



Menopausal problems among rural middle aged women of Punjab

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Abstract:

Background: Menopause is a physiological process, which takes place universally in all women who reach midlife. During the transition to menopause, women may experience vasomotor, urogenital, psychosomatic and psychological symptoms, as well as sexual dysfunction. The prevalence of menopausal symptoms varies widely not only among individuals of the same population but also between different populations. **Objective:** To determine the prevalence of menopausal problems among the middle aged women. **Material and Methods:** A total of 180 women aged 40-60 years were selected by proportionate sampling technique. Menopausal problems were categorized into 5 groups i.e. Vasomotor, Psychogenic, Urogenital, Skin, other health problems. The frequency of the individual symptom was observed in each subject. **Result:** In the present study, 25.0% subjects were Premenopausal, 9.4% were Peri-menopausal and 65.6% were Postmenopausal. Mean age at menopause was found to be 45.91 (\pm 3.47) years and median age was 46 years. Symptoms, which were reported more frequently in the present study were headache (94.1%), dizzy spells (81.5%), decreased libido (81.5%), sleep disturbance (68.9%) and loss of interest in most things. Other symptoms, which were found common among the subjects, were hot flushes (59.3%), lack of concentration (54.1%), mood changes (49.6%) and night sweats (35.6%). A very few subjects reported symptom like hair loss, increase in facial hair, urinary tract infection, urinary incontinence, prolapsed uterus, and dyspareunia. **Conclusion:** Mean age at menopause was found to be 45.91 (\pm 3.47) years and median age was 46 years. Headache (94.1%) and dizziness (81.5%) was the most commonly reported vasomotor complaint. Most frequent psychogenic problem reported was sleep disturbance (68.9%). Regarding the urogenital problems, it was decreased libido (81.5%) which was most frequently reported.

Key words: Menopause; Middle age; Symptoms

Introduction

Menopause is a physiological process, which takes place universally in all women who reach midlife. It is an important event that occurs within long process of menopausal change, “the period immediately prior to menopause (when the endocrinological, biological, and clinical features of approaching menopause commence) and at least the first year after the menopause” [1], in which women move from the reproductive to the post reproductive phase of life as a part of the aging process [2].

According to the WHO (1981), natural menopause is defined as no menses for 12 consecutive months with no obvious intervening cause, such as pregnancy, lactation, exogenous hormone use, dietary

deficiencies, or surgical removal of the uterus or ovaries [1].

During the transition to menopause, women may experience vasomotor, urogenital, psychosomatic and psychological symptoms, as well as sexual dysfunction [3]. The prevalence of each of these symptoms varies widely not only between individuals in the same population but also between different populations [4]. Even there is great diversity in nature of symptom and frequencies across countries, even in the same cultures [5]. Also some women may become symptomatic in months, others may take years to develop symptoms and some may never develop any symptoms [4].

With the general increase in life expectancy, many females are likely to live for another 20-30 years

after menopause and spend approx, one- third of their lives in a state of estrogen deficiency [6]. In 1990, there were estimated 467 million women aged 50 years and above in the world. This number is expected to be 1200 million by year 2030 [7].

Menopausal health demands priority in the Indian scenario specially due to increase of life expectancy and growing population of menopausal women. Many women donot correlate these symptoms as being due to menopause. Knowledge and scientific data on menopausal symptoms experienced by Indian women specially those living in the rural area is sparse. Hence, the present study was planned to evaluate the menopausal symptoms of middle aged women of rural area of Punjab which may effect their overall health status.

Materials & Methods

The study was carried out in the field practice area of Rural Health Training Center (RHTC) located at village Pohir, Dehlon Block, District Ludhiana, Punjab, India. The field practice area is composed of fifteen villages. The subjects for the present cross-sectional study were those, with established menopause (i.e., cessation of menstruation for more than one year). Proportionate Sampling technique was used for selection of subjects. The highest proportion calculated was 12, so 12 women from each of 15 villages were randomly selected constituting a total of 180 women (40-60 years).

