

## Research Article

# A comparative study on postmenopausal symptoms in rural and urban women

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## ABSTRACT

**Background:** Health issues of postmenopausal women pose a significant challenge to public health. Menopause is an unspoken, unattended, reality of life, the cause of which is still deciphered completely by man. Objective: To compare the post-menopausal symptoms among rural & urban women.

**Methods:** The present cross sectional study was conducted in the month of September 2014, which continued for 2 months in rural and urban area. Predesigned, pretested questionnaire was used to interview 500 participants who met the selection criteria. Data was analysed using SPSS software.

**Results:** 250 from rural area and 250 from urban area. Nearly half 223 (44.6%) of them were in the age group of 55-64 years. Majority 161 (32.2%) of them belonged to the upper middle class, 346 (69.2) were pre obese according to WHO classification. Majority (385) 77% had no h/o gynecological problems. Almost all had one or the other menopausal symptom.

**Conclusions:** The prevalence of postmenopausal symptoms was higher in urban women compared to the rural population.

**Keywords:** Post menopause, Symptoms, Urban and rural

## INTRODUCTION

Menopause is an unspoken, unattended, reality of life, the cause of which is still deciphered completely by man. This phase of life is shrouded with lots of myths and taboos. Early recognition of symptoms can help in reduction of discomfort and fears among the women.<sup>1</sup>

During the transition to menopause, women may experience vasomotor, urogenital, psychosomatic, and psychological symptoms, as well as sexual dysfunction. The prevalence of each of these symptoms related to menopause varies across ethnic and socioeconomic groups, and between rural and urban women.<sup>2</sup>

From India, some scattered studies have focused on estimating age at menopause and menopausal symptoms.

Few Indian studies have attempted to determine the rural-urban difference in menopausal age and symptoms.<sup>3</sup>

With the increasing life expectancy a women spends almost 1/3rd of life in menopause. Menopause is cessation of periods for 12 months or cessation of ovarian function resulting in permanent amenorrhea. Menopause usually occurs more or less in midlife, signaling the end of the reproductive phase of a women's life. In developing country the mean age of menopause is 44-45yrs. Gradually, as a woman approaches her midlife years, the production of estrogen and progesterone slows down and eventually stops altogether at menopause. Some women experience mild problems and some women have severe symptoms.<sup>4</sup>

The early symptoms are oligomenorrhoea, menorrhagia, hot flushes, Insomnia, mood changes. The intermediate symptoms are skin and vaginal atrophy, stress incontinence followed by late effects or osteoporosis, coronary heart diseases, Alzheimer's diseases, diabetes and Arthritis. These symptoms are because of decrease in production of estrogens.

There is varied lifestyle of rural & urban people. There is an economic imbalance between the poor, middle class, affluent and the multicultural, multi-ethnic, multi-religious composition of the population. Large geographical variations exist with people in the plains, hills, deserts who are subjected to different climates and have varied food habits and lifestyles. The country is rife with contraindications between traditions and modernity. It is taboo to discuss reproductive health and sexual problems. Improper compliance by patients on recommended lifestyle changes and medication is another issue. Average age of menopause is somewhat lower in rural population than urban population.<sup>5</sup>

Menopausal symptoms have been found to be different in the rural and urban areas. Uro-genital symptoms, body aches and pains are the predominant symptoms in both rural and urban menopausal women. Menopause is recognized by all women in all culture as cessation of menstruation for one year, thus can be said universal reproductive phenomenon. Even there is a great diversity in nature of symptoms and frequencies across the countries and even in same culture. But the beliefs regarding menopausal syndrome are different at rural and urban population, thus the present study is an attempt to rule out the myths and to know the prevalence of post-menopausal symptoms among rural and urban population.<sup>6</sup>

### Objective

To find out the prevalence of post-menopausal symptoms among urban and rural women.

## METHODS

### Study area

This study was conducted in Chandanathope and Kummalloor.

### Study design

A cross sectional community based study

### Study period

Study period was from 1/9/2014- 31/10/2014

### Sampling method

Simple random sampling method

### Sample size

Total of 500, 250 from rural and 250 women from urban population.

### Sampling criteria

1. Inclusion criteria- postmenopausal women more than 45 years of age.
2. Exclusion criteria- women who were not interested in participating in the study.

