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A CROSS-SECTIONAL SURVEY TO ASSESS THE LEVEL OF STRESS AMONG POSTMENOPAUSAL WOMEN IN RURAL VALPARAI, AT COIMBATORE DISTRICT, TAMIL NADU, INDIA.

Obstetrics & Gynecology

Ms. Suganthy C Ph.D. (N) Scholar, Himalayan University, Itanagar, Arunachal Pradesh, India

Dr. Balasubramanian N* Principal cum Professor, Ambika College of Nursing, Mohali, Punjab, India
*Corresponding Author

ABSTRACT

Background: Menopause is an inevitable reproductive phase between 45-55 years of age when various physical and mental changes impair the life of women. It typically occurs in a woman's late 40s to early 50s (Barkha D et al., 2018). Many women find the time around menopause as stressful (The North American Menopause Society, 2016). Menopausal women in rural areas are often ignored (Sheri L and Sandra S, 2008), also, described more physical, psychological, and social stress. Moreover, they do have more medical troubles and lower self-esteem than men. Therefore, the study aims to assess the level of stress among postmenopausal women in rural Valparai, at Coimbatore district, Tamil Nadu.
Objective: The purpose of this study was to quantify the levels of stress experienced by postmenopausal women in rural areas.
Research Approach and Design: A cross-sectional survey approach, described level of stress among postmenopausal women
Setting: The study was conducted in the Valparai area, after obtaining administrative permission from the village administrative officer of the area and formal written consent from the postmenopausal women who met inclusion criteria.
Sample size and sampling technique: simple random sampling which is a probability sampling was used to select the samples. A total of 50 postmenopausal women were the samples for study.
Instrument used: Level of stress was measured by using a structured self-administered schedule developed by the authors. The tool has two sections ie., section A and section B. Section A consists of demographic variables and section B consists of a five-point Likert scale with 20 items with three domains. The three domains are stress factors related to physical, psychological, and sexual factors.
Major findings and reports: Major findings revealed that the majority (38%) of the postmenopausal women were in the age group of 51 – 55 years, 46% were Hindus, 36% had primary education, 48% were daily wages, 42% had their family monthly income of Rs. 7501 – Rs. 10000, 74% of them belong to a nuclear family and 76% of the postmenopausal women were non-vegetarians. From menopause specific variables, the highest percentage (38%) of them attained menopause in the age group of 51 – 55 years, the duration of menopause was higher among 60% of postmenopausal women and 40% had their source of health information from their friends.
Severe level of stress was found highest for the factor related to physical menopausal symptoms, such as hot flushes, urinary changes, and sleep disturbances. There was no significant association between the level of stress and age, religion, education, occupation, monthly family income, type of family, dietary status, age at menopause, duration since menopause, and source of health information respectively.
Conclusion: This small study provides a start to the prospective mapping of stress levels on time of menopause. It also provides information to researchers who want to examine postmenopausal women's stress. By understanding the stress experienced by postmenopausal women, nurses are better able to provide physical, psychological support, and thus more holistic care to this group of women.

KEYWORDS

Postmenopausal women, level of stress, physical stress, psychological stress, sexual stress.

INTRODUCTION

"Menopause means you're moving into your wise womanhood!"
-Susan B. Anthony

Middle age is one of the defining moments throughout one's life as it brings along numerous changes. It roughly starts in the early 40s, when for most people; it is the best period in their life when their achievement is at the highest point. The challenges between adulthood and despair of old age become the change of menopause in women and during which lives take a compulsory change of direction. Menopause is a natural step in the aging process, represents the end of menstruation after the last menstrual periods in the previous 12 months. It occurs gradually in women and indicates the transition from the reproductive to the post-reproductive era of a women's life. It is the condition that every woman faces, in later life and can have many associated effects, which might disrupt the quality of life (Supriya S and Kamini T, 2011).

Menopause is a normal achievement experienced every year by 2 million American women, and many women are worried about the relation between menopause and health. A total of 130 million Indian women is expected to live beyond menopause into old age by 2015. The menopause is developing as an issue inferable from fast globalization, Urbanization, mindfulness, and increase life span in urban middle-aged Indian women, who are advancing as a homogeneous group. Improved financial conditions and education may cause the attitude of rural working women to be more positive towards the menopause. However, most stay careless of the short-and long-term implication of the conditions associated with middle and old age, basically because of lack of awareness, and the inaccessibility of the increasing cost of the medical and social support systems. Evidence-based medicine is accessible to still only a couple of Indian women. Most menopausal women go untreated or utilize unproven alternatives.