A structured and pretested questionnaire was used to collect the data. Initially the questionnaire was prepared in English and then translated to local language. Information regarding their symptoms both physical and psychological was analyzed. Each item was read out and the women were asked whether they experienced the symptoms mentioned. The variables age, education, marital status, occupation, socio-economic status and type of family were noted. A complete history was taken and a general systemic and gynecological examination was made. Menopausal problems were categorized into 5 groups i.e. Vasomotor (hot flushes, night sweats), Psychogenic (sleep disturbance, mood changes), Urogenital (UTI, incontinence of urine), Skin (Hair loss, increase in facial hair), other health problems (Breast tenderness, weight gain) were studied. The frequency of the individual symptom was observed in each subject.

Results

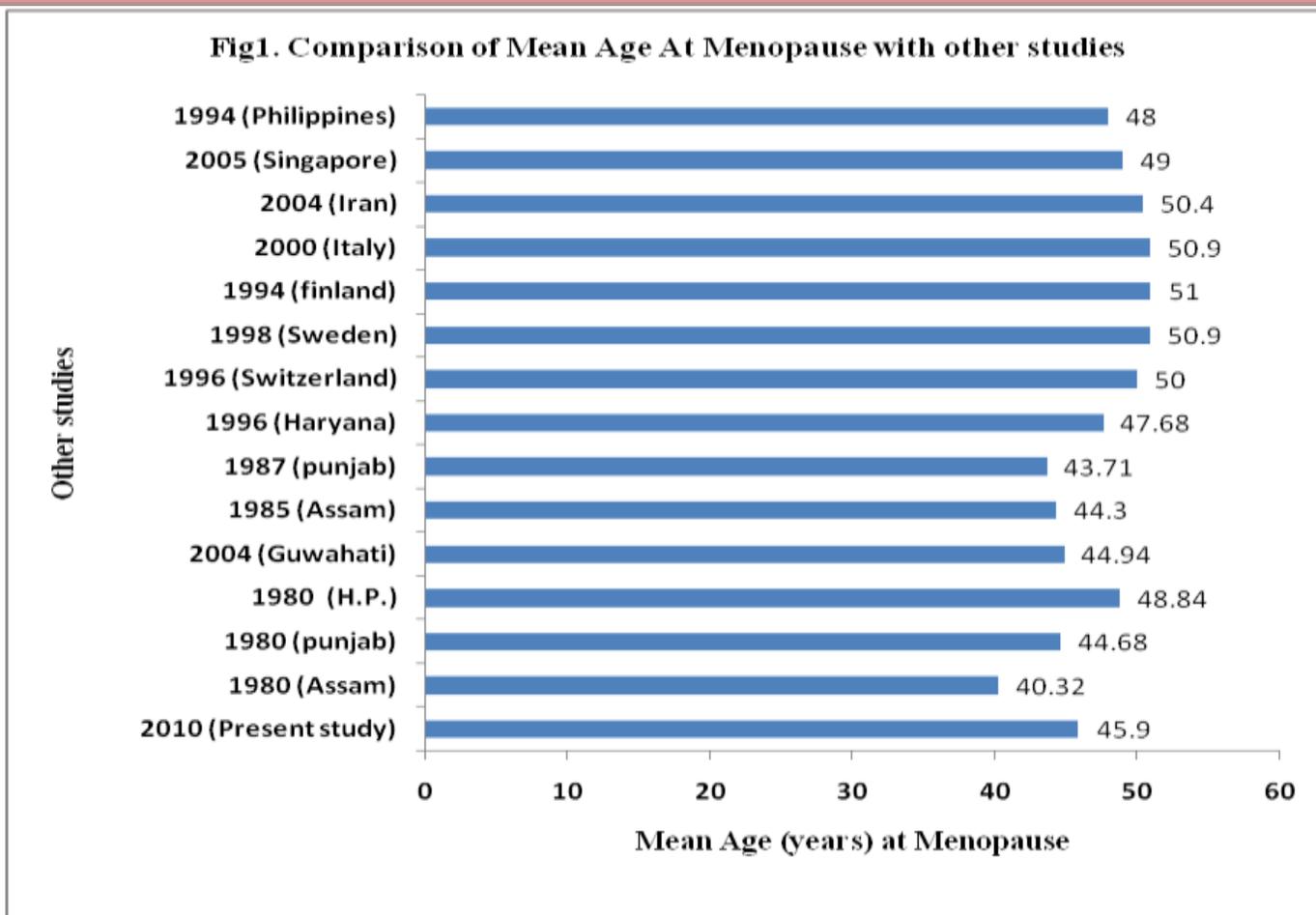
Out of 180 women, there were 45 premenopausal, 17 perimenopausal, 18 artificially

