmenopausal phase (6). In 1990, there were approximately 467 million women in the world aged 50 or above. 40% of postmenopausal women lived in industrialized regions and 60% lived in developing regions. By 2030, experts estimate that 24% of postmenopausal women will be living in industrialized regions, and 76% will be in developing regions (7). India has a large population, which has already crossed the one billion mark with 71 million people over 60 years of age, of which 43 million are postmenopausal women. Further, by the year 2026 population in India will be 1.4 billion and people over 60 years will be 173 million, of which menopausal women population will increase to 103 million (8).

In view of increasing burden of menopause related health problems in women after 45 years of age, study of menopausal symptoms and their perception by postmenopausal women is required in view to explore new options for the management of menopausal symptoms in the form of non-hormonal therapy and non-pharmacological measures (5). So this study was conducted to assess the menopausal

symptoms among postmenopausal women residing in urban area.

## Methods

A cross sectional study was conducted among all postmenopausal women in the age group of 45-60 years who have stopped menstruating for a period of more than one year residing in urban slum of field practice area of Department of Community Medicine, SDM Dharwad, Karnataka, India. Postmenopausal women not willing to give consent were excluded. A sample of 334 was considered by proportionate sampling (32% postmenopausal women). House to house survey with systematic random sampling was done till we reach required sample. The authors used a predesigned and pretested proforma along with (MRS) to assess menopausal symptoms and Grading was done accordingly. Proforma consisted of basic information about the participants including socio-demographic data. MRS consists of a list of 11 items (symptoms or complaints). Each of the eleven symptoms in the scale can get 0 (no complaints) to 4 points (severe symptoms) depending on the severity of the complaints perceived by the women filling the scale. The points marked in the scale are similar to the points that are added up to get the total (or domain) score. The total score of the MRS ranges from 0 (asymptomatic) to 44 (the highest degree of complaints). Minimum/maximum scores vary between the three dimensions, depending on the number of complaints allocated to the respective dimension of symptoms: psychological domain: 0 to 16 points (four symptoms: depression, irritability, anxiety, fatigue); somato-vegetative domain: 0 to 16 points (four symptoms: sweating/ hot flush, cardiac complaints, sleeping disorders, joint and muscle complaints); urogenital domain: 0 to 12 points (three symptoms: sexual problems, urinary complaints, vaginal dryness) (9).

Informed written consent was obtained from the participants. Ethical clearance was obtained from IEC before starting the study. Data were entered in to excel sheet and analyzed using SPSS version 22. Results were explained in the form of frequency,

percentages, and displayed in Tables and Figures. Researchers applied the Chi-square test to find the association between the two variables.

**Results**

116 (34.73%) of postmenopausal women in this study belonged to 45-49 age group, 200 (59.88%) were Muslims. The urban field practice area was a Muslim dominated community. 148 (44.31%) were

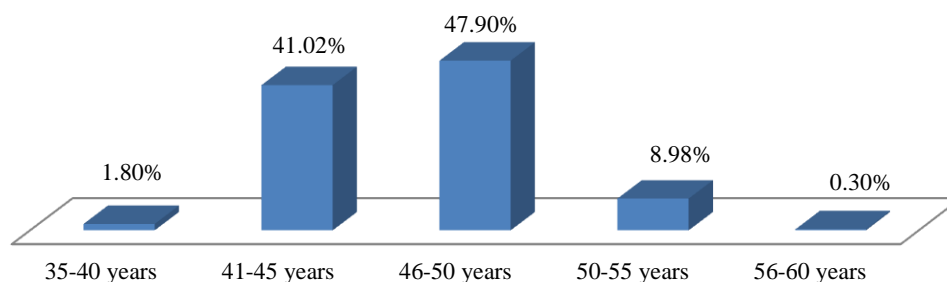
illiterates, 245 (73.36%), housewives, 148 (44.31%) belonged to class four of SES according to modified BG Prasad classification (Table 1).

In this study from 334 participants, 160 (47.90%) of them had reached menopause between 46-50. This is while 137 experienced menopause (41.02%) between 41-45. 6 (1.8%) women reached this stage at early between 35-40. (Figure 1)

**Table 1.** Socio-demographic Distribution of Postmenopausal Women

	Variables	N	%
Age	45-49	116	34.73
	50-54	80	23.95
	55-59	78	23.35
	≥60	60	17.97
Religion	Hindu	132	39.52
	Muslim	200	59.88
	Christian	02	00.60
Education	Illiterate	148	44.31
	Primary school	112	33.53
	High school	49	14.67
	PUC	17	05.09
	Degree and above	08	02.40
Occupation	Agriculturist	06	01.80
	Laborer	52	15.57
	Housewives	245	73.36
	Employee in service	22	06.58
	Business	09	02.69
Socio-economic status	Class 1	10	02.99
	Class 2	43	12.88
	Class 3	67	20.06
	Class 4	148	44.31
	Class 5	66	19.76

**Age at the Onset of Menopausal Symptoms**



**Figure 1.** The Starting Age of Menopausal Symptoms among the Study Participants

All the women were assessed for the severity of menopausal symptoms using MRS, 233 of them (69.76%) suffered from mild postmenopausal

symptoms, 80 (23.95%) moderate symptoms and only 7 (2.1%) women suffered from severe form of postmenopausal symptoms. None of the women

suffered from very severe form of menopausal symptoms in this study group (Table 2).

