

TO ASSESS THE HEALTH STATUS AND MENOPAUSAL SYMPTOMS OF POSTMENOPAUSAL WOMEN IN URBAN FIELD PRACTICE AREA OF TERTIARY CARE HOSPITAL VIJAYAPURA-KARNATAKA

¹*K. Priyanga and ²Rekha Ud giri

¹Postgraduate, Department of Community Medicine, BLDE (DU) Shri BM Patil Medical College, H&RC, Vijayapura, Karnataka, India.

²Professor, Department of Community Medicine, BLDE (DU) Shri BM Patil Medical College, H&RC, Vijayapura, Karnataka, India.

Article Received on: 22/01/2024

Article Revised on: 11/02/2024

Article Accepted on: 03/03/2024



*Corresponding Author

Dr. K. Priyanga

Postgraduate, Department of
Community Medicine, BLDE
(DU) Shri BM Patil Medical
College, H&RC, Vijayapura,
Karnataka, India.

ABSTRACT

Background: The World Health Organization states menopause can only be confirmed after 12 months of amenorrhea. The age of menopause ranges between 45-55 years, the average being 50 years. A woman during the menopause period experiences certain physical and psychological changes and faces various problems such as urogenital, psychological, social, cardiovascular, neurological problems etc. The aim of this study is to assess the health status of postmenopausal women and their symptoms in order to educate and make these women aware of symptoms, reduction of discomfort and enable them to seek appropriate medical care. **Objective:** 1. To assess the health status of menopausal symptoms in the postmenopausal women aged 40-60 years. 2. To find association between socio-demographic factors, health status with menopausal symptoms. **Methods:** This cross-sectional study was conducted among the urban people of Vijayapura district. A sample of about 264 participants was planned using a simple random sampling methodology. Data was collected using semi-structured questionnaire by interview technique. **Results:** Majority of the post-menopausal women belong to the age group of 51-55 years (37%). Age group of urban population was significantly associated with psychological domain with p values of 0.019. In the present study vasomotor symptom shows significance with socio-economic status. **Conclusion:** This study will help to know about the postmenopausal symptoms related to menopausal hormonal changes. Also the co-morbid conditions and deterioration of health status during this phase. Based on the finding of the study postmenopausal women were sensitized for availing health facilities for their health problems through counselling.

KEYWORDS: Menopause, vasomotor, psychological, physical, sexual.

INTRODUCTION

Menopause is an inevitable reproductive phase during midlife when various physical and mental changes may impair the quality of life.^[1]

The World Health Organization states menopause can only be confirmed after 12 months of amenorrhea. Around 25 million women globally achieved menopause in 1990; by the late 2020s, this figure is anticipated to quadruple.^[2]

The age at which menopause occurs is genetically predetermined. The age of menopause ranges between 45-55 years, the average being 50 years. Age at last pregnancy or age at menarche has no bearing on menopause age. Additionally, it is unrelated to the frequency of pregnancies, breastfeeding, oral pill use, socioeconomic status, race, height, or weight.^[3-5]

Menopause can have a number of symptoms, including hot flushes, mood swings, and irritability, are linked to low estrogen levels. A woman during the menopause period experiences certain physical and psychological changes and faces various problems such as urogenital, psychological, social, cardiovascular, neurological problems etc.^[6-9]

There is currently no health program in India that addresses the unique medical requirements of postmenopausal women. Furthermore, the National Rural Health Mission and Reproductive and Child Health-II programs primarily target women, still in the reproductive age range, excluding those beyond the reproductive stage.^[10-13]

The aim of this study is to assess the health status of postmenopausal women and their symptoms in order to

educate and make these women's aware of symptoms, reduction of discomfort and enable them to seek appropriate medical care.

OBJECTIVE

1. To assess the health status of menopausal symptoms in the postmenopausal women aged 40-60 years.
2. To find association between socio-demographic factors, health status with menopausal symptoms.

METHODOLOGY

The present cross-sectional study is conducted among people of urban field practice area of Vijayapura, Karnataka, India and it covers population of 10,000. Verbal consent was obtained from all the participants. Institutional ethical clearance was obtained before the start of the study. This cross-sectional study was conducted among the urban people of Vijayapura district from march 2022 to december 2022. A sample of about 264 participants was planned using a simple random sampling methodology. Ethical clearance was obtained from institutional ethical committee after which the study was conducted. Data was collected using semi-structured questionnaire by interview technique. The questionnaire was divided into five parts including socio-demographic characteristics, vasomotor domain, physical domain, sexual domain and psychological domain. Data was entered in MS excel and analysed using IBM SPSS v 25. Statistical significance was set at $p < 0.05$.

