

**ORIGINAL ARTICLE**

# SOCIO-DEMOGRAPHIC CHARACTERISTICS OF POST-MENOPAUSAL WOMEN OF RURAL AREA OF VADODARA DISTRICT, GUJARAT

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## ABSTRACT

**Background:** With the growing aged population in the country, postmenopausal health problems and needs are likely to become a great challenge to public health. This is more so related to the women with poor social background like those residing in rural areas.

**Material & Methods:** Design: Cross-sectional study, Participants: 147 post-menopausal women residing in Piparia village of Vadodara district were involved in the study, based on sample size calculation and necessary assumptions. Information was filled up in a pre-tested questionnaire.

**Objective:** To study the social and demographic characteristics of the post-menopausal women in rural areas of Vadodara district, Gujarat.

**Results:** Among a total of 147 respondents, the mean age was 58.32 (48-68) years, while the mean age of inception of menopause was 47.74 (44.84-50.64) years. Labor work (n=37, 25.2%) was the most common occupation. Among all the respondents, 98.5% belonged to social class 4 or below, 18.4% were widow and 40% were below poverty line (BPL). 74.8% were not literate and 42.9% were dependent on their children for daily living.

**Conclusion:** Rural post-menopausal women in India suffer many social disadvantages which could make them more vulnerable to experience more frequent and more severe of menopausal symptoms. Along with geriatric care, this special group of women also needs a separate focus for health care provision.

**Key words:** post menopausal women, socio-demographic profile, rural area, menopause, menopausal symptoms.

## INTRODUCTION

While women of reproductive age group (15-45 years) are covered under the Reproductive and Child Health (RCH) program, the postmenopausal women ageing 45 and above, are not covered in any specific health program in the country. This is especially important as the country is facing the challenges of growing aged population and provision of health services to those people, which has already become a challenge. It has been estimated that in

2025, the geriatric population in India would reach the mark of 168 million, which was only 81 million in 2002.<sup>1</sup> The second issue here is the lack of standard data related to post-menopausal women in India, especially rural areas, where lack of services has been a huge issue and where most of the women of this age-group are expected to reside.<sup>2</sup> It is important to study the women in socio-demographic context, as they are closely related with regards to perceptions-positive or negative-

by the woman.<sup>3</sup> It has been emphasized to study social factors along with medical problems of postmenopausal women, to derive at valid conclusions.<sup>4</sup> Though there are few studies in India, several local contexts need to be studied well in every part of the country.<sup>5</sup>

The study was conducted with an objective to study the social and demographic characteristics of the post-menopausal women in rural areas of Vadodara, Gujarat.

## MATERIAL & METHODS

A cross sectional study was conducted during 2009-10 in rural area of Vadodara district of Gujarat state. Sample size calculation was done using average prevalence of some of the major postmenopausal symptoms affecting Indian women found from various studies. Here the prevalence rate of the major menopausal symptoms (like, hot flushes, anxiety, depressive episodes etc.) was considered to be about 40%<sup>1-7</sup> on an average, based on various studies in India, and the maximum allowable error was kept at 5%. The desired sample size (600 samples) was modified, as the survey included all the women, who reported as having crossed menopause and who also gave informed consent. Institutional ethical committee approved the project and informed written consent was taken from the participant during the conduct of the study in vernacular language.

The study population was rural women aged 45 and above who had undergone menopause from

the information provided by themselves. The study was carried out in village Piparia of Waghodia taluka of Vadodara district of Gujarat state. The inclusion criteria were any woman, aged 45 and above and who reported to have experienced menopause in recent or remote past and who gave informed consent to participate in the study. Postmenopausal women who were seriously ill due to reasons associated or not associated with menopause were excluded from the study. The study was carried out in the village by searching in all the four corners of the village, the desired samples, conducting house to house survey. Those women fulfilling inclusion criteria were interviewed using pre-designed questionnaire. The information was collected by considering a particular symptom if it was present since at least 5 days at the time of interview. The data was collected by the intern doctors posted in the department. The data were analyzed using SPSS software and appropriate statistical tests were applied.

