

## A SURVEY ON THE SOMATOVEGETATIVE SYMPTOMS OF MENOPAUSAL WOMEN IN A VILLAGE OF KOLLAM DISTRICT IN KERALA

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### ABSTRACT

Menopause is a universal phenomenon and an unavoidable physiological transition process in a woman's life which marks the end of women's reproductive capacity. Unlike men women are having a more complex and stressful aging process, resulting from hormonal changes that occur during the transition period. The present study was a cross sectional survey study done in 250 menopausal subjects with an aim to assess the somato-vegetative symptoms that is mentioned in the menopausal rating scale (MRS). It is observed that out of the 4 somato-vegetative symptoms (hot flushes, heart discomfort, sleep problems and joint and muscular discomfort) joint and muscular discomfort is the most frequent symptom and while considering the severity using the S-score it is observed that 37% of subjects had moderately severe somato-vegetative symptoms.

**Keywords:** menopause, *Rajonivrtti*, MRS, hot flushes.

**INTRODUCTION:** Menopause is an integral part of aging process in a women's life. World Health Organization (WHO) defines menopause as the permanent cessation of menstruation resulting from the loss of ovarian follicular activity. Natural menopause is recognized as 12 consecutive months of amenorrhea for which there is no other obvious pathological cause. In comparison to the world-wide average age of menopause which comes to 50 years, India centres around 48 years. Factors such as low socioeconomic status, poor nutrition, reproductive history, healthcare ignorance and stressful family life affect the quality of life of menopausal women in India. Generally, women are having a more

complex and stressful aging process, resulting from hormonal changes that occur during menopausal transition<sup>11</sup>. In Ayurveda literature, the term *Rajonivrtti* is used for menopause. The term *nivrtti* has following meanings 1) cessation 2) disappearance 3) inactivity 4) suspension. Thus the term '*Rajonivrtti*' used here has similar terminology of menopause which is defined as the 'end or stoppage of menstrual cycle'. *Nivrtti* is the term used by *Dalhana* in his commentary. In *brhat trayī*'s the term '*Kshayam*' is used for denoting cessation of menstruation<sup>2 3 4</sup>. *Ācāryā*'s had considered *rajonivrtti* as a sign of aging or *jarā*. And it is a *nityapratikriyā avastha* (changes cannot be resisted)<sup>5</sup>, just like *kshut* (hunger), *Pipāsa*

(thirst), *nidrā* (sleep), *Jarā* (aging), *Mrtyu* (death)<sup>67</sup>. With advancing age there is gradual diminution in the qualities of *dosha*, *dhātu*, *malā*, *Agni*, and *oja*<sup>8</sup> which may be the reason for the appearance of the menopausal symptoms in the women. During this stage there is decline of the *soumya guna* into a *vata* dominant stage along with a mild increased *pitta* and the *kshaya* of *kapha* dosha is responsible for the menopausal symptoms.

Menopause brings somatic, psychological and biological changes that affect women's health and degrade her quality of life. According to 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 main intention of the present study was to find out the frequency and severity of the somato-vegetative symptoms in the menopausal women and to adopt new strategies in prevention as well as in the management of these symptoms.

Somato-vegetative symptoms mentioned in the MRS (which is an internationally accepted standard scale due to its reliability, short format encompassing all the associated symptoms and the simple scoring scheme<sup>9</sup>) include hot flushes, heart discomfort, sleep problems and joint and muscular discomfort.

## MATERIALS AND METHODS:

- The present study was a cross sectional survey study done in sakthikulangara Village ward no: 2, 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 inclusion and exclusion criteria .

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

### **Exclusion criteria:**

- Malignancy
- Under radiation or chemotherapy
- Under hormone replacement therapy
- Patients suffering from severe arthritis

The subjects who satisfy the inclusion and exclusion criteria irrespective of religion and marital status were selected from the sakthikulangara Village ward no 2 with the help of voters list and Asha workers are selected for the study. A pre-designed structured questionnaire was used for collecting data from the menopausal women who consist of 2 parts

### **Part 1**

- Part 1a) consist of socio-demographic data of the participant
- Part 1b) consist of reproductive profile

**Part 2** consist of somato-vegetative symptoms that is mentioned in the menopausal rating scale [MRS], for assessing the somato-vegetative symptoms.

Somatic – hot flushes, heart discomfort, sleeping problems, muscle and joint problems [item 1,2,3 and 11 mentioned in the MRS].