In the age of 45-50 years, weakness (60%), lack of energy, cold hands, and feet, hot flushes, cold sweats, increased BMI, irritability, and nervousness (50%) were common complaints. Whereas joint pains, fatigue, and lack of energy followed by headache, back pain, forgetfulness, bone pain, sleep disturbance, and depression were frequent symptoms in the age group of above 50 years. Many women begin their menopause years without knowing anything about what they might expect, or when or how the process might show up and how long it might take. Very often a woman has not been informed in any way about this stage of life; it may often be the case that she has received no information from her physician or her older female family members, or her social group. Subsequently, a woman who happens to experience strong menopause with countless various impacts may become confused and anxious, expecting that something abnormal is going on her. This is a strong need for more information and more education among the women regarding menopause.

World Menopause Day, October 18, saw the Indian menopause society telling how the change, would impact their lives. But menopause was not always such a big issue for earlier generation women. They simply viewed it as a natural stage in life. Increase lifespan owing to modern medical achievement allows women to spend more than one-third time in the menopausal period. Although the mechanism of ovarian aging is not fully understood, menopause associated clinical problems can be controlled and improved.

Many women find the time around menopause stressful. This may be partially due to hormonal changes and resulting in bothersome symptoms such as hot flushes, sleep disturbances, and mood changes. Besides, family and personal issues such as the demands of the family and career changes often converge on women during these years. Chronic stress is not good for anyone's health. It may cause increased

blood pressure and heart rate, headaches, gastric reflux, depression, or anxiety, and over the long term, an increased risk of heart diseases. Stress affects not only health but also the relationships, work performance, and quality of life. Stress is now considered a significant contributor to poor health and an important factor in the development of heart diseases, cancer, and many chronic and acute diseases.

Menopause does not require medical treatment since it is a natural biological process. Exercising, proper diet, not smoking, and reduction of stress are also effective ways to make menopause more bearable and also facilitate in preventing any chronic ailments that can occur in the postmenopausal years. Practices including relaxation, exercises, biofeedback, aerobic exercises, yoga, meditation, and breathing techniques give women tools for dealing with their stressful lives. The present study aims to evaluate the level of stress among post-menopausal women in rural Valparai area in Coimbatore district, Tamil Nadu, India.

METHODOLOGY

The design selected for this present study was a cross-sectional survey approach. The study was conducted in the Valparai area which is a hill station surrounded by 64 estate villages. All postmenopausal women in the selected area were the population for the present study. A total of 50 subjects were recruited randomly after obtaining a sampling frame from the village health nurse of the area. A lottery method was adopted to draw samples. All the postmenopausal women who met the inclusive criteria were the subjects for the study.

CRITERIA FOR INCLUSION IN THE STUDY:

The study was limited to the patients who: were between the age group of 45 – 65 years. could speak and understand Tamil give the concern to participate in the study available during the data collection period were not taking any hormonal replacement therapy.

DESCRIPTION OF THE TOOL:

After an exhaustive review, the author developed the tool, based on the objectives. The tool has two sections ie., Section "A" and Section "B"

Section "A" consists of demographic data of postmenopausal women.

Section "B" consisting of 5 points Likert scale on stress with a total of 3 main menopausal stress factors which comprised of 20 items on stress

To assess the level of stress, the scale was classified into not at all, rarely, sometimes, frequently, always.

Scoring procedure:

Each option is given a score. It varies from zero to four as per the category of the response. The scoring system is presented below:
Not at all - 0
Rarely - 1
Sometimes – 2
Frequently – 3
More frequently – 4

VALIDITY:

Validity refers to the degree to which an instrument measures what it is intended to measure (Patrick Biddix, 2009). Content validity concerns the degree to which an instrument has an appropriate sample of items for the construct being measured and adequately covers the construct domain (Denise. F. Polit, 2008). The content validity of the tool was established from seven experts in the field of Obstetrics and gynecology, Obstetrics and Gynecology Nursing, and psychology. Few suggestions were given by the experts. The tool was modified according to the suggestions and recommendations of experts.

RELIABILITY:

Reliability refers to the degree of consistency or accuracy with which an instrument measures the attribute it has been designed to measure (Katrina B and Roger W, 2009). The reliability of a measuring tool can be assessed in the aspect of internal consistency depending on the nature of the instrument (Paul C, 2013). Correlation of the test was found by using Karl Pearson's correlation coefficient formula and Spearman-Brown formula was used to find out the reliability of the tool, the r-value was 0.92 and it was found that the tool was more reliable.

DATA COLLECTION PROCEDURE:

Formal permission was obtained from the village administrative officer, of the Valparai area. The data was collected by the authors. An average of 3-4 postmenopausal women could be interviewed per day.

The techniques followed during the interview as follows.