In this study, out of 334 women suffering from postmenopausal symptoms, 285 (85.33%) had psychological symptoms, 311 (93.11%), somatic symptoms and 112 (33.53%) had urogenital symptoms. This shows that women suffered more

from somatic symptoms than psychological and urogenital symptoms (Table 3). Researchers compared postmenopausal symptoms with variables like age, occupation, marital status, socio-economic status and age of menopause using MRS. it was found that socio-economic status was significantly associated with their socio-economic status (Table 4).

**Table 2.** Distribution of Study Participants Regarding Their Menopausal Symptoms

Menopausal Symptoms	Number	%
No	14	04.19
Mild	233	69.76
Moderate	80	23.95
Severe	07	02.10
Total	334	100.00

**Table 3.** Distribution of Postmenopausal Women regarding MRS

Domains	Number	%	
Psychological	Present	285	85.33%
	Absent	49	14.67%
Somatic	Present	311	93.11%
	Absent	23	6.89%
Urogenital	Present	112	33.53%
	Absent	222	66.47%

MRS\*(Multiple answers)

**Table 4.** The association between Menopausal symptoms and Other Variables

Variable	Menopausal Symptoms		Chi square test, df, p value
	Present	Absent	
Age	45-49	111	1.473, 3, 0.688
	50-54	75	
	55-59	76	
	≥60	58	
Occupation	Agriculturist	6	1.995,4, 0.736
	Laborer	49	
	Housewives	234	
	Employee in service	22	
	Business	9	
Marital status	Married	251	0.508,3,0.917
	Single	3	
	Widow	65	
	Divorcee	1	
Socio-economic status	Class 1	10	12.306, 4, <b>0.015*</b>
	Class 2	41	
	Class 3	63	
	Class 4	147	
	Class 5	59	
Age of menopause	35-40	6	4.831,4,0.305
	41-45	128	
	46-50	157	
	50-55	28	
	56-60	1	

\*significant

## Discussion

Health problems of postmenopausal women pose a significant challenge to public health. There hasn't been a specific health program for such women in the country and the rising middle-aged population.

In this study, 69.76% women suffered from mild postmenopausal symptoms, 23.95% moderate symptoms and only 2.1% women experienced severe form of postmenopausal symptoms. In a study done in Mohali, 44.24% of the participants suffered from severe psychological distress, 21.5% from moderate psychological symptoms, 19% from severe urogenital and 17% faced severe somatic symptoms (10). The majority of participants suffered from mild symptoms, followed by moderate and severe symptoms. This can be attributed to poor knowledge regarding recognizing the symptoms at the early stage or negligence of their counterparts.

In this study, 285 (85.33%) of woman had psychological symptoms, 311(93.11%), somatic symptoms and 112 (33.53%) had urogenital symptoms. This indicates that women suffered more from somatic symptoms than psychological and urogenital symptoms. These symptoms were associated with reduced estrogen levels in menopause. Compared to a study done in Maharashtra, 31.89% of participants suffered from vulvovaginitis symptoms (vaginal dryness, vaginal irritation and leucorrhoea), followed by 24.86% from vasomotor symptoms (hot flushes and night sweats), 23.43% from urological symptoms (increased frequency of micturition, stress incontinence and urge incontinence), 12.57% from psychological symptoms(irritability, insomnia, anxiety, depression and lack of concentration) (11). Another similar study done in Tamilnadu found that most of woman were suffering from vasomotor symptoms (60.9%), followed by sleep related symptoms (40.1%), anxiety (35.4%), depression (24.7%), joint pain (20%), urinary symptoms (11.7%) and irritability (9.1%) (10). a study conducted in Aligarh, authors found that most of the women (60.1%), had

somatic symptoms, followed by urogenital symptoms (59.6%) and psychological symptoms (34.3%) (12). Another similar study done in Tamilnadu, it was found that majority were suffering from vasomotor symptoms (60.9%), followed by sleep related symptoms (40.1%), anxiety (35.4%), depression (24.7%), joint pain (20%), urinary symptoms (11.7%) and irritability (9.1%).(12) In a study done in Aligarh, majority 60.1% had somatic symptoms, followed by 59.6% with urogenital symptoms and 34.3% with psychological symptoms.(14)

Therefore, more somatic and less urogenital symptoms were noted. This may be because women were hesitant to report their urogenital symptoms, while seeking healthcare for their complaints at their respective health centers. Most of the postmenopausal women in the study population suffered from one or more menopausal symptoms, which is a matter of concern and cannot be ignored.

