



Menopausal Symptoms: A Comparative Study in Rural and Urban Women

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Abstract

The present study was carried out on 500 females in the age group of 40-60yrs to find out average age of menopause in rural and urban women and associated menopausal symptoms & its awareness & prevalence by predesigned questionnaire. We found out that, the percentage of all menopausal symptoms is more in urban women as compared to rural cases. Commonly observed symptoms are hot flushes, joint & muscular discomfort and physical & mental exhaustion. However women don't come out with sexual problem much both in rural and urban. The symptoms are at peak during 45-55 years and after 55 years severity decreases. However the urinary symptoms and heart discomfort are more in > 55 years in urban women. Though the urban women are consulting physician for menopausal problems still percentage is very less. On the other hand rural women don't come out with their problems.

Key Words

Menopause, Rural, Urban, HRT, Quality of Life, Menopausal Symptoms

Introduction

With the increasing life expectancy a woman spends almost 1/3rd of life in menopause. Menopause is cessation of periods for 12 months or cessation of ovarian function resulting in permanent amenorrhoea. Menopause usually occurs more or less in midlife, signaling the end of the reproductive phase of a woman's life. In developing country the mean age of menopause is 44-45yrs(1,2). Gradually, as a woman approaches her midlife years, the production of oestrogen and progesterone slows down and eventually stops altogether at menopause (3,4). Some women experience mild problems and some women have severe symptoms. The early symptoms are oligomenorrhoea, menorrhagia,(5) hot flushes,(6,7,8) Insomnia (9,10), mood changes.(9,11) The intermediate symptoms are skin and vaginal atrophy, stress incontinence (2) followed by late effects or osteoporosis, coronary heart diseases, Alzheimer's diseases. Diabetes and Arthritis. These symptoms are because of decrease in production of oestrogens.

There is varied lifestyles 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 (12-14). 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 recognised 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 (12-15). 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.

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Material and Methods

The observational cross sectional study was conducted from December 2007 to August 2009 in N.K.P. Salve Institute of Medical Sciences, Nagpur. This study included 500 cases, 250 from urban area and 250 from rural area. The age of the study group was between 40-60 years. Evaluation of cases was done on the basis of history, physical examination and questionnaire. A detailed history with age, marital status, age of menarche, complaints regarding menopause, obstetrics and gynecology history, with physical examination of weight, height, blood pressure and general examination was done.

Statistical Analysis

Data were analysed by using appropriate statistical method i.e. t-test and chi-square test

Results

Data of 500 women, 250 from urban and 250 from rural area were obtained. Their demographic and clinical characteristics are depicted in Tables I&II. Mean age of menopause in urban women was found 49.56±4.12 years and in rural women it was found 48.56±2.27 years. The number of cases of natural menopause was significantly more in rural women, surgical menopause was significantly more in urban women, and 5 cases of premature menopause were found in urban and no one in rural.

A total of 37.6% (n=94) rural cases complained of hot flushes and sweating as compared to 59.6% (n=149) urban cases, 2.8% (n=7) rural cases had heart discomfort as compared to 24.45% (n=61) urban cases, 27.2% (n=68) rural cases suffered from sleep problems as compared to 42.4% (n=106) urban cases, 8% (n=20) rural cases complained of depression as compared to 54.4% (n=136) urban cases, 26% (n=65) rural cases suffered from irritability as compared to 54.4% (n=155) urban cases, 0.5% (n=5) rural cases suffered from anxiety as compared to 21.2% (n=53) urban cases, 14.8% (n=37) rural cases reported weight changes as compared to 42% (n=105) urban cases, 24.8% (n=62) rural cases complained of physical and mental exhaustion as compared to 62.4% (n=156) urban cases, 60.4% (n=151) rural cases complained of joint and muscular discomfort as compared to 72% (n=180) urban cases, 18.8% (n=47) rural cases suffered from bladder problems as compared to 48.8% (n=122) urban cases, 8.8% (n=22) rural cases had dryness vagina as compared to 40.8% (n=102) urban cases only 3.6% (n=9) urban cases reported sexual problems. All the symptoms of menopause were observed significantly more in urban women in comparison to rural women.

Discussion

At menopause, terminal reproductive milestone the women may have certain myths regarding menopause viz; menopause is natural with no clinical consequences and no treatment is required & has no effect on mental health & hormone therapy is harmful. A woman's experience of menopause is not only her personal experience but also influenced by social and cultural factors. In our society there is lack of awareness regarding menopause and its treatment. Some women perceive menopause positively as relief from monthly periods, no contraception required, no pregnancy worries & advantages of senior citizen in society. On the other hand some women perceive menopause negatively as, fear of old age, isolation & loneliness.

In this cross sectional study of 500 cases, 250 cases from rural area & 250 cases from urban area were interviewed. We found the average age of menopause in rural cases was 48.56± 2.27 years and average age of menopause in urban cases was 49.56 ±4.12 years which was non- significant.(Table I) Out of 124 rural cases 117 cases have attained natural menopause, 7 cases have undergone surgical menopause. Out of 114 urban cases that have attained menopause, 88 of them had natural menopause, 15 had surgical menopause & 5 have premature menopause. There was a significant difference

Table -I Showing Mean ± Standard Deviation

Demographic parameters	Urban	Rural	P valve
Age	49.77 ± 6.78	49.67 ± 6.53	0.6179
Menopause age	49.56 ± 4.12	48.56 ± 2.27	0.0667
Weight.	64.35 ± 7.14	55.67 ± 6.90	0.000
Height	1.58 ± 0.05	1.57 ± 0.43	0.0019

