

Original Article

A Study on Health Profile of Post-menopausal Women in Jamnagar district, Gujarat

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ABSTRACT

Introduction: Various menopausal symptoms experienced by middle aged women affect their quality of life. There is lack of awareness regarding menopause and related problems among women. Studies related to knowledge of menopause and awareness regarding how to cope with it to have a good quality of life are very limited.

Objective: This cross-sectional study aimed at evaluating various post-menopausal symptoms and various demographic parameters like mean age at menarche, marriage, menopause etc among women aged between 40 and 65 years and comparing them in urban, urban slums and rural areas of Jamnagar district.

Material and Methods: 300 women (100 each from urban, urban slum and rural areas of Jamnagar district) aged between 40 and 65 years, through simple random sampling method.

Results: Mean age at menarche and menopause were 14.73 ± 1.40 and 46.3 ± 5.29 (mean \pm SD) respectively, which were higher in rural areas, followed by urban slums and urban areas of Jamnagar district. Whereas mean age at marriage and first pregnancy were found to be 17.71 ± 3.31 and 20.18 ± 3.27 (mean \pm SD) respectively, which were higher in urban areas followed by urban slums and rural areas. The most common symptoms associated with menopause were joint pain (64%), backache (58%), irritability (56.66%), forgetfulness and sadness (48%) and vasomotor symptoms like hot flushes and night sweats (47.33%).

Conclusion: As life expectancy and population of post-menopausal women increases, efforts are needed to educate them and make them aware about various menopausal symptoms. This will enable them to recognize these symptoms early, to seek timely medical treatment for the same and improve quality of life.

Keywords: menstruation, menopause, post-menopausal symptoms, old age, health.

INTRODUCTION

Menopause is the permanent cessation of menstruation which is retrospectively determined following twelve months of amenorrhea during mid-life period. It is an important transition in a women's life and can be smooth in some, while varyingly difficult in others. The year immediately preceding and the decade afterwards, however, are of much clinical significance (1). The immediate symptoms of menopause are effects of hormonal changes on various systems of body, mainly cardiovascular and musculoskeletal system, thus affecting their quality of

life (2). The common climacteric symptoms experienced by them can be grouped into vasomotor, physical and psychological complaints (3).

Similarly, menarche is also one of the most significant milestones in a women's life, occurring between 10 and 16 years of age in most girls. The age at menarche has been suggested as a determinant of their age at marriage and first birth (4).

There are few studies from the Indian subcontinent regarding the quality of life of post-menopausal women. This study is an attempt to study various

demographic parameters like mean age at menarche, mean age at menopause etc., as well as to evaluate the menopausal symptoms of women aged between 40 and 65 years, to understand their prevalence, plan for remedial measures and also to create awareness thereby improving their health and quality of life.

MATERIAL AND METHODS

It was a cross-sectional study conducted from October 2012 to December 2012 covering urban, urban slum and rural areas of Jamnagar district.

A total of 300 women aged between 40 and 65 years were part of the study. Among them, 100 were from urban area, 100 from urban slum area (near Urban Health Training Centre, Vambe, attached to Shri M.P. Shah Government Medical College) and 100 from rural area (Rural Health Training Centre, Aliabada, also attached to the same Medical college), thus making it representative of the entire district.

The data were collected through house-to-house visits using a pre-tested, semi-structured proforma, based on Menopausal Rating Scale (MRS), which has been widely used in many epidemiological and clinical researches for investigation of menopausal symptoms (5).

Inclusion Criteria:

Women aged between 40 and 65 years of age who have attained menopause (i.e. women not having menstruation in the last twelve months).

Exclusion Criteria:

Women who have not attained menopause and diagnosed cases of psychiatric illness, or cases of diabetes and other diseases that present with similar manifestations as known to be associated with menopause too, were excluded since it could interfere with the findings of the study.

Statistical Analysis: Data were entered and analyzed using Microsoft Office Excel 2007. Data presented as percentages for qualitative variable. For quantitative variable, mean and standard deviation were calculated.