Even though it is a self-administrated structured questionnaire in order to minimize the reporting error it 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. Severity of somato-vegetative symptoms of 250 subjects is assessed using S-score.

#### S-score

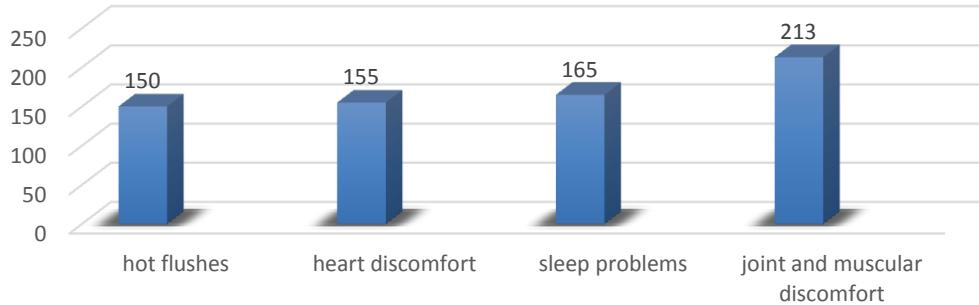
- (a) No, little – 0-2
- (b) Mild –3-4
- (c) Moderate- 5-8
- (d) Severe -9+

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

**The frequency of somato-vegetative symptoms of 250 subjects is presented in the chart 1 and table 1**

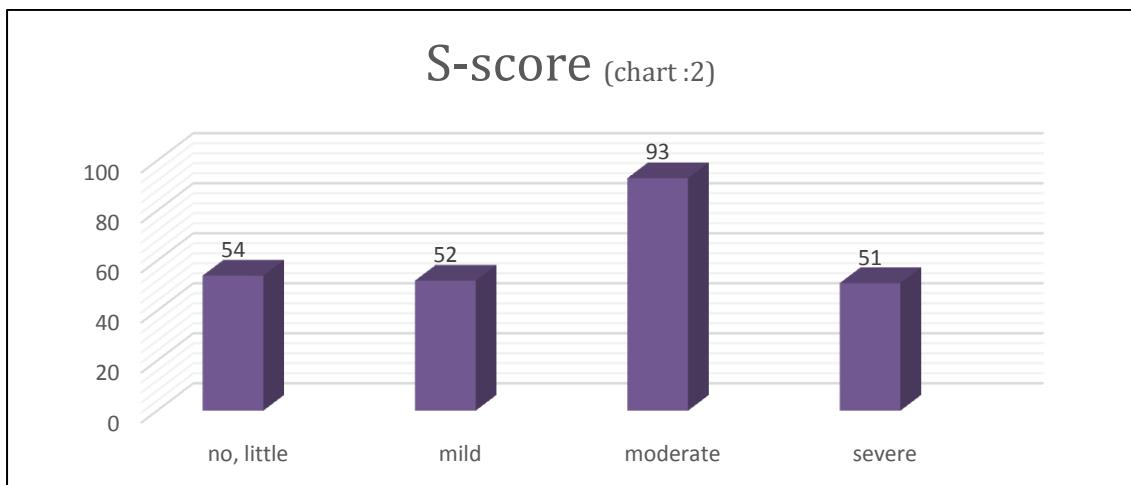
Severity	Hot flushes	Heart discomfort	Sleep problems	Joint & muscular discomfort
Nil	100	95	85	37
Mild	34	87	46	88
Moderate	43	43	60	80
Severe	52	19	39	44
Very severe	21	6	20	1

**FREQUENCY OF SOMATO-VEGETATIVE SYMPTOMS  
(chart 1)**



**The severity of the somato-vegetative symptoms is assessed using S-score is presented in chart 2.**

**RESULTS:** A total of 250 subjects were enrolled in the study. It is observed that Out of them a good majority that is 41.5% falls within the age group of 50-54 years, regarding religion, 77% of them belong to the Hindu community. Concerning the marital and educational status of the study subjects 82% of them are married and leading a family life. Only 62.4% of them have completed their primary education. . A mean of 29.6% of subjects are employed and only 19% of them are living in a financially stable surrounding. And it is observed that the mean age at which these subjects attained menopause is 46.56 years.