Inclusion criteria

- 1) Women with natural menopause were alone included in the study.

- 2) Postmenopausal women aged up to 60 years were included in the study.
- 3) Women who are a permanent resident of the locality. (At least 6 months).

Exclusion criteria

- 1) Women not willing to participate and co-operate in the study.
- 2) Women who had undergone surgical menopause or had undergone chemotherapy/radiotherapy-induced ovarian failure or were taking hormone replacement therapy
- 3) Women with mental instability and critically ill.

RESULTS

A total of 264 participants completed the questionnaire. Majority of the post-menopausal women belong to the age group of 51-55 years (37%) followed by 21% of postmenopausal women belongs to the age group of 40-45 years and 46-50 years. Monthly per capita income that was self-reported was noted in order to determine the socioeconomic class of the study subjects, Modified BG prasad classification was applied.^[14] Participants completed their education upto high school (57.5%), followed by diploma/degree (17%). Most of the women were doing semi-skilled type of work (24.6%) followed by unemployed (23.4%) i.e they are home maker. (Table1)

Table 1: Socio-demographic profile of study participants.

Variables	n=264	Percentage (%)
Age	40-45	21.2
	46-50	21.2
	51-55	36.7
	56-50	20.8
Socio-economic status	Upper	28.4
	Upper middle	32.1
	Middle class	5.6
	Lower middle	5.6
	Lower class	14.3
Educational status	Primary school	15.1
	High school	57.5
	Diploma	17.0
	Degree	10.2
Occupational status	Unemployed	23.4
	Skilled	10.7
	Unskilled	6.06
	Professional	12.1
	Semi-skilled	24.6
	Others	23.1
Family type	Nuclear	71.5
	Joint	28.4
Marital status	Married	60.9
	Widowed	18.9
	Separated	20

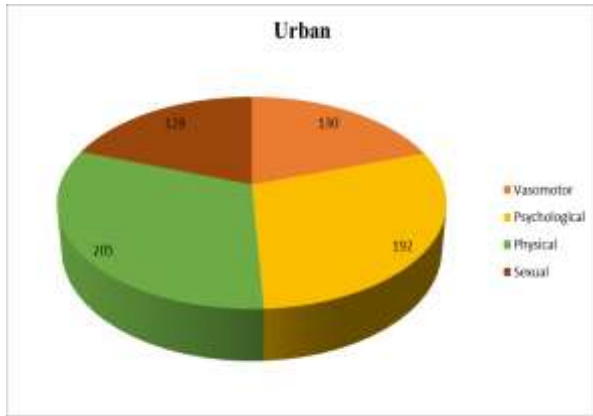


Figure 1: Proportion of study subjects with menopausal symptoms.

Out of 264 participants from urban area, majority of the participants presented with physical symptoms (205) and (128) participants presented with sexual symptoms. Overall presented with postmenopausal symptoms 73%.

Table 2: Frequency of menopausal symptoms among study participants.

Vasomotor symptoms(n=264)	n (%)
Hot flushes	148(56)
Night sweats	174 (65)
Sweating	174 (65)
Sexual symptoms	
Change in your sexual desire	169(64)
Vaginal dryness	174 (65)
Avoiding intimacy	180 (68)
Physical symptoms	
Flatulence	180 (68)
Aching in muscles and joints	190 (71)
Tired or worn out	180 (68)
Difficulty sleeping	190 (71)
Aches in back of neck or head	180(68)
Decrease in physical strength	180(68)
Decrease in stamina	169 (64)
Feeling lack of energy	185 (70)
Drying skin	174 (65)
Weight gain	185 (70)
Increased facial hair	180(68)
Change in appearance	195 (73)
Feeling bloated	169 (64)
Low backache	211 (79)
Frequent urination	174 (65)
Involuntary urination	169(64)
Psychological	
Dissatisfied	180 (68)
Poor memory	169 (64)
Anxious or nervous	174 (66)
Accomplishing less than used do	169 (64)
Feeling depressed	185 (70)
Being impatient	169 (64)
Wanting to be alone	185 (70)

*Multiple response

Multiple response were recorded by the participants. 65% of postmenopausal experienced night sweats and sweating followed by 56% experienced hot flushes. With related to sexual symptoms, maximum number of women reported avoiding intimacy (68%) followed by vaginal dryness (65%) and change in sexual desire (64%). In physical symptoms, majority of the women complained about low backache (79%) followed by change in appearance (73%). The most common psychological symptom observed was feeling depressed and wanting to be alone (70%), the least common symptom observed poor memory, accomplishing less than used to, being impatient (64%). (Table 2)

Table 3: Distribution of study participants with co-morbid conditions.