Fig. -I

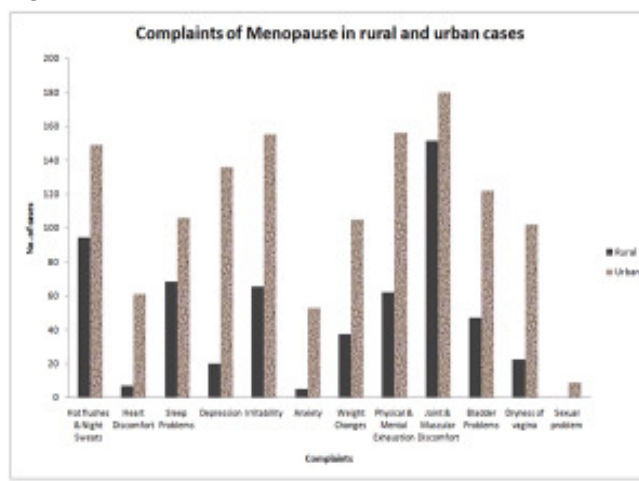


Table 2. Prevalence of Various Parameters Associated with Menopause

Menopausal symptoms	Rural	Urban	P Value
Hot flushes & Night Sweats	94 (36.7%)	149 (59.6%)	0.000
Heart Discomfort	07 (2.8%)	61 (24.4%)	0.000
Sleep Problems	68 (27.2%)	106 (42.4%)	0.000
Depression	20 (8%)	136 (54.4%)	0.000
Irritability	65 (26%)	155 (62%)	0.000
Anxiety	05 (0.5%)	53 (21.2%)	0.000
Weight Changes	37 (14.8%)	105 (42%)	0.000
Psychical & Mental Exhaustion	62 (24.8%)	156 (62.4%)	0.000
Joint & Muscular Discomfort	151 (60.4%)	180 (72%)	0.002
Bladder Problems	47 (18.8%)	122 (48.8%)	0.000
Dryness of vagina	22 (8.8%)	102 (40.8%)	0.000
Sexual problem	0(0%)	09 (3.6%)	0.002
Surgical Menopause	7 (0.56%)	15 (.131%)	0.05
Natural Menopause	117 (0.94%)	88 (0.77%)	0.05
Premature Menopause	0(0%)	5 (0.043)	0.05

in the types of menopause between rural and urban cases. (Table 1 &2). Premature menopause was observed in our study.

But the increased prevalence of surgical menopause in urban women could be due to more awareness and regular gynecological consultations with doctors, where as rural females usually do not report the problem as it is social taboo to discuss the reproductive & sexual health.

Joint & muscular discomfort were highest followed by hot flushes, night sweat & sleep problems both in urban & rural. Similar study (16) found psychosomatic complaints to be higher in women, still the prevalence of classical menopausal symptoms were lower in our study group as compared to this study, as there exist difference in racial group. Our study also shows that urban female leads in all menopausal symptoms as compared to rural women. Similar study by Gupta *et al* (15) where urban females have more menopausal symptoms as compared to rural. It is also supported by Puri *et.al* study (14) & Singh & Arora study (1). The sexual problems and reproductive health awareness is very less in rural women as compared to urban. This finding may be due to more awareness and literacy in urban area. Most of the symptoms at menopause related with decrease level of oestrogen. The etiology of hot flushes is sudden decrease in oestrogen level. Thermoregulatory centre situated in the hypothalamus is under the control of neurotransmitter like catecholamine and catechol oestrogens. There are oestrogen receptors present in these thermoregulatory centers. The oestrogen present in blood combines with catecholamines to produce catechol oestrogen. Whenever there is oestrogen lack, an imbalance is created between catecholamines and

catechol oestrogen. This results into hot flushes. This activates the mechanism of heat loss (vasodilatation, sweating & behavioral adjustments) at the onset of hot flush with (vasoconstriction, behavioral changes & shivering) heat conservation and its termination (17). Episodes of hot flushes generally start at the onset of menopause. Other common symptoms encountered during the peri-menopausal period include mood changes, insomnia, fatigue & memory problems. Sleep disturbance at menopause results from night sweats which also contributes to mood disorders. Also the common problems observed during post menopause are osteoporosis, coronary heart diseases, diabetes, arthritis and urinary symptoms. The female urethra & trigone of the bladder, because they share embryonic origin with vagina, contains oestrogen receptors and are affected by decreased level of circulating oestrogen.

In a study from Jammu mean age at menopause was 47.35 years. Mean number of menopausal symptoms in three age groups were as (mean±SD) 10.53±7.33, 7.70±6.76 and 14.50±10.77 respectively, which varied significantly (F=4.86, df=2, 87, P=0.009). The study reveal, varying nature of symptoms with age and MDSM (Mean Duration since Menopause), with vasomotor symptoms being more prevalent with lesser MDSM and psychological and rheumatic complaints more prevalent with increasing age and MDSM in this region among urban population (12).

Simlary in one study from south India, the mean age at menopause was 48.7 years. Most frequent menopausal symptoms were aching in muscle and joints, feeling tired, poor memory, lower backache and difficulty in sleeping. The vasomotor and sexual domains were less frequently



complained when compared to physical and psychological domains. The age at onset of menopause in southern Karnataka (India) is 48.7 years which is four years more than the mean menopause age for Indian women. This could be attributed to better socioeconomic and health-care facility in this region.

All these symptom can be reduced by making women more aware of these symptoms, to rule out the myths that it have no clinical consequence & does not require treatment. Rather female need doctor consultation & treatment to reduce the symptoms for better quality of life in women more in rural group as compared to urban.

Conclusion

As the menopausal health demand priority in Indian scenario both in urban or rural areas due to increase in life expectancy and growing population of menopausal women. Large efforts are required to educate and make the women aware of menopausal symptoms including rural women. This will help in early recognition of symptoms, reduction of discomfort and enable them to seek appropriate treatment.

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