RESULTS

The study population involved 300 women, one third each from urban non-slums, urban slums and rural areas of Jamnagar district. Out of total women enrolled in the study, 73.67% were married, while 26.33% were

single or widow or divorced. About 87.33 % women were Hindu, while 12.67% were Muslims. About two-third of women were illiterate, while 17.67% and 5.67% women had completed their primary and secondary schooling respectively. About 14% women had induced menopause i.e. they had undergone hysterectomy, while rest of women had history of natural menopause [Table 1].

Table No.1: Demographic Characteristics of Study Participants

Variable	No.	%
Age distribution		
40-44 years	10	3.33
45-49 years	41	13.67
>50 years	249	83.00
Marital Status		
Married	224	74.67
Single/Widow/Divorcee	76	25.33
Religion		
Hindu	262	87.33
Muslim	38	12.67
Educational Status		
Illiterate	200	66.66
Primary	53	17.67
Secondary	17	5.67
Higher Sec. & Above	30	10.00
Menopause		
Natural	258	86.00
Induced (Hysterectomy)	42	14.00

In our study, the mean age at menarche, marriage, first pregnancy and menopause were found to be 14.73 years, 17.71 years, 20.18 years and 46.30 years respectively [Table 2].

As shown in Table 3, the occurrence of joint pain (64.66%) was very high, which was followed by backache (58%), irritability (56.66%), forgetfulness (49%), sadness (47%) and insomnia (48%). 47.33% complained of hot flushes and night sweats. 23.66% suffered from vaginal dryness and itching while a few had recurrent UTI (15.33%) and urinary urgency (7.67%).

DISCUSSION

The mean age at menarche in the present study was 14.73 years, which was almost similar in urban, urban slums and rural areas of the district. The mean age at menarche in a study by Shipra Gupta in Jamnagar in 2009 was also 14.73 years (6), also, it was 14.6 years

Table No.2: Demographic parameters of study participants. (n=300)

Variables	Urban (n=100)	Urban Slum (n=100)	Rural (n=100)	Average (n=300)	p-value	F-statistic
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)		
Mean age at menarche	14.56 (1.39)	14.66 (1.49)	14.95 (1.28)	14.73 (1.40)	0.32	2.13
Mean age at marriage	19.12 (3.95)	17.08 (2.78)	16.96 (2.65)	17.71 (3.31)	0.001	14.56
Mean age at first pregnancy	21.50 (3.89)	19.53 (2.92)	19.57 (2.54)	20.18 (3.27)	0.001	12.63
Mean age at menopause	45.35 (5.08)	46.22 (5.88)	47.33 (4.72)	46.3 (5.29)	0.08	3.57

Table No.3: Frequency of various symptoms associated with menopause

Symptoms	Urban (n=100)	Urban slum (n=100)	Rural (n=100)	Total(n=300)	
	No.	No.	No.	No.	%
Vasomotor					
Hot Flushes & Night sweats	48	50	44	142	47.33
Urinary					
Recurrent UTI	16	13	17	46	15.33
Urinary Urgency	7	12	4	23	7.67
Orthopedic					
Backache	55	60	59	174	58.00
Joint Pain	64	66	64	194	64.66
Fracture	3	2	3	8	2.66
Gynecological					
Vaginal Dryness & itching	24	27	20	71	23.66
Psychological					
Headache	31	49	53	133	44.33
Forgetfulness	49	53	45	147	49.00
Irritable Mood	52	63	55	170	56.66
Sadness	53	46	44	143	47.66
Loneliness/Boredom	46	42	40	128	42.66
Feeling of being neglected	20	20	14	54	18.00
Feeling of Uselessness	4	5	16	25	8.33
Insomnia	42	49	53	144	48.00
Change in quality of life	4	25	22	51	17.00

in a study by Yahya and Rehan in 2002 (7), which was at par with the present study. Sharma N. et al in 2006 in Jammu observed that mean age at menarche was 13.86 in two caste systems, namely Brahmins and Rajputs (8), which was lower than this study.