Co-morbid conditions	Urban	
	Frequency	%
Diabetes	85	16%
Hypertension	83	16%
Tuberculosis	12	2%
Asthma	20	4%
Epilepsy	4	1%
Others	10	1.8%
TOTAL*	214	40%

*Multiple responses

In an urban area we found majority of the participants were suffering diabetes and hypertension (16%). The other conditions include osteoarthritis, spondylosis, rheumatoid arthritis and peptic ulcer.

Table 4: Association of post-menopausal symptoms in relation to age of the study participants of urban area.

Age of study population (Urban)	Vasomotor		Psychological		Physical		Sexual	
	Present	%	Present	%	Present	%	Present	%
40-50	38	14.3%	27	10.2%	75	28.4%	82	42.7%
51-60	92	34.8%	165	62.5%	130	49.2%	46	23.9%
Chi-square(χ^2)	0.135		3.317		3.401		0.788	
p value	0.704		0.019*		0.051		0.333	

Our finding shows vasomotor symptoms, psychological symptoms, and physical symptoms were more prevalent in 51-60 years of age group and sexual symptoms were among 40-50 years.

Age group of urban population was significantly associated with psychological domain with p values of 0.019.

Table 5: Association of post-menopausal symptoms in relation to socio- economic status of the study participant of urban area.

Socio-economic status (urban)	Vasomotor		Psychological		Physical		Sexual	
	Present	%	Present	%	Present	%	Present	%
Below Class 3 (Lower)	78	29.5%	68	25.7%	110	41.6%	65	33.8%
Above and Equal to class 3 (Upper)	52	19.6%	124	46.9%	95	35.9%	63	32.8%
Chi-square(χ^2)	4.572		12.915		0.025		0.235	
p value	0.018*		0.007*		0.0625		0.515	

In present study we observed vasomotor, physical, sexual, were more prevalent in lower socio-economic status and psychological symptoms were more prevalent in upper socio-economic status.

Here the vasomotor symptom shows significance with socio-economic status with the p value of 0.018 and psychological symptoms with the p value of 0.007 respectively.

Table 6: Association of post-menopausal symptoms in relation to their co-morbid condition in urban area.

CATEGORY (urban)	Vasomotor	Psychological	Physical	Sexual	Chi square(χ^2)	P Value
Diabetes (85)	25(29.4%)	16(18.8%)	22(25.8%)	10(11.7%)	3.479	0.063
Hypertension (83)	32(38.5%)	12(14.4%)	29(34.9%)	6(7.2%)		
Tuberculosis (12)	6(50%)	4(33.3%)	9(75%)	0		
Asthma (20)	5(25%)	8(40%)	12(60%)	0		
Epilepsy (4)	2(50%)	0	0	1(25%)		
Others (10)	1(10%)	3(30%)	7(70%)	0		

Overall vasomotor symptoms were more prevalent among participants with diabetes, hypertension and epilepsy. Among participants with tuberculosis and asthma, and with other conditions physical symptoms were more prevalent in urban area. But postmenopausal symptom doesn't show significance with co-morbid condition in urban area.

DISCUSSION

Our study highlights overall prevalence of postmenopausal symptoms 73%. In a similar view, Sharma and Mahajan's study revealed that the age group of people who were >50 years old had considerably more postmenopausal symptoms on average, demonstrating that ageing and social deprivation may potentially have a negative impact on the quality of life of postmenopausal women in addition to menopausal symptoms.^[15]

The association between socio-economic status and vasomotor symptoms has been discovered to be statistically significant at P= 0.018. Similarly significant

association was observed between socio-economic status and psychological symptoms (P = 0.007) in our study. Women belonging to middle-class families had more onset of menopausal symptoms compared to women belonging to poor socio-economic status. Study was done by Wise *et al.*, also showed that adverse socio-economic conditions across the lifespan may be associated with an increased rate of entry of women into perimenopause.^[16]