induced menopausal women and 100 were those who has attained menopause naturally.

Table1: Socio-Demographic characteristics of women

Socio-Demographic characteristics	Number	Percentage
Age (years)		
40-45	21	15.6
46-50	47	34.8
51-55	42	31.1
56-60	25	18.5
Marital status		
Married	121	89.6
Widowed/divorced	14	10.4
Education level		
illiterate	57	42.2
Primary	33	24.4
Middle	27	20.0
High school +	18	13.3
Employment situation/occupation		
Household work	126	93.3
Unskilled	6	4.4
Skilled	3	2.2
Socioeconomic status		
Low	4	3.0
Low middle	64	47.4
High middle	60	44.4
High	7	5.2
Type of family		
Nuclear	61	45.2
Joint	70	51.9
Extended nuclear	4	3.0

Futher analysis has been done for 135 subjects as 45 premenopausal women were excluded as the symptoms does not start appearing in this group. Among 135 subjects, 21 were in age group 40-45 years, 47 in 46-50



years, 42 in 51-55 years and 25 were in age group 56-60 years (Table 1). Majority of subjects (90%) were married and 10% were widow. It was observed that there were 57 illiterate subjects, 33 subjects had education upto primary level, 27 educated upto middle and 18 subjects received education upto high school. Majority of the women i.e 93.3% were housewives engaged in household work. Only 4.4% and 2.2% were engaged in unskilled and skilled occupation, respectively. Most of the study population belongs to middle socio-economic group comprising 47.4% from low middle and 44.4% from high middle socio-economic group, while only 5.2% were from high social class. Regarding the type of family 51.9% were staying in joint family and 45.2% in nuclear family. Only 3% were staying in extended nuclear family. The mean age at menopause observed in our study was 45.9 (± 3.5 years) and median age is 46 years.

Among the vasomotor complaints most commonly reported was Headache (94.1%), Dizzy spells (81.5%), Palpitations (64.4%) followed by hot flushes (59.3%) and night sweats (35.6%). Most frequent psychogenic problem reported by the subjects was sleep disturbance 93 (68.9%), followed by difficulty in concentration 73 (54.1%), mood changes 67 (49.6%) and Loss of self confidence by 36 (26.7%) subjects (Table 2). Regarding the urogenital problems reported by the subjects, it was observed that decreased libido was the most frequent problem reported by 110 (81.5%) subjects, followed by incontinence of urine 13 (9.6%). Problem of recurrent UTI was reported by 5 (3.7%) subjects. Few subjects i.e. 3 (2.2%) reported dyspareunia.

It was observed that 7 subjects (5.2%) had problem of hair loss or thinning. Only two subjects reported increase in facial hair. Problem of breast tenderness was reported by 11 subjects (8.1%). There were 12 (8.9%) subjects who reported weight gain.