### Methodology

The present cross sectional study was conducted in the month of September 2014, which continued for 2 months in rural and urban area. Predesigned, pretested questionnaire was used to interview the participants. Out of 500 postmenopausal women 250 from rural and 250 from urban area were selected by random sampling method and data was collected by personal interview.

### Statistical analysis:

Data collected was entered into the Microsoft Excel and analyzed further using SPSS software.

## RESULTS

In this study 500 post-menopausal women were interviewed, 250 from rural area and 250 from urban area. Women above 45 years were included. Nearly half 223 (44.6%) of them were in the age group of 55-64 years.

**Table 1: Distribution of the participants according to socio demographic profile, N = 500.**

Age Group	Frequency	Percentage
45-54	191	38.2
55-64	223	44.6
65-74	63	12.6
>84	21	4.2
Socioeconomic status		
Upper	74	14.8
Upper middle	161	32.2
Middle	131	26.2
Lower middle	119	23.8
Lower	15	3.0
BMI		
>18.5	25	5.0
18.5-24.9	346	69.2
25-29.9	115	23.0
30-34.9	11	2.2
>35	3	0.6
<b>Total</b>	<b>500</b>	<b>100</b>

This frequency table 1 represents socio economic status of the 500 post-menopausal women from urban and rural area. Out of this majority 161 (32.2%) of them belonged to the upper middle class and more than half 346 (69.2) were pre obese according to WHO classification.

**Table 2: Age distribution of the participants at the time of menarche, marriage, first child, menopause & gynecological problems, N=500.**

Age at menarche	Frequency	Percentage
<10	1	0.2
11 to 20	499	99.8
>20	0	0
<b>Age at marriage</b>		
<18	12	2.4
19-25	467	93.4
>25	21	4.2
<b>Age of first child birth</b>		
<20	59	11.8
21-25	390	78
>25	51	10.2
<b>Age of menopause</b>		
<45	157	31.4
45-50	276	55.2
51-56	62	12.4
>56	5	1.0
<b>H/o gynaecological problems</b>		
Yes	115	23.0
No	385	77.0
<b>Total</b>	<b>500</b>	<b>100</b>

On analyzing the data 499 (99.8%) attained menarche during the age of 11-20 years. In our study most of them 467 (93.4%) were married between the ages of 19-25 years. 12 (2.4%) of them married before 18 years. Out of 500 samples 132 (26.4%) had 2 children, 128 (25.6%) of them had 3 children. Among the 500 participants 390(78%) had their first child birth during the age of 21-25yrs, 59(11.8%) had delivered first child before 20yrs. Out of 500 we found that 276 (55.2%) attained menopause during 45-50years 157 31.4% had premature menopause. In our study, the mothers of 500 selected postmenopausal women who attained menopause during the age of 45-50 is 276 (55.2%) (Table 2).

**Table 3: Distribution of the participants based on H/O abortion, N = 500.**

H/O Abortion	Frequency	Percentage
No	472	94.40
Yes	28	5.60
<b>TOTAL</b>	<b>500</b>	<b>100</b>

Majority (385) 77% had no h/o gynecological problems (Table 2) Only 28 (5.6%) had h/o abortion (Table-3). In our present study 307 (61.4%) women were under treatment for various conditions like diabetes,

hypertension, dyslipidemia etc. (Table no-4). In this study we found that out of 500 very few 45(9.0%) were aware of hormone replacement therapy (Table no-5) (Figure-2). Many of the study participants 412 (82.4%) were not aware of the reasons for menopause (Table no-6) (Figure-1).