The widely held of menopause symptoms are linked to a drop in estrogen levels. Hot flushes are caused by a sudden drop in estrogen levels. Neurotransmitters like catecholamine and catechol estrogens regulate the thermoregulatory region in the hypothalamus.^[17]

In our study, the prevalence of vasomotor symptoms such as hot flushes were 56%, night sweat 65%, and sweating was 65%, similarly a study done by Shukla *et al.*, in a rural area of Gujarat showed the prevalence of at least one vasomotor symptom was 21.3%.^[18]

Felling depressed was a common symptom, with 70% of psychological symptoms being present. Anxious or nervous was 65% and 64% being impatient in our study. Similarly, a study by Duta *et al.*, in the rural sections of Tamil Nadu's Thiruvallur district revealed that the prevalence of feeling anxious was 35.4%, that of feeling depressed was 24.7%, and that the prevalence of being impatient with others was 9.1%.^[19]

Symptoms related to the physical domain were observed in our study participants, feeling a lack of energy at 70%, decreased stamina at 64%, decrease strength 68%, low backache at 79% and, aching in muscles and joint 68%. Similarly, a study done in Kochi by Senthilvel *et al.*, showed a feeling lack of energy 84%, decreased stamina 82.7%, low backache 80%, aching in the muscle and joint 90.7%.^[20] Karmakar *et al.*, conducted a study in Dearah village of West Bengal reported physical symptoms were similar to our study.^[21] This is because during aging, muscle mass decreases due to an imbalance in muscle protein turnover and cell atrophy. In women, aging related hormonal changes accelerate especially during post menopause, which women face in middle age.^[22]

The symptoms concerning sexual domain were change sex desire was 64%, vaginal dryness during intercourse 65% and avoiding intimacy was 68%. Whereas Singh and Pradhan *et al.*, conveyed that decreased sexual desire was 33.7% and vaginal dryness 20.2%.^[23] Although the actual incidence and causes of sexual dysfunction in women throughout menopause are unknown, this variety is caused by the fact that many of them experience it. Reduced interest or desire to initiate action, as well as diminished arousal or capacity to elicit an orgasm during sexual encounters, are all possible symptoms of sexual dysfunction. Conflict within the relationship, psychological issues like depression or anxiety disorders, and other factors are frequently involved in the etiology of sexual dysfunction.^[24]

CONCLUSION

The present study concludes that most common menopausal symptoms were of physical domain and the least observed one was sexual domain. It shows that women's suffer from one or the other postmenopausal symptoms. Lack of awareness and misconceptions among the women led them to suffer in silence.

RECOMMENDATIONS

Information education and communication activities to increase awareness about menopause problems among general public, family members and middle aged women should be undertaken. There is a need for the state and central public health systems to address the issues of middle-aged women. There is currently no health program in India that addresses the unique medical requirements of postmenopausal women. Furthermore, the National Rural Health Mission and Reproductive and Child Health-II programs primarily target women still in

the reproductive age range, excluding those beyond the reproductive stage. We need to educate, make these women's aware of symptoms, reduction of discomfort, enable them to seek appropriate medical care.

ACKNOWLEDGMENT

We would like to heartily thank all the participants of this study for giving their valuable time.

Financial Support and Sponsorship

None.

REFERENCES

- Goyal A, Mishra N, Dwivedi S. A comparative study of morbidity pattern among rural and urban postmenopausal women of Allahabad, Uttar Pradesh, India. *International Journal of Research in Medical Sciences*, 2017; 5(2): 670-677.
- World Health Organization. *Research on the Menopause in the 1990s: report of a WHO Scientific Group*. Geneva: World Health Organization; 1996. [Last accessed on 2022 Oct 09].
- D.C Dutta Text Book of Gynaecology. Department of Obstetrics and Gynaecology, Nilratan Sircar Medical College and Hospital, Kolkata, India. Sixth edition, 2013; 57-65.
- Knobf MT. Natural menopause and ovarian toxicity associated with breast cancer therapy. *Oncol Nurs Forum*, 1998; 25(9): 1519-1530. [PubMed] [Google Scholar]
- Canney PA, Hatton MQ. The prevalence of menopausal symptoms in patients treated for breast cancer. *Clin Oncol (R Coll Radiol)*, 1994; 6(5): 297-299. [PubMed] [Google Scholar]
- Ramteke D. Health status of Postmenopausal women. *Journal of Medical Science And clinical Research*, 2016; 04(06): 10759-10770.
- World Health Organization. *Quality of Life Assessment: International Perspectives*. Berlin: Springer, 1994.
- Lock M. Ambiguities of aging: Japanese experience and perceptions of menopause. *Cult Med Psychiatry*, 1986; 10: 23-46.
- Haines CJ, Chung TK, Leung DH. A prospective study of the frequency of acute menopausal symptoms in Hong Kong Chinese women. *Maturitas*, 1994; 18: 175-81.
- Lewis JE, Hilditch JR, Wong CJ. Further psychometric property development of the menopause-specific quality of life questionnaire and development of a modified version, MENQOL-intervention questionnaire. *Maturitas*, 2005; 50: 209-21.
- Knobf MT. Reproductive and hormonal sequelae of chemotherapy in women. Premature menopause and impaired fertility can result, effects that are especially disturbing to young women. *Am J Nurs.*, 2006; 106(3): 60-65. [PubMed] [Google Scholar]
- Knobf MT. "Coming to grips" with chemotherapy-induced premature menopause. *Health Care Women*