## RESULTS

A total of 176 women were found having undergone menopause, out of which 29 subjects were excluded from the study due to not satisfying the inclusion criteria. (not giving consent and/or seriously ill). The mean age of the rest (n=147) subjects was 58.32 (48-68) years.[Table 1]. Importantly, the mean age of menopause came out to be 47.74 (44.84-50.64) years. The mean gravida was 2.69 children and mean parity was 2.61 children per woman.

**Table 1:** Statistics related to age of various events among postmenopausal women (N=147)

Statistics	Minimum (yrs)	Maximum (yrs)	Mean (yrs)	Standard Deviation
Age	45	85	58.32	9.858
Age of Menarche	12	17	13.39	1.107
Age at Marriage	12	23	17.80	2.358
Age at Menopause	40	55	47.74	2.905

The results of the study shows that among a total of 147 women, the majority of the women were not engaged in any work and were housewives (n=108, 73.5%), while few of them were laborer (n=37, 25.2 %). [Table 2]. Majority of the women (n=118, 80.3%) were married and living with the partner at the time of the study while some were widow (n=27, 18.4%). Most (98.5%) of the women belonged to either class IV or class V according to modified Prasad

classification. (58.5% and 40% respectively). While socio-economic class signifies the said amount of income of the family, the study also took into account the distribution of BPL families which was 40 %.( n=59). Most of the BPL women were laborer by occupation (34/37), which was found to be highly significant in comparison to non-laborers. (25/110). (p<0.001)[Table: 3]

**Table 2:** Distribution of various social characteristics among post menopausal women (n=147)

Characteristics	No. of Women (%)
<b>Level of Education</b>	
Illiterate	110 (74.8)
Primary School	26 (17.7)
High School	3 (2.0)
SSC	4 (2.7)
Above SSC	4 (2.7)
<b>Types of Occupation</b>	
Farmer	2 (1.4)
Housewife	108 (73.5)
Laborer	37 (25.2)
<b>Socio-economic Class</b>	
Class III	1 (0.7)
Class IV	86 (58.5)
Class V	60 (40.8)
<b>Marital Status</b>	
Unmarried	2 (1.4)
Married	118 (80.3)
Widow	27 (18.4)
<b>Nature of Dependency</b>	
Self	42 (28.6)
Spouse	42 (28.6)
Children	63 (42.9)
<b>Whether belonged to Below Poverty Line</b>	
Not BPL	88 (59.9)
BPL	59 (40.1)

**Table 3:** Distribution of occupation type among BPL-non BPL respondents (p<0.001)

Occupation	BPL	APL	Total
Farmer	1	1	2
Housewife	24	84	108
Laborer	34	3	37
Total	59	88	147

BPL=Below Poverty Line , APL= Above Poverty Line

The most common mode of dependency was dependent 'on children' (42.9%, n=63) followed by both 'on self' and 'on husband'. (n=42, 28.6% for each category).<sup>1</sup>

The education level showed following distribution. It shows that most of them (n=110, 74.8%) were not literate, while only 17.7% (n=26) had an education level of primary school. Rest of the categories did not form significant proportions.

## DISCUSSION

The mean age of the study was 58 (48-68) years, which is higher than the studies conducted by Kapur et al (45.02 years) Kakkara et al (48.0 years) and Bairy et al (48.70 years) which probably explains that chances of getting premenopausal women were very less.<sup>5, 10, 11</sup> This can be accepted because the reported age of menopause was quite similar (47.74 years) in present study.

