



ORIGINAL RESEARCH PAPER

Health Science

A SURVEY ON THE FREQUENCY AND SEVERITY OF PSYCHOLOGICAL SYMPTOMS OF MENOPAUSAL WOMEN IN KERALA.

KEY WORDS: menopause , anxiety , depression , psychological symptoms

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ABSTRACT

Menopause is a stage of female reproductive life, just as puberty. World Health Organization (WHO) defines menopause as the permanent cessation of menstruation. Menopause brings psychological and biological changes that affect women's health and degrade her quality of life. The present survey study was done in 250 subjects, were aimed to assess the psychological symptoms of the menopausal women as mentioned in the Menopausal rating scale (MRS). Psychological symptoms include -depressive mood, irritability, anxiety and physical and mental exhaustion. It is observed that anxiety is the most frequent psychological symptom. Using the p- scoring method the severity of psychological symptoms is assessed and found that 34% of patients had severe psychological symptoms.

INTRODUCTION

The physiological state of the human body does not remain the same throughout the life. Different changes occur in the body as a part of the aging process. Menopause brings psychological and biological changes that affect women's health and degrade her quality of life. According to World Health Organisation [WHO] in the year 1990 there were 467 million women aged 50 years and above globally. (40 % of them lived in the developed countries, whereas 60 % were in the developing countries). The global figure is expected to hit 1200 million by the year 2030. Significantly, as the proportion of postmenopausal women living in the developed region is expected to decline by over 16%, it in turn causes an alarming situation for the developing countries. This read along with the statistical data put forward by IMS (Indian menopause society) research, that there are about 65 million Indian women above the age of 45 makes the Indian scenario crucial by demanding utmost priority to menopausal health. The age at which natural menopause occurs is between 45 and 55 years for women worldwide with an average of 50 years, In India the menopausal age varies between 45 – 50 years, the average age being 48 years. Thus women had to spend almost 1/3 rd their life in the menopausal period and most of the women especially in developing countries are less aware of the menopausal symptoms that they are passing through.

Psychological symptoms include depression, irritability, anxiety, physical and mental exhaustion. Changes in mood during perimenopause in middle aged women may be related to endocrine changes, social factors, and the ageing process. Socially, women in midlife have to face many problems, including children leaving home, physical illness of either self or partners, marriage of daughters, caring for sick family member, and marital stresses relating to mid-life transition. Various socio-demographic variables such as educational level, occupational status, income and social network may influence the way in which women adapt to the many changes occurring in the menopausal years. Undesirable life-events were found to be worsen the severity of menopause symptoms. Mood disturbances are reported by 75% of perimenopausal women and affect their quality of life. The study of Women's Health across the Nation (SWAN study) showed that the perimenopausal women reported more psychological symptoms than pre or post-menopausal women. Up to 30% of the women attending the gynaecology clinics with menopause is diagnosed to have a current depressive disorder. Studies of mood variations during menopause have generally revealed an increased risk of depression during perimenopausal period, and a decrease in risk during the postmenopausal years. An Ovarian Aging cohort study, also found depressive symptoms to be increased during the menopausal transition and decreased after menopause. A personal or family history of major depression, postpartum depression, or premenstrual disorder seem to be a major risk factor for depression in the perimenopausal period. High stress and anxiety levels have

been reported to potentially worsen the somatic symptoms of menopause. certain researchers have found an increased incidence of depression in women who have undergone a surgical menopause. young women may be at greater risk for depression than older women following hysterectomy.