**Table 4: Distribution of the participants based on any ongoing treatment N = 500.**

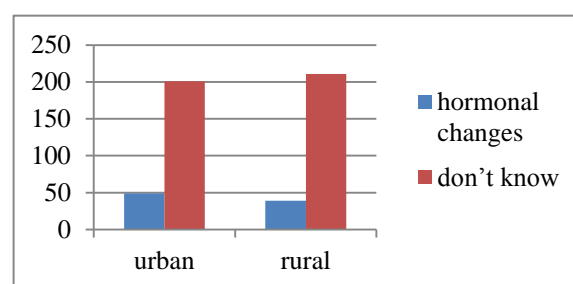
On-going Treatment	Frequency	Percentage
No	193	38.60
Yes	307	61.40
<b>TOTAL</b>	<b>500</b>	<b>100</b>

**Table 5: Distribution of the participants based on awareness regarding Hormone Replacement Therapy, N = 500.**

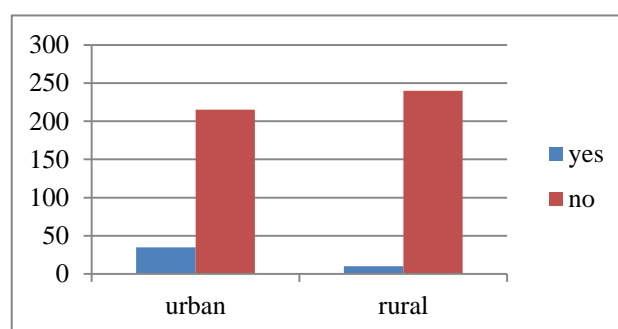
Hormone Replacement Therapy	Frequency	Percentage
No	455	91.00
Yes	45	9.00
<b>TOTAL</b>	<b>500</b>	<b>100</b>

**Table 6: Distribution of the participants based on knowledge regarding reason for menopause, N = 500.**

Reason for menopause	Frequency	Percentage
Hormonal change	88	17.60
Don't know	412	82.40
<b>TOTAL</b>	<b>500</b>	<b>100</b>



**Figure 1: Reason for menopause.**



**Figure 2: Hormone replacement therapy.**

**Table 7: Distribution of the participants based on doctor consultation for menopausal symptoms, N = 500.**

Doctor consultation	Frequency	Percentage
No	430	86.00
Yes	70	14.00
<b>TOTAL</b>	<b>500</b>	<b>100</b>

450 (86%) among these post-menopausal women did not consult the doctor for their postmenopausal symptoms (Table 7). The prevalence of post-menopausal symptoms among rural and urban women is given in (Table 8).

**Table 8: Distribution of the participants according to menopausal symptoms.**

Symptoms	Urban				Rural			
	Yes	%	No	%	Yes	%	No	%
Hot Flushes	181	72.40	69	27.6	184	73.6	66	26.4
Night sweats	103	41.2	147	58.8	34	13.6	216	86.4
heart discomfort	135	54.0	115	46.0	73	29.2	177	70.8
sleep disturbance	177	48.0	73	29.2	62	24.8	188	75.2
Depression	73	29.2	177	70.8	45	18.0	205	82.0
Irritability	120	48.0	130	52.0	93	37.2	157	62.8
Anxiety	136	54.4	114	45.6	141	56.4	109	43.6
Recent weight Gain	100	40.0	150	60.0	85	34.0	169	67.6
Lethargy	171	68.4	79	31.6	136	54.4	114	45.6
Bladder Problems	73	29.2	177	70.8	96	38.4	154	61.6
Dryness Vagina	120	48.0	130	52.0	81	32.4	169	67.6
Sexual problem	43	17.2	207	82.8	29	11.6	221	88.4
Musculoskeletal problems	198	79.2	52	20.8	73	29.2	177	70.8
frequent headache	79	31.6	171	68.4	88	35.2	162	64.8
Hair loss	192	76.8	58	23.2	118	47.2	132	52.8
Digestive problem	138	55.2	112	44.8	121	48.4	129	51.6
Tingling extremity	83	33.2	167	66.8	56	22.4	194	77.6
Forgetfulness	157	62.8	93	37.2	55	22.0	195	78.0
Frequent Fractures	0	0	250	100	22	8.8	228	91.2

## DISCUSSION

Health issues of postmenopausal women pose a significant challenge to public health, considering the facts like; there hasn't been a specific health program for such women in the country and the rising geriatric population.

In this current study 72.4% of post-menopausal women complained of hot flushes in urban area and 73.6% complained of the same in rural area. This finding is comparable to finding in the studies carried out by Madhukumar et al<sup>7</sup> (2012, Bangalore), Nusrat et al<sup>8</sup> (2008 Pakistan), Sharma et al<sup>9</sup> (2004-2005, Jammu) and Dutta et al<sup>10</sup> (2012 Tamil Nadu) in which the prevalence

of hot flushes were found to be 55.9%,59.4%,53.86% and 60.8% respectively.