Among 285 women suffering from psychological symptoms, 99 (34.74%) were in the age group of 45-49. From 311 women suffering from somatic symptoms, 107 (34.41%) were in the age group of 45-49. It was also found that from 112 women suffering from urogenital symptoms, 30 (26.79%) were in the age group of 50-54. In a study done in Loni, Maharashtra, 80% of women were in the age group of 40-50 with somatic symptoms, 76% were in the age group of 61-70 with psychosocial symptoms, and 60% were in the age group of 71-80 with urogenital symptoms (10). At the onset of menopause, however, there were more vasomotor and psychological symptoms. As menopausal age increases, there is gradual increase in the symptoms due to fluctuations in estrogen levels. Later, these symptoms fade and urogenital symptoms appear. This was similar to this study (13).

The present study is cross-sectional study over using systematic random sampling. Results of the study may not be true representation of the menopausal symptom of the population in general.

Sometimes the true symptoms cannot be explained from the participant.

### Conclusion

In the present study, the prevalence of somatic postmenopausal symptoms through MRS was 93.11% regarding somatic problems 85.33% for psychological disorder, and 33.53 % (for urogenital problems). The factors associated with postmenopausal symptoms were age, poor SES, being a housewife, marital status, educational status and age of menopause. Measures should be taken for early recognition of symptoms and treatment. Thus, postmenopausal clinics can be established by government, private, and voluntary

organizations as soon as possible regarding all levels of healthcare.

### Acknowledgements

The authors would like to thank all the participants involved in this study.

### Conflicts of interest

The authors declare that there is no conflict of interest.

### Author's Contribution

V. M. and M. S. designed the study, conducted the experimental work, analyzed the data and wrote the manuscript.

### References

1. Borker SA, Venugopalan PP, Bhat SN. Study of menopausal symptoms and perceptions about menopause among women at a rural community in Kerala. *J Midlife Health*. 2013; 4(3): 182-7.
2. Choudhary A, Choudhary P. Socio-cultural beliefs and perception of menopausal symptoms: A study in urban Indian women. *Asian J Med Res*. 2013; 2(4): 84-8.
3. Anil BS, Anitha B, Jose J. Prevalence of menopausal symptoms among women (menopausal for < 5 years) in a rural area in Kottayam, Kerala, India. *Journal of Evolution of Medical and Dental Sciences*. 2014; 3(17), 4648-4657.
4. Liu K, He L, Tang X, et al. Relationship between menopause and health-related quality of life in middle-aged Chinese women: across-sectional study. *BMC Womens Health*. 2014; 14(1): 7-14.
5. Vaze N, Joshi S. Yoga and menopausal transition. *J Midlife Health*. 2010; 1(2): 56-8.
6. Mahajan N, Aggarwal M, Bagga A. Health issues of menopausal women in North India. *J Midlife Health*. 2012; 3(2): 84-7.
7. World Health Organ Tech Rep Ser. 1996; 866: 1-107.
8. Unni J. Third consensus meeting of Indian Menopause Society (2008): A summary. *J Midlife Health*. 2010; 1(1): 43-7.
9. Heinmann, Lothar AJ. Menopause rating scale development of the scale. Status report. 2007. Available at: [http://www.menopause-ratingscale.info/documents/Development\\_of\\_MRS\\_scale\\_review\\_as\\_PRO.pdf](http://www.menopause-ratingscale.info/documents/Development_of_MRS_scale_review_as_PRO.pdf). Accessed April 26, 2019.
10. Kakkar V, Kaur D, Chopra K, et al. Assessment of the variation in menopausal symptoms with age, education and working/non-working status in north-Indian subpopulation using menopause rating scale (MRS). *Maturitas*. 2007; 57(3): 306-14.
11. Deotale M, Ranganathan U, Mankeshwar R, et al. Study of epidemiological features of health problems in perimenopausal and postmenopausal women in an urban community. *Int J Med and Public Health*. 2015; 5(2): 147-51.
12. Dutta R, Dcruze L, Anuradha R, et al. A population based study on the menopausal symptoms in a rural area of Tamil Nadu, India. *Indian Journal and Diagnostic Research*. 2012; 6(4): 597-601.
13. Pal A, Hande D, Khatri S. Assessment of menopausal symptoms in perimenopause and postmenopause women above 40 years in rural area. *International J Healthcare and Biomedical Research*. 2013; 1(3): 166-74.
14. Khan S, Shukla M, Priya N, et al. Health seeking behaviour among postmenopausal women: a knowledge, attitude and practices study. *Int J Community Med Public health*. 2016; 3(7): 1777-82.