The study showed that a majority of the women were housewives (n=108, 73.5%) and only few were laborer (n=37, 25.2%). Importance of the type of occupation lies in the fact that, several studies have shown an association of the nature of the work done by the women and severity of the complaints after menopause. For example, a study by Kakkara V. et al showed that working women had a higher proportion of psychological symptoms while the non-working women had higher proportions of somatic symptoms among the study subjects.<sup>5</sup> To live with the partner (n=118, 80.3%) has got some positive implications on the perception of symptoms as social factors do play in here.

Most (98.5%) of the women belonged to either class IV or class V according to modified Prasad classification. (58.5% and 40% respectively). While socio-economic class signifies the said amount of income of the family, the study also took into account the distribution of BPL families, as reported, which was 40 %.( n=59). Poor socio-economic conditions predisposes to higher rates of menopausal complaints as evident by a study conducted by Aaron et al, which showed higher proportions of depressive symptoms.<sup>2</sup> Poor social-economical status is also associated with higher chances of getting early menopause<sup>11</sup>. The study shows that most of them (n=110, 74.8%) were not literate. A study conducted in Turkey showed that the level of education has got a positive influence on the perceptions of symptoms by menopausal women. The role of social factors also plays part. Thus it recognizes the need of such studies in rural and backward areas of country like us<sup>4</sup>.

## CONCLUSION

Post-menopausal women in India, particularly in rural areas, pose a challenge to public health as well as to society, as most of India resides in villages and geriatric population is also increasing day by day. It is evident that these women also suffer added social disadvantages

like poor social status, hard physical working conditions, poor economic conditions and low level of literacy. Although age of menopause is not affected by such conditions, these disadvantages certainly make them more vulnerable to various menopausal symptoms with increased severity, for which various preventive and curative solutions are yet to be sorted out.

**Acknowledgement:** The authors would like to acknowledge the help of the intern doctors during the study.

## REFERENCES

1. Report of the United Nations, 2004, UN- United Nations, "World Population Prospects," The 2004 Revision.
2. Aaron R, Muliyl J, Abraham S, Medico-social dimensions of menopause: a cross-sectional study from rural south India, *Natl Med J India*. 2002 Jan-Feb; 15(1):14-7.
3. Liu J, Eden J., Experience and attitudes toward menopause in Chinese women living in Sydney—a cross sectional survey, *Maturitas*, 2007, Dec 20; 58(4):359-65.
4. Uncu Y., Alper Z., Ozdemir H., Bilgel N. & Uncu G., The perception of menopause and hormone therapy among women in Turkey, 2007, 10 (1) , 63-71 . Online link- <http://informahealthcare.com/doi/abs/10.1080/13697130601037324?select23=Choose>
5. Kakkara V, Kaurb D., Chopraa K., Kaura A., Kaura L., Assessment of the variation in menopausal symptoms with age, education and working/non-working status in north-Indian sub population using menopause rating scale (MRS), *Maturitas*, 57, (3), Pages 306-314.
6. Simon T., Why is cardiovascular health important in menopausal women?, *Climacteric.-The journal of the International Menopause Society* 2006 Sep;9 Suppl 1:13-8.
7. Gupta P, Sturdee DW, Hunter MS., Mid-age health in women from the Indian subcontinent (MAHWIS): general health and the experience of menopause in women. *Climacteric*, 2006 Feb; 9(1):13-22.
8. Reena C, Kekre AN, Kekre N., Occult stress incontinence in women with pelvic organ prolapsed, *Int J Gynaecol Obstet.*, 2007, Apr; 97(1):31-4.
9. Avis NE, Stellato R, Crawford S, Bromberger J, Ganz P, Cain V, Kagawa-Singer M., Is there a menopausal syndrome?—Menopausal status and symptoms across racial/ethnic groups, *Soc Sci Med*. 2001 Feb; 52(3):345-56.
10. 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, Feb 49(1):106-
11. Kapur P, Sinha B, Pereira BM, Measuring climacteric symptoms and age at natural menopause in an Indian population using the Greene Climacteric Scale, 2009, Mar-Apr; 16(2):378-84.