Prevalence of night sweats in the current study was found to be 41.2% in the urban area, this is consistent with the findings of studies carried out by Sharma<sup>9</sup> (2004-2005 Jammu), Madhukumar<sup>7</sup> (2012 Bangalore), Sagdeo and Arora<sup>11</sup> (2007-2009 Nagpur) and Rehman<sup>12</sup> (2010 Bangladesh) in which the prevalence of night sweats were found to be 53.86%,36.7%,35.8% and 48.3% respectively.

Sleep disturbance was reported by 48% of women in urban area in the current study this is comparable to the results in the studies conducted by das Gupta and Ray<sup>13</sup> (2007 West Bengal), Aaron<sup>14</sup> (2002 Tamilnadu) and Rehman<sup>12</sup> (2010 Bangladesh) in which the prevalence of sleep disturbance were found to be 70.0%,52.0% and 54.4% respectively.

In this study 79.2% postmenopausal women complained of muscle or joint pain. Similar findings were observed in the studies conducted by Sagdeo and Arora<sup>11</sup> (2007-2009 Nagpur), Nusrat<sup>8</sup> (2008 Pakistan) and Sharma<sup>9</sup> (2004-2005) Jammu in which the prevalence of muscle or joint pain were found to be 60.4%, 66.74% and 53.86% respectively.

Irritability was reported by 48% of post-menopausal women in urban area and 37% in rural area in the current study, this finding was consistent with the results of Kaulagekar<sup>15</sup> (2011 Pune), Rahman<sup>12</sup> (2010 Bangladesh) and Sharma<sup>9</sup> (2004-2005) Jammu.

It was observed that 68.4% of post-menopausal women in rural area and 55.4% in rural area had complaints of easy fatigability comparable results were found in the studies conducted by Monterrosa<sup>16</sup> (2006-2007columbia) and Khan and Hallad<sup>17</sup> (2004 Karnataka).

Similar to the prevalence of palpitation (29.95%) observed by Kaulageker<sup>15</sup> (2011 Pune), in the current study 54% of post-menopausal women in urban area and 29% of post-menopausal women in rural area complaint of palpitation, this finding was similar to the findings of the study carried out by Monterrosa<sup>16</sup> (2006-2007 Colombia) in which the prevalence of palpitation was observed to be 26.8% among non afro Colombian women and 38.8% among afro Colombian women.

The prevalence of headache in the present study was observed to be 31.6%in the urban area and 35.2 in rural area this is comparable with the result of studies conducted by Aaron<sup>14</sup> (2002 Tamilnadu) and khan and Hallad<sup>17</sup> (2004 Karnataka) were the prevalence was found to be 35.0% and 19.8% respectively.

About 29% of women in the menopausal age group suffer from depression in the urban area and 18% from the rural area has similar complaints, this is actually a matter of

concern, Rehman<sup>12</sup> (2010 Bangladesh) found the prevalence of depressive mood to be 37.3%

Almost more than 90% of postmenopausal women in the study area suffered from one or more menopausal symptoms, which is a matter of concern and cannot be ignored.

## CONCLUSION

The prevalence of postmenopausal symptoms was higher in urban women compared to the rural population. Most common menopausal complaints reported by the postmenopausal women both in rural and urban population were hot flushes, night sweats, sleep disturbances & easy fatigability. Sexual life was also affected by menopause.

## Limitations:

It was a cross sectional study of short period and small population was covered; therefore follow up studies should be taken up in future as they would be more use full in assessing the menopausal symptoms.

## Recommendations:

Menopause is not a disease or a disorder, and therefore it does not automatically require any kind of medical treatment. However, in those cases where the physical, mental, and emotional effects of perimenopause are strong enough that they significantly disrupt the everyday life of the woman experiencing them, palliative medical therapy may sometimes be appropriate with,

1. Hormone replacement therapy
2. Selective oestrogen receptor modulators
3. Education- Woman has to be informed about various stage of menopause. It may often be obtained with the help of her physician, or from her older female family members, or from her social group.
4. Incorporating components related to specific health needs of postmenopausal women in national health programs.

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