A study on neurobiological effects of hormones in 1994 found that oestrogen and testosterone were present in areas of the brain thought to be relevant to emotional functioning. Withdrawal of sex hormones at the menopause has been thought to influence neuropeptides and neurotransmitters, resulting in depression, irritability, insomnia and anxiety in women. Most of the hypothesis link oestrogen's with them development of depression during and after the menopause transition. Estrogen might work like an antidepressant on neurotransmitters and their receptors.. Certain studies prove that symptoms of depression are significantly related to increased risk of CV events in women suspected of myocardial ischemia. The depression during menopause ranges in severity from minor depressive symptoms to more severe forms of major depressive disorder. Moreover, depressive disorders /symptoms and the associated brain changes have been related to mild cognitive impairment and probable dementia in postmenopausal women over 65 years of age

AYURVEDICVIEW

The concept of psycho spiritual wellbeing has been emphasised in the definition of health in Ayurveda classics. Ācāryā's had mentioned that *prā a vāyu* is responsible for the normal functioning of *buddhi, indriya, hr daya Manas* etc. When the *prā a vāyu* is disturbed or aggravated which in turn cause or manifest symptoms like anxiety, depression, mental confusion. *Kama* (desire), *krodha* (anger), *bhaya* (fear), *śoka* (sadness), *irśyā* (jealous), *Udvega* (anxiety) etc. are the *Manovikaras* (disorders of *Manas*) In *nanatmaja vāta vikāra Ācāryā* has mentioned some of the psychological disorders like *śrama, bhrama, glāni, vi ādā, anavasthitacittatā* etc are mentioned. *Ācāryā caraka* while explaining *vāta prak ti Lak a a* according to *gu ā*, due to *śighragu ā* they are quick in initiating actions, getting irritated easily, quick in affliction with fear, etc are mentioned. *Ācāryā* has mentioned for the management of *mānasika vikāra's dhi, dhriti and ātmādi vijñāna* plays a major role. And also the role of psychological support is mentioned.

MATERIALS AND METHODS

The present study was a survey study done in sakhikulangara Village ward no: 2 of kollam district in kerala., after getting approval from the institutional ethics committee of Amrita school of Ayurveda (prior to the start of work) as well as from the ward councillor. A total number of 250 subjects were fixed for the survey (with a 95% confidence limit, and 20% relative precision of estimate sample size was calculated as 180 subjects, but for a

better outcome it was decided to be 250 subjects) who satisfy the following criteria.

Inclusion criteria

- Women who had attained menopause either naturally or surgically between the age of 40-60

Exclusion criteria

- Malignancy
- Under hormone replacement therapy

The subjects who satisfy the inclusion and exclusion were selected from the saktthikulangara Village ward no 2 with the help of voters list and Asha workers are selected for the study. A pre-designed structured questionnaire consist of socio-demographic data, psychological symptoms that is mentioned in the menopausal rating scale [MRS], for assessing the psychological symptoms like – depressive mood, irritability, anxiety and physical and mental exhaustion.

The survey was conducted by face to face interview method, after obtaining consent from the subject. The data was collected by keeping a target of 25 patients in a month. Data was collected from October 2015-November 2016.

Psychological symptoms of patients are observed using P-score

- (a) No, little – 0-1
- (b) Mild- 2-3
- (c) Moderate - 4-6
- (d) Severe - 7+

The Software used is - SPSS version 20, the data obtained is presented as Frequencies, Percentage, Tables and Charts.

RESULTS

1) FREQUENCY OF THE PSYCHOLOGICAL SYMPTOMS AMONG THE SUBJECTS.

It was observed that out of the 4 psychological symptoms anxiety is the most frequent symptom about 82% of the subjects suffer from the symptom.

TABLE NO 1

Sl	Symptoms	Frequency	Percentage
1	Depression	188	75.2%
2	Irritability	200	80%
3	anxiety	207	82%
4	Physical and mental exhaustion	173	69.2%

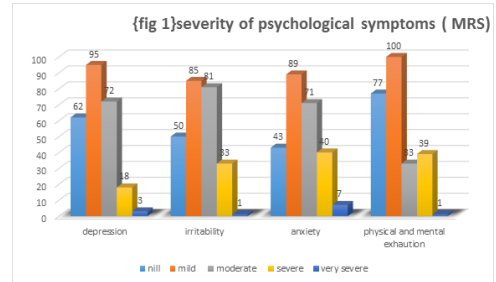
And its individual severity using MRS is accordingly

