

Average Age of Menopause and its Climacteric Symptoms in Women of Multan City

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ABSTRACT

Aim: To determine average age at menopause in women having natural menopause and identify climacteric symptoms occurring after menopause.

Methods: This cross sectional study was carried out in the Department of Obstetrics and Gynaecology, Nishtar Hospital, Multan from April 2011 to September 2011. A total of 89 subjects were included in the study.

Results: The age of the women was 35-60 years with mean age 54.29 ± 3.73 years. Mean age at menopause was 46.88 ± 2.44 years. Majority of women (50.6%) were multiparous. Most of the women (67.4%) belong to low socio-economic status. Hot flushes were the commonest symptom after menopause evident in 69(77.5%) women followed by loss of libido found in 62(69.7%) women. Forty four (49.4%) had body aches and pains while nocturia was evident in 42 women. Thirty nine (43.8%) had night sweats and headache was evident in 34(38.2%) women.

Conclusion: We concluded that average age at menopause was 46.88 ± 2.22 years and most common climacteric symptom was hot flushes.

Keywords: Menopause, Climacteric symptoms, Hot flushes.

INTRODUCTION

Menopause is the permanent cessation of menstruation resulting from the loss of ovarian follicular activity¹ (that occurs naturally or is iatrogenic) at the age of 40-55 years. Natural menopause occurs after 12 months of amenorrhea that is not associated with any pathological cause or physiological cause². Menopause is the point when menstruation ceases depicting end of woman's reproductive life usually occurring between the age of 45-55 years³.

The transition from reproductive to non-reproductive years, known as climacteric, is a period of declining ovarian function, which usually becomes clinically apparent over two to five years around menopause. The menopause is a biologic phenomenon unique to the human species. All other animals continue with their reproductive potential until old age⁴.

Women, who under menopause experience the loss of cyclical ovarian estrogen secretion⁵. This decrease in estrogen level is linked to some uncomfortable symptoms in many patients. Common symptoms are hot flushes (36.2%), sleep disturbance (38.5%), mood changes, urinary leakage (56.2%), decreased libido (51%), lack of energy and poor memory (57.7%)^{4,6}. In the long term women may develop osteoporosis⁷ and increased risk for heart

disease⁵. These are clinically apparent over two to five years around menopause. The menstruation become irregular and usually cease between age of 45-55 years⁸.

Conditions like smoking, different socio-economic status, race, parity, height, weight, skin fold thickness, lifestyle and education affect the age at menopause⁹. Reproductive hormonal functions may underlie some of the common symptomatology of the perimenopause¹⁰.

The average age at menopause has not changed for centuries. Most estimates of age at natural menopause are based on samples of Caucasian women in western societies. The studies conducted on non-Caucasian societies have reported younger age at menopause than those of Caucasian women. African, Hispanic, Chinese and Thai women have an earlier age at menopause^{11,12}, whereas Japanese and Malaysian women reported an age similar to women of European descent¹³.

In Pakistan greatest hurdle is ascertainment of correct age of women causing difficulty in determining the correct age at menopause. In practice, in the absence of reliable estimates of the distribution of age at natural menopause in populations in developing countries, the age of 40 years is frequently used as an arbitrary cutoff point, below which menopause is said to be premature¹⁴. In one study carried out in Karachi, the average age of menopause was 47.1 ± 4.7 years¹⁵.

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MATERIAL AND METHODS

This cross sectional study was carried out in the Department of Obstetrics and Gynaecology, Nishtar Hospital, Multan from April 2011 to September 2011. A total of 89 subjects were included in the study.

RESULTS

The age range of the women was 35-60 years with a mean 54.29 ± 3.73 years. Mean age at menopause was 46.88 ± 2.44 years and mean duration since menopause was 7.42 ± 3.32 years. Among all the climacteric symptoms, hot flushes contributed to 77%, loss of libido 21.4%, body aches and pains 15.2%, nocturia 14.5%, night sweats 13.4% and headache 11.7% respectively. Seventeen (19.1%) women were 46-50 years of age, 31(34.8%) were 51-55 years and 41(46.1%) were 56-60 years (Fig 1). There were 31(34.8%) patients having parity 1-4, 45 (50.6%) were para 6-10 while 13(14.6%) were para 11 and above (Table 1). Table 2 shows socio-economic status of 60(67.4%) patients was low, of 22(24.7%) was middle and of 7(7.9%) was high. Hot flushes were commonest symptom after menopause evident in 69(77.5%) women as shown in table 3.