- Int., 2008; 29(4): 384–399. [PubMed] [Google Scholar]
13. Tchen N, Juffs HG, Downie FP, Yi Q-L, Hu H, Chemerynsky I, et al. Cognitive function, fatigue, and menopausal symptoms in women receiving adjuvant chemotherapy for breast cancer. *J Clin Oncol*, 2003; 21(22): 4175–4183. [PubMed] [Google Scholar]
 14. BG Prasad's socioeconomic scale for 2022 ONLINE TOOL. Available From: <https://prasadscaleupdate.weebly.com/>
 15. Sharma S, Tandon V, Mahajan A. Menopausal symptoms in urban women. *J K Sci.*, 2007; 9: 13–7. [Google Scholar]
 16. Wise L A, Krieger N, Zierler S, Harlow BL. Lifetime socioeconomic position in relation to onset of perimenopause. *Epidemiol Community Health*, 2002; 56: 851–60. [PMC free article] [PubMed] [Google Scholar] [Ref list]
 17. Dennerstein L, Lehert P, Guthrie JR, Burger HG. Modeling women's health during the menopausal transition: a longitudinal analysis. *Menopause*, 2007; 14: 53–62.
 18. Shukla R, Ganjiwale J, Patel R. Prevalence of Postmenopausal Symptoms, Its Effect on Quality of Life and Coping in Rural Couple. *J Midlife Health*, Jan-Mar., 2018; 9(1): 14-20. doi: 10.4103/jmh.JMH_34_16. PMID: 29628723; PMCID: PMC5879841
 19. Dutta R, Dcruze L, Anuradha R, Rao S, Rashmi MR. Population based study on the menopausal symptoms in a rural area of Tamil Nadu, India. *J Clin Diagn Res.*, 2012; 6: 597–601. [Google Scholar]
 20. Senthilvel S, Vasudevan S, Anju PS, Sukumaran A, Sureshbabu J. Assessment of symptoms and quality of life among postmenopausal women in a tertiary care hospital in Kochi, South India: A hospital-based descriptive study. *J Midlife Health*, 2018; 9: 185–90. [PMC free article] [PubMed] [Google Scholar]
 21. 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 Midlife Health*, Jan-Mar., 2017; 8(1): 21-27. doi: 10.4103/jmh.JMH_78_16. PMID: 28458476; PMCID: PMC5367220.
 22. Juppi H-K, Sipilä S, Cronin NJ, Karvinen S, Karppinen JE, Tammelin TH, et al. Role of Menopausal Transition and Physical Activity in Loss of Lean and Muscle Mass: A Follow-Up Study in Middle-Aged Finnish Women. *Journal of Clinical Medicine* [Internet], 2020; 9(5): 1588. Available from: <http://dx.doi.org/10.3390/jcm9051588>
 23. Singh A, Pradhan SK. Menopausal symptoms of postmenopausal women in a rural community of Delhi, India: A cross-sectional study. *J Midlife Health*, Apr., 2014; 5(2): 62-7. doi: 10.4103/0976-7800.133989. PMID: 24970983; PMCID: PMC4071646.
 24. Scavello I, Maseroli E, Di Stasi V, Vignozzi L. Sexual Health in Menopause. *Medicina (Kaunas)*, Sep 2, 2019; 55(9): 559. doi: 10.3390/medicina55090559. PMID: 31480774; PMCID: PMC6780739.