Table 2: Menopausal symptoms

Menopausal Symptoms	Number	Percentage
Vasomotor symptoms:		
-Hot flushes	80	59.3
-Night sweats	48	35.6
-Palpitations	87	64.4
-Headache	127	94.1
-Dizziness	110	81.5
Psychogenic symptoms		
- Difficulty in concentration, mental confusion	73	54.1
- Sleep disturbance/Insomnia	93	68.9
- Mood changes	67	49.6
-Loss of self confidence	36	26.7
Urogenital problems		
-Dyspareunia	3	2.2
-Incontinence of urine	13	9.6
-Prolapse uterus	8	5.9
-Decreased libido	110	81.5
-Recurrent U.T.I	5	3.7
-Muscle ache	104	77.0
Skin problems		
-Hair loss or thinning (head, pubic, whole body)	7	5.2
- Increase in facial hair	2	1.5
Other health problems		
-Breast tenderness	11	8.1
-Weight gain	12	8.9

Table 3: Most Frequent Menopausal Symptoms

Present study	<ul style="list-style-type: none"> - Headache (94.1%), Dizzy spells (81.5%), - Decreased libido(81.5%) - Sleep disturbance (68.9%), Palpitations (64.4%), - Hot flushes (59.3%), Lack of concentration (54.1%), - Mood changes (49.6%), Night sweats(35.6%)
Indian Studies	
Sharma S et al (Jammu) ^[5]	<ul style="list-style-type: none"> - Fatigue & lack of energy (72.93%), - Headache (55.9%), - Hot flushes, Cold sweats, cold hand & feet 53.86 % each, - Weight gain (43.13%)
Bagga A (Guwahati) ^[8]	<ul style="list-style-type: none"> - Loss of interest (93%), - Pressure/tightness in head (83%) - Weight gain (67%), Hot flushes (54%)
Shah,et al (Mumbai) ^[4]	<ul style="list-style-type: none"> - Muscle and joint pains (37.4%), - Fatigue (35.6%), Hot flushes (19.4%), - Sweating (18.6%), Insomnia (20.6%), - Headache (13.8%)
Kaur et al ^[14]	- Diminished acuity of vision
Singh& Arora (Punjab) ^[15]	- Diminished acuity of vision & Hot Flushes
International Studies	
Schnatz et al (USA) ^[16]	<ul style="list-style-type: none"> - Mood swings (77.9%), - Decrease in energy (75.9%), - Sleeping problems (73.4%), - Memory problems (67.1%)
Kim et al (Korea) ^[17]	<ul style="list-style-type: none"> - Fatigue, Hot flushes, - Benumbed hands and feet, - Irritability
American Women	<ul style="list-style-type: none"> - Weight gain (61.5%), - Ache in back of neck & skull (53.8%), - Fatigue & lack of energy (53.0%), - Headache (45.7%)

Discussion

Although menopause is a universal phenomenon, there is a considerable variation among women regarding the age of attaining menopause. Worldwide, the estimates for the median age at menopause range from 45 to 55 years, with women from western countries having a higher menopausal age compared to women from other parts of the world.

In present study mean age at menopause was 45.9 (\pm 3.5) years and median age is 46 years. Wide range in mean age at menopause in Indian women from 40.32 to 48.84yrs [8] and in developed countries from 48.0 to 51 yrs [9] have been seen in the past as shown in Figure 1. The variation regarding the age of attaining menopause could be because of regional, community and ethnic variations. Genetic and environment factors may also play role [10].

During the transition to menopause, women may experience vasomotor, urogenital, psychosomatic and psychological symptoms, as well as sexual dysfunction [3]. The prevalence of each of these symptoms varies widely not only between individuals in the same population but also between different populations. Also some women may become symptomatic in months, others may take years to develop symptoms and some may never develop any symptoms [4].

Vasomotor instability or menopausal hot flushes are characterized by a rise in skin temperature, peripheral vasodilatation, transient increase in heart rate, and changes in ectodermal activity. The symptom complex may include sweats, chills, nervousness, irritability and headache. The hot flush is believed to be due to sympathetic discharge but its hormonal basis remains obscure [1].

In the present study, hot flushes were reported by 59.3% subjects (Table 2). The prevalence of hot flushes in other studies conducted at different places as reported by WHO (TRS, 1996) ranged from 0% to 80%. The prevalence has been reported to be nil in Mayan women, 10-22% in Hong Kong women, 17% in Japanese women, 23 % in Thai women, 45 % in North American women and upto 80 % in Dutch women [7].