## DISCUSSION:

### Regarding the somato-vegetative symptoms:

a) Among the somato-vegetative symptoms it is observed that joint and muscular discomfort is the most frequent symptom 85.2% of subjects had this symptom. Certain factors like Age, weight, female sex, quadriceps weakness, and overload on the knee joint and menopause increases the incidence of osteoarthritis. Those contributing factors should be addressed on a priority basis. Almost all persons by age 40 have some pathologic change in weight bearing joint. OA strikes women more often than men and it increases in prevalence, incidence and severity after menopause<sup>10</sup>. A study showed that there is some relation between Estrogen deficiency and osteoarthritis. Oophorectomy-induced acceleration of cartilage degradation and erosion in rats indicate that Estrogen deficiency accelerates cartilage turnover and increases cartilage surface erosion<sup>11</sup>. **Asthikshaya:** *Asthidhātu* (osteocyte) is necessary to maintain the body<sup>12 13</sup>. *Vāta doshā* and *Asthidhātu* have *āsrayāsrayī* relation i.e. *vāta* resides in *Asthidhātu*. Therefore **Asthikshaya** (osteopenia) occurs when there is *Vrddhi* of *vāta doshā*<sup>14 15</sup>. The associated symptoms of *Asthikshaya*

include pain in bones, tooth decay, brittleness of nails, pain in joints<sup>16</sup> etc .

b) It is observed that almost 66% of subjects had sleep problems. Sleep problems is one of the hallmarks of menopause. One fourth to one half of all women will have some sleep complaint during menopause as compared to approximately 15% of the general population<sup>1718</sup>. The Study of Women's Health across the Nation (SWAN), shows that the prevalence of sleep disturbance increases with increasing age. The prevalence in the premenopausal age group ranges from 16% to 42%; in perimenopausal women prevalence varies from 39% to 47%; in postmenopausal females, the prevalence ranges from 35% to 60%<sup>19</sup>. In Ayurveda classics *Ācāryā suśruta* explained *nidrā* occurs when the *samjñāvaha srotas* is become filled with *śleshma* and is dominated by *tamoguna*, then sleep occurs in an individual. But if *śleshma* has decreased and *anila* has increased and also in person whose mind and body are in troubles by disease then *svābhāvika nidrā* does not occur.<sup>20 21</sup> *Ācāryā*'s have also mentioned *dhātukshaya*, *vātavrddhi* and *pittavrddhi* etc as a cause for *nidrānāśha*<sup>22</sup>. In the context of *nānātmaja vāta vikāra* *Ācāryā*

*vāgbhata* has mentioned *asvapnā* as a *vātavikāra*<sup>23</sup>

It is observed that 62% of subjects had heart discomfort or palpitation. During the perimenopausal period, palpitations may be due to the rising levels of FSH. It has also been proposed that deficiency of progesterone may also be a contributory factor since progesterone is responsible for a relaxing and calming effect<sup>24</sup>. Palpitations associated with menopause are caused by the fluctuating levels of Estrogen. As menopause is not the only cause of palpitations, it is necessary to get any abnormal cardiac rhythm to be evaluated before attributing it to menopause. *Hrddrava* mentioned as a *nānātmaja vāta vikāra*<sup>25</sup> can be considered as palpitation. It is also mentioned in *rasha kshaya*. Reference about *hrddrava* is also seen in *vātika hrdroga Lakshana*<sup>26 27</sup> from these instances it is clear about the role of vata involvement in the occurrence of palpitation.

Hot flushes is observed in 60% of subjects. It can begin prior to the last menstrual period, with nearly 60 percent of women reporting them before any menstrual changes are experienced<sup>28</sup>. hot flushes begin and have their peak occurrence during the peri and early postmenopausal periods, typically when a woman is in her late 40s and early 50s, at times they may begin when menstrual cycles are still regular<sup>29,30</sup>. In most women with advancing age these symptoms subside but approximately 20% of women continue to have hot flushes several years after menopause<sup>31</sup>. *Ācāryā* explained different conditions in *nānātmaja vyādhi* of *pitta*<sup>32</sup> which can correlate with the symptoms of hot flushes. *Ushmādhikyam, atisvedam, osha, dhūmaka* etc. *osha* is the burning

sensation accompanied with sweating<sup>33</sup> and restlessness. *Dhūmaka* is the feeling of movement of hot fumes inside the head, neck, throat and palate<sup>34</sup>. As there is *Lakshana* of the particular *pitta dosha* is mentioned management is also according to the *pitta upakrama*.

Considering the severity it is observed that only 20.4% of subjects had severe symptoms. Most of the subjects had moderate symptoms.

**CONCLUSION:** Among the somato-vegetative symptoms joint and muscular discomfort is the most frequent symptom. Considering the severity most of the subjects had moderately severe somato-vegetative symptoms.

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