Fig 1: Age distribution in menopausal women (n=89)

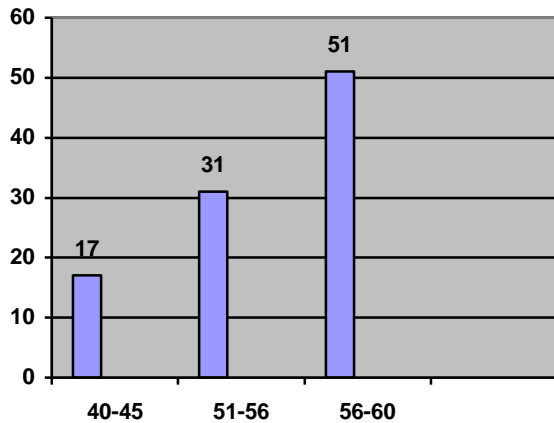


Table 1: Parity distribution (n=89)

Parity	n	%age
1-5	31	34.8
6-10	45	50.6
11 & above	13	14.6

Table 2: Socio-economic status (n=89)

Status	n	%age
Low	60	67.4
Middle	22	24.7
High	07	07.9

Table 3: Proportion of climacteric symptoms after menopause (n=89)

Symptoms	n	%age
Hot flushes	69	77.5
Loss of libido	62	69.7
Body aches	44	49.4
Nocturia	42	47.2
Night sweats	39	43.8
Headache	34	38.2

DISCUSSION

The age at natural final menstrual period is an important risk indicator for subsequent morbidity and mortality¹¹. The usual age at last menstrual period is estimated at between 48 and 52 years with a range of 35-58 years. However, menopause occurring before the age of 45 is often classified as early. Usual age of onset of the menopausal transition is estimated at 44-48 years, with a range of 31-45 yrs.

Present study was conducted to find mean age of menopause and identify women with climacteric symptoms after menopause. Mean age of women in our study was 54.29 ± 3.73 years. Mean age at menopause was 46.88 ± 2.44 years. Common symptoms in order to precedence were hot flushes 77.5%, loss of libido 69.7%, body aches and pains 49.4%, nocturia 47.2%, night sweats 43.8% and headache 38.2%. There seem to be regional variation with regard average age and menopausal symptoms among different populations of the world. As such our results are in agreement as well as there is some contradiction with international literature. A few reports have suggested mean age of menopause ranged from 44.5 ± 0.8 years to 49 ± 3.6 years among rural and urban population of Lahore and Karachi¹⁶⁻¹⁷. In a recent study it has been reported that menopause occurred at the mean age of 45.5 yrs¹⁸.

The median age at menopause reported from the West (50.3 years)¹⁹ is higher as compared to the range of 45.47 years in developing countries. The mean age at menopause has been found to be 50.7 years in Malaysia¹³ while in southern Thailand it is 48.7 years²⁰ (range 40-57 years)¹². In USA, it is 50.6 years, in France it is 52 years²¹, while in the UK, the mean age of menopause is 50 years and 9 months²². However, in UAE, the mean age at menopause is 47.3 years (range 40-59 years) which is significantly lower like other developing countries and may be influenced by genetic factors, parity and previous use of oral contraceptives¹⁹. Similarly, a lower mean age of 45.50 years has been reported in Mexico²³, and in India, the mean age has been found to be 44.6 years and as low as 43.55 years in two separate studies²⁴. The age in India is very similar to that of our mean of 46.88 years, which is also lower than the age in the West.

Menopause is accompanied by various symptoms like hot flushes, night sweats and various psychic symptoms, of which hot flushes is known to occur in about 75% of the women and may continue for as long as 40 years. In one study it has been reported that the most predominant symptom was hot flushes in 82% of menopausal women²⁵. In another study conducted at Islamabad, the most commonly symptoms as hot flushes 90% and sleep disturbances 89% followed by palpitations 42%²⁶. Nisar et al found backache 75.7%, insomnia 63.4%, hot flushes 59.4%, night sweats 45.9% loss of libido 43.9% and frequent urination 35.1%. Similar symptoms were reported in another study. Commonest symptoms reported in a study were body ache 86%, hot flushes 86% and irritability 65%²⁷.

The 3 most prevalent menopausal symptoms in Malaysian women were joint and muscular discomfort 80.1%, physical and mental exhaustion 67.1% and sleeping problems 52.2%²⁸. In Japanese population commonest symptoms were shoulder stiffness 50%, fatigue 2%, headache 30% and hot flushes 28%²⁹, while symptoms experienced by mid-aged women were dizziness, tiredness, headache, joint aches/pain and backache³⁰. Middle aged women in Taiwan reported troubled sleep, backache and joint pain³¹. From a study, the most frequently recorded menopausal symptoms among Ghanian women were night sweats 83.2%, hot flushes 76.4%, mood swings 72.5% and vaginal dryness 71.4%³¹.

Average age at menopause in current study is similar as in neighboring countries. The symptoms experienced are similar as in other parts of the world, although occurring with varying frequencies. Our study has been conducted on a small sample and does not reflect whole the population of our city, so the results cannot be generalized.

CONCLUSION

We concluded that average age at menopause was 46.88±2.22 years and most common climacteric symptom was hot flushes.