Most frequent psychogenic problem reported by the subjects in this study was sleep disturbance (68.9%), followed by difficulty in concentration (54.1%), mood changes (49.6%) and loss of self confidence (26.7%) (Table 2). Comparable to these findings, are results of Anderson *et al* (2004) who on investigation among Australian and Japanese women

found that there were 65.1% of Australian women who reported problem of sleep disturbance, 55.6% had mood changes, 59.1% had difficulty in concentration. Whereas in case of Japanese women 46.9% had reported sleep disturbance, 52.2 % had mood changes and 72.2% had difficulty in concentration [11].

Changes in β -endorphins and other opioids that occur during this period lead to an influence in the nervous transmitters of the GABA- system and serotonin system. These changes may explain in part why many women experience psychic and psychologic symptoms around menopause. However, it is unclear to what degree each of these symptoms is related to oestrogen withdrawal, ageing and / or environmental stress [12].

Present study showed that only 13.3 % had urogenital complaints. However in study conducted on Thai slum postmenopausal women, genital symptoms were reported in 87.4 % [13]. This variation could be due to fact that the women in present study were in the early postmenopausal period and the urogenital symptoms do not usually become obvious in the early post menopausal period.

Sexual problems are common in the age group of 40-60 years. The likelihood of a woman suffering from such a problem is obviously increased if her reproductive anatomy or physiology is disturbed in some way. This occur with the natural physiological changes of the menopause, which can have profound psychosexual effects. Loss of sexual desire was noted in 81.5% of subjects and Dyspareunia was complained by 2.2 % of women in the present study. (Table 2)

Comparable to the findings, Anderson *et al* (2004) study on Australian and Japanese women reported that there were 71.5% Japanese and 70.4% Australian women who had loss of interest in sex.[11] Another study by Shah *et al* (2004) on menopausal symptoms in urban Indian women of Mumbai, showed that out of 58.6% sexually active women, 20.6% of women had loss of sexual desire and 5.2 % had problem of dyspareunia [4].

The possible explanation to it may be the declining oestrogen level, which accounts for diminished vaginal lubrication. Second reason could be, that in rural society of India postmenopausal women are less active sexually as they become involved in taking care of their grand children and in performing religious activities like offering prayers and other rituals.

The most commonly occurring menopausal symptoms in the present study and other studies are

shown in the Table 3. Symptoms, which were reported more frequently in the present study were headache (94.1%), dizzy spells (81.5%), decreased libido (81.5%), sleep disturbance (68.9%) and loss of interest in most things. Other symptoms, which were common in study, were hot flushes (59.3%), lack of concentration (54.1%), mood changes (49.6%) and night sweats (35.6%). A very few subjects reported symptom like hair loss, increase in facial hair, urinary tract infection, urinary incontinence, prolapsed uterus, and dyspareunia.

In a study conducted by Bagga (2004) among women of Guwahati showed that most frequently reported symptoms was loss of interest in most things (93%), followed by pressure /tightness in head (83%), weight gain (67%) and problem of Hot flushes were reported by 54% women [8].

The reasons for variation in frequencies may be attributed to the fact that menopausal symptoms are influenced by socio-demographic / socio-cultural factors, economic stress, general health status, individual perception of menopause, genetic and racial differences and reproductive parameters like parity. Apart from all these differences the different design of studies, sample size, age range, distribution of menopausal status of participants and instruments used may also account for difference in findings.

Conclusion

Mean age at menopause was found to be 45.91 (\pm 3.47) years and median age was 46 years. Common vasomotor problems experienced by the subjects (94.1%) were headache, dizziness (81.5%) followed by palpitations (64.4%) and hot flushes (59.3%). Most frequent psychogenic problem reported was sleep disturbance (68.9%) and difficulty in concentration (54.1%). Few subjects reported symptom like urinary tract infection, urinary incontinence, prolapsed uterus and dyspareunia. Efforts should be made to educate and inform women of the menopausal transition. This would enable them to effectively deal with this transitory period and seek appropriate medical care, if necessary.

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