A)DEPRESSIVE MOOD- out of 250 subjects 38% of subjects have mild symptoms , 28% of subjects have moderate symptoms , 7.2% have severe symptoms , 1.2% have very severe symptoms and 24 % have no symptoms at all (fig 1)

B)IRRITABILITY- out of 250 subjects 34% of subjects have mild symptoms, 32.4% have moderate symptoms, 13.2% have severe symptoms, .4% have very severe symptoms and 20% of subjects have no symptoms at all . (fig 1)

C)ANXIETY- out of 250 subjects 35.6% of subjects have mild symptoms , 28.4% of subjects have moderate symptoms, 16% of subjects have severe symptoms , 2.8% of subjects have very severe symptoms and 17.2% subject don't have any symptom of anxiety. (fig 1)

D)PHYSICAL AND MENTAL EXHAUSTION- out of 250 subjects 40% of subjects have mild symptoms, 13.2% have moderate symptoms, 15.6% have severe symptoms, .4% have very severe symptoms and 30.8% of subjects had no symptoms.



2)SEVERITY OF PSYCHOLOGICAL SYMPTOMS OF THE 250 MENOPAUSAL SUBJECTS USING P- SCORE

On observing the psychological symptoms of patients (4,5,6&7th symptom in MRS) it is observed that 87% of patients have moderate and severe symptoms , 42% of subjects have mild symptoms , 34% of subjects have no or little symptoms



DISCUSSION

The psychological symptoms like anxiety (82.4%), irritability (80%) & depression (75.2%), which is much higher than any other studies conducted in India, especially those outside Kerala. But various menopausal studies in Kerala shows a higher percentage of psychological symptoms that is to precise, a study conducted in Kannur district projects the persistence of psychological symptoms to be 90.7%, where as another one in Idduki reported about psychological symptoms like irritability and anxiety to be centring around 85.8% and 73.8% respectively. This may be attributed to the concern with regards to their children, feeling of insecurity & social issues. One of the noticeable observation is that, the psychological symptoms in different studies done in Kerala is much higher in comparison to those in other states.

REGARDING SEVERITY OF THE PSYCHOLOGICAL SYMPTOMS

It is observed that 34.8% of subjects had moderate and 35% of subjects had severe symptoms and only 13% of subjects had no symptoms it may be because of the hormonal variation along with the social as well as the economic factors which may also contribute as 37% of subjects are poor and 44% are living in an average financial situation and this financial insecurity along with family issues , health of husband and kids, marriage of daughters , financial burden all contribute to the psychological status of the women.

In *nanatmaja vāta vyādhi* Ācāryā had mentioned *vi ādā* as a psychological symptom due to the predominance of *vāta*. *jarā avastha* is a stage where *vata* is in *v dhā avastha* hence it may also contribute to the psychological disturbance in this phase along with other *vata vikāra*'s .

CONCLUSION

Among the psychological symptoms anxiety is the most frequent symptom. Considering the severity most of the subjects had moderate to severe symptoms. This data itself shows the alarming situation of the psychological health of menopausal women in Kerala,

References

1. World Health Organization (1996). Research on menopause in the 1990 s. Report of WHO Scientific Group Geneva, (WHO Technical Report Series, No. 866).
2. Wyon JB et al; Population index, 1996,32:328-329
3. ShilpaSapre and Ratna Thakur, Lifestyle and dietary factors determine age at natural menopause. J Midlife Health. 2014 jan- mar; 5(1):3-5
4. Igarashi M, Saito H, Morioka Y, et al. Stress vulnerability and climacteric symptoms:

- life events, coping behavior and severity of symptoms. *Gynecol Obstet Invest* 2000;49:170-8.
5. Ayubi-Moak I, Parry BL. Psychiatric aspects of menopause. In: Kornstein SG, Clayton AH, editors. *Women's mental health: a comprehensive textbook*. New York, NY: Guilford Press; 2002. p. 132-43.
 6. Hay A G, Bancroft J, Affective symptoms in women attending a menopause clinic, *B J Psychiatry*, 1994; 164: 513-51.
 7. Alder SR, et al., Fosket JR, et al., Kagawa-Singer M, et al. Conceptualizing menopause and midlife: Chinese American and Chinese women in the US. *Maturitas* 2000;35(1):11-23.
 8. Soares CN., Perimenopause-related mood disturbance: an update on risk factors and novel treatment strategies available. Meeting Program and Abstracts. Psychopharmacology and Reproductive Transitions Symposium. American Psychiatric Association 157th Annual Meeting; May 1-6, 2004; New York, NY. Arlington, Va: American Psychiatric Publishing; 2004. 51-61
 9. Soares CN. Perimenopause-related mood disturbance: an update on risk factors and novel treatment strategies available. Meeting Program and Abstracts. Psychopharmacology and Reproductive Transitions Symposium. American Psychiatric Association 157th Annual Meeting; May 1-6, 2004; New York, NY. Arlington, Va: American Psychiatric Publishing; 2004. 51-61.
 10. Alexander JL, Dennerstein L, Woods NF et al. Role of stressful life-events and menopausal stage in wellbeing and health. *Expert Rev Neurotherapeutics* 2007; 7: 593- 113.
 11. Amanda A. Deeks, Psychological aspects of menopause management , *Best Practice & Research Clinical Endocrinology & Metabolism* Vol. 17, No. 1, pp. 17-31, 2003 doi: 10.1053/ybeem.2003.232, available online at <http://www.sciencedirect.com>.
 12. Cabness J. The psychosocial dimensions of hysterectomy: private places and the inner spaces of women at midlife. *Soc Work Health Care* 2010;49: 211-26
 13. Sherwin BB. Impact of the changing hormonal milieu on psychological functioning. In Lobo RA (ed.) *Treatment of the Post-menopausal Woman: Basic and Clinical Aspects*. pp 119-127, New York: Raven Press, 1994.
 14. Plácido Llaneza , María P. Garcia-Portilla Depressive disorders and the menopause transition, *Maturitas* 71 (2012) 120-130
 15. Smith RNJ & Studd JWWW. Estrogens and depression in women. In Lobo RA (ed.) *Treatment of the Postmenopausal Woman: Basic and Clinical Aspects*. pp 129-136, New York: Raven Press, 1994
 16. Rutledge T, Reis SE, Olson MB, et al. Depression symptom severity and reported treatment history in the prediction of cardiac risk in women with suspected myocardial ischemia: The NHLBI-sponsored WISE study. *Arch Gen Psychiatry*. 2006;63(8):874- 880.
 17. Schmidt PJ, Roca CA, Bloch M et al. The perimenopause and affective disorders, *Semin Reprod Endocrinol*, 1997, 15: 91-100
 18. Prof. K.R. Krishna murthy, *Astanga sa graha of vāgbha a. jaikrishna Ayurveda series, chaukhambha orientalia , Varanasi, 8th edition, 1st volume .20.2-*
 19. *Caraka sa hitā, 3.6.5-*
 20. Prof. K.R. Krishna murthy, *Astanga sa graha of vāgbha a. jaikrishna Ayurveda series, chaukhambha orientalia , Varanasi, 8th edition, 1st volume .A.s.su.20*
 21. Dr. Ram karan sharma , *Vaidya Bhagwan dash, Agnivesa s Charaka samhitha based on chakrapani data s Ayurveda dipika chawkhambha Sanskrit series , Varanasi, reprint 2003, shareera sthanam, ,3.8.98-*
 22. Namitha subrahmanyam, Dr.A Padmaja Menopause related problems among perimenopausal women, *Biohouse, Volume 2: Issue 1, Jan-Feb 2016*