REFERENCES

1. Rees M. The menopause. In: Shaw RW, Soutter WP, Stanton SI editors. *Gynaecology*. Edinburgh:Churchill Livingstone, 2003; 415-32.
2. Rao SS, Singh M, Parker M, Sugumaran R. Health maintenance for postmenopausal women. *Am Fam Phys* 2008; 78: 583-94.
3. Dailey RK, Neale AV, Northrup J, West P. Herbal products and menopause symptoms relief in primary care patients. *J Womens Health* 2003; 12: 633-41.
4. Yahya S, Rehan N. Age pattern and symptoms of menopause among rural women of Lahore. *JAMC Abbottabad* 2002 14:9.
5. Henderson VW, Sherwin BB. Surgical versus natural menopause cognitive issues. *Menopause* 2007;14:572-9.
6. Castelo BC, Palacio S, Mostajo D. Menopausal transition in Movima women. *Maturitas*2005; 51: 380-5.
7. Gallagher J, Christopher MD. Effect of early menopause on bone mineral density and fracture. *Menopause* 2007; 14: 567.
8. Ganong WF. The gonads. In: Ganong WF editor. *Review of medical physiology*. India McGraw Hill Co. 2003; 391-428.
9. Noreh J, Karanja JG, thagana NG. Median age at menopause in a rural population of western Kenya. *E Afr Med J* 1997; 74: 634-8.
10. Santoro N. The menopausal transition. *Am J Med* 2005; 118: 8-13.
11. Gold EB, Bromberger J, Cranford S, Samuels S, Grundale GA, Harlon SD et al. Factors associated with age at natural menopause. *Am J epidemiol* 2001; 153: 865-74.
12. Peeyananjarassri K, Hubbard M, Zoa MR. Menopausal symptoms in a hospital based sample of women in southern Thailand. *Climacteric* 2006; 9: 23-9.
13. Ismael NN. A study on the menopause in Malaysia. *Maturitas* 1994; 19: 205-9.
14. Menopausae terms: [online]. 2007 [cited 2007 Nov 28]; available from URL: http://www.heartspring.net/perimenopause_symptoms.html.
15. Baig LA, Karim SA. Age at menopause and knowledge of and attitudes to menopause, of women in Karachi, Pakistan. *J Br Menopause Soc* 2006; 12: 71-4.
16. Adhi M, Hasan R, Shoaib S, Tauheed S. Age and symptomatology of menopause in Karachi. *Pak J Physiol* 2007; 3: 41-4.
17. Qazi Ar. Age, pattern of menopause, climacteric symptoms and associated problem among urban population of Hyderabad. *J Coll Phys Surg Pak* 2006; 16(11): 700-3.
18. Mazhar SB, Rasheed S. Menopause rating scale. *Ann Pak Inst Med Sci* 2009; 5(3): 158-61.
19. Rizk DEE, Bener A, Ezimokhai M, Hassan MY, Micallef R. The age and symptomatology of natural menopause among United Arab Emirates women. *Maturitas* 1998; 29: 197-202.
20. Anderson ER, Hamburger SBA, Rebart RW. Characteristics of menopausal women seeking assistance. *Am J Obstet Gynaecol* 1987; 2:433-8.
21. Salat BJ. The menopause and its problems. *Sem Hop* 1980;56: 1343-5.
22. Rymer J, Morris EP. Extracts from clinical evidence: menopausal symptoms. *Br Med J* 2000; 321: 1516-9.
23. Alvarado ZG, Rivera DR, Ruiz MR. Factors possibly associated with the age at the onset of menopause. *Ginecologiy Obstetrica de Mexico* 1995; 63: 432-8.
24. Randhawa I, Premi HK, Gupta T. The age at menopause in the women of Humachal Pradesh. *Indian J Pub Health* 1987; 31: 40-4.
25. Martini FH, Timmons MJ, Tallitsch RB. *Human anatomy*. San Francisco: Pearson Education Inc.2006; 738-45.
26. Reynolds RF, Obermeyer CM. Age at natural menopause in Spain. *Am J Hum Biol* 1998; 70: 1073-91.
27. Jamelle RN. Awareness of menopause and pattern of menopausal symptoms in HRT clinic, Pak J Obstet Gynaecol 1996; 9: 16-8.
28. Alwi S, Rehman SA, Sainudin SR, Mun VLK. Assessment of menopausal symptoms using modified menopause rating scale. *Asia Pac Fam Med* 2010;9:5-10.
29. Aso T. Demography of menopause and pattern of climacteric symptom in the east Asian region. [Onlin] 2003 [cited Oct 2004]; available from: URL: <http://www.gfmee.cj/books/bookup/24.htm>.
30. Punyahorta S, Dennerstein L, Lehact P. Menopausal experience of Thai Women. *Meturitas* 1997; 26: 1-7.
31. Wang SJ, Lue SR, Juang KD, Chiu LM. The kinmen women health investigation. *Maturitas* 2001; 39(2): 117-