The mean age at marriage in the present study was 17.71 years. This was less as compared to 21 years in India (20.5 years in rural areas and 22.4 years in urban areas). Similarly, the mean age at marriage in Gujarat was also 21 years (20.4 years in rural and 22.0 years in urban areas) (9).

Similarly, the mean age at first pregnancy was 18.70 years. The mean age at marriage and first pregnancy were higher in urban areas compared to urban slums and rural areas of the district. Puwar et al (2009) reported in their study on fertility indicators in slum areas of Ahmedabad that median age at marriage and first pregnancy was 17 and 20 years respectively (10).

The mean age at menopause observed in our study was 46.30 years, which was higher in rural areas compared to urban and urban slums of the district. Shipra Gupta et al in 2009 in her study also observed higher mean age at menopause in rural areas compared to urban areas, with mean age at menopause being 46.55 years (6). On the contrary, Arora and Sagdevin in 2011 observed slightly higher mean age at menopause in urban areas compared to rural areas (11). Jasbir Kaur et al in 2008 in Jat Sikh women also observed higher mean age at menopause in urban areas (47.54 years) compared to rural areas (46.67 years) of Ludhiana (12). There is no agreement on the average age at which Indian women attain menopause. A wide range in mean age at menopause in Indian women from 40.32 to 48.84 yrs (13-22), and in developed countries from 48.29 to 51 yrs (23-25) has been suggested in the past. Mean age at menopause in Indian women is less in comparison to women from developed countries. Mean age at menopause in the present study corresponds with Shipra Gupta et al (6). These diversities may probably be because of regional, community and ethnic variations. Genetic and environment factors may also play role in the same (23).

Menopause has emerged as a prominent issue in the women's health. We evaluated the quality of life of women with menopausal symptoms consisting of mainly vasomotor, psychomotor, urinary, gynecological and orthopedic symptoms. Joint pain (64.66%) and backaches (58%) are predominant symptoms observed in both urban and rural

menopausal women, followed by some psychological symptoms like irritability (56.66%), forgetfulness (49%), sadness (47%) and insomnia (48%). Hot flushes and night sweats were observed in 47.33% of post-menopausal women. The etiology of hot flushes is sudden decrease in estrogen level. Some women complained of vaginal dryness and itching (23.66%), while a minority of post-menopausal women had recurrent UTI (15.33%) and urinary urgency (7.67%). Sleep disturbance at menopause results from night sweats which also contributes to mood disorders. Most of the symptoms at menopause were related with decreased level of estrogen. In a study by Yahya and Rehan in 2002, prevalence of hot flushes and night sweats was 32%, which was lower than our study (7). As per a study in Amritsar (Punjab) in 2005, the rate was 55.08% (21), while, according to a study by Sharma et al. (26), the prevalence was 53.86%.

CONCLUSION

With the increase in life expectancy and hence, the population of post-menopausal women, there is a substantial number of health problems of post-menopausal women. And so, in the current scenario, post-menopausal health should be given due importance. Efforts are needed to educate these women to make them aware about various menopausal symptoms and clear their doubts & fears. This will enable them to recognize these symptoms early, seek timely medical intervention for the same and improve quality of life.

Mass media should be used to create awareness regarding physical, nutritional, psychosocial and emotional needs of post-menopausal women. And there should be special clinics for post-menopausal women to carry out IEC activities regarding diet, exercise, nutritional supplements and health care. Such IEC activities should impart information about usefulness of soya products, apples, potatoes, carrots etc. containing natural plant estrogens called phytoestrogens in postmenopausal women. The women should be made aware of drinking adequate water per day for preventing urinary tract infections or dehydration due to excessive sweating. All postmenopausal women should have adequate intake of calcium (1,000 to 1,500 mg elemental calcium per day) and vitamin D (800 to 1,000 IU per day) to maintain bone health. Good sources of calcium are milk, dairy products, sesame seeds, almonds, low fat yoghurt and dark green leafy vegetables.

Political will and proactive support through government and NGOs is highly recommended in all aspects of post-menopausal women.

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