- Women were made to feel comfortable and refreshing.
- Written consent was obtained from postmenopausal women.
- Instruction related to the tool was given to facilitate cooperation.
- Questions were asked as per the interview schedule.
- Questioning demographic data was asked first as per the interview schedule followed by the question related to stress.
- Each question was repeated as per the interview schedule during the interview to help the patient to understand and given the correct response.
- Responses were recorded as per the interview schedule during the interview.
- At the end of the interview, the question asked by the patients were clarified

ETHICAL CLEARANCE:

The study was approved by the research development committee members of Himalayan University, Itanagar, Arunachal Pradesh. Formal permission was obtained by the Village Administrative Officer, Valparai in Coimbatore District. Written informed consent was taken from all the participants. After explaining the purpose of the study, self-introduction and establishment of rapport with the participants were done to gain their co-operation and after that, the postmenopausal women were given the questionnaire.

FINDINGS AND INTERPRETATIONS

Descriptive statistics and inferential statistics have computed the results by using SPSS software, version 16. The analyses of the data from the study are presented under the following headings:

Section A: Description of the samples according to their demographic variables and menopause specific variables.

Section B: Description of the level of stress among postmenopausal women.

Section C: Association of the level of stress with the demographic variables.

Section A: Description of the samples according to their demographic variables.

Table 1: Frequency and percentage distribution of postmenopausal women according to their Demographic variables.

N = 50

S. No	Demographic Variables		Frequency (f)	Percentage (%)
1.	Age in years	a) 45-50	11	22
		b) 51-55	19	38
		c) 56-60	15	30
		d) 61- 65	5	10
2.	Religion	a) Christian	16	32
		b) Hindu	23	46
		c) Muslim	11	22
3.	Education	a) No formal education	11	22
		b) Primary	18	36
		c) Secondary	13	26
		d) Graduation	8	16
4.	Occupation	a) Homemaker	11	22
		b) Daily wages	24	48
		c) Self-employed	6	12
		d) Professional	9	18
5.	Family monthly income	a) 1001 - 5000	9	18
		b) 5001 - 7500	12	24
		c) 7501 – 10000	21	42
		d) Above 10000	8	16
6.	Type of family	a) Nuclear	37	74
		b) Joint	13	36
7.	Dietary Status	a) Vegetarian	12	24
		b) Nonvegetarian	38	76

The data presented in Table 1 showed the highest percentage (38%) of the postmenopausal women were in the age group of 51 – 55 years, 46% were Hindus, 36% had primary education, 48% were daily wages, 42% had their family monthly income of Rs. 7501 – Rs. 10000, 74% of them belong to a nuclear family and 76% of the postmenopausal women were non-vegetarians.

Table 2: Frequency and percentage distribution of postmenopausal women according to their menopause specific variables.

N = 50

S. No	Menopause Specific Variables		Frequency (f)	Percentage (%)
1.	Age at Menopause (in years)	a) 40 to 45	8	16
		b) 46 to 50	23	46
		c) 51 to 55	19	38
2.	Duration since menopause (in years)	a) 0 to 2	7	14
		b) 3 to 5	30	60
		c) 6 to 10	13	26
3.	Source of Health Information	a) Friends	20	40
		b) Family Members	16	32
		c) Media	9	18
		d) Health Personnel	5	10

The data presented in Table 2 showed the highest percentage (38%) of the postmenopausal women attained menopause in the age group of 51 – 55 years, the duration of menopause was higher among 60% of postmenopausal women and 40% had their source of health information from their friends.

Section B: Description of the level of stress among postmenopausal women.

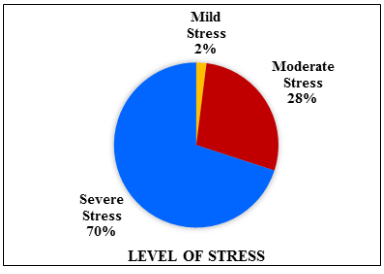

Figure 1 Pie diagram representing the percentage distribution of the level of stress according to their scores

The data presented in figure 1 shows that70% of them had severe stress, 28% had moderate stress and only 2% of them had mild stress.

Table. 3: Area wise distribution of Mean, SD, and Mean Percentage of the level of stress score relating to Physical, Psychological and Sexual factors.

N = 50

Area	Max Score	Mean	SD	Mean %
Physical factor	44	35.62	2.84	80.95
Psychological factor	24	17.78	2.63	74.08
Sexual factor	12	8.96	1.48	74.66
Overall	80	62.36	4.33	77.95

Table. 3 shows the area wise distribution of the mean, SD, and mean percentage of the level of stress. In the area "Physical factor" the mean percentage was 80.95 (35.62±2.84), in the area "Psychological factor" the mean percentage was 74.08 (17.78±2.63) and in "Sexual factor" the mean percentage was 74.66 (8.96±1.48). The overall mean percentage was 77.95%.

Section C: Association of the level of stress with the demographic variables.

Table. 4: Chi-square test showing an association between the level of stress with the demographic variables among postmenopausal women.

N = 50

S. No	Demographic data	χ^2 value	p-value
1	Age in years	8.56	0.03575
2	Religion	4.353	0.11341
3	Educational Status	4.24	0.23669
4	Occupation	15.12	.00172
5	The family income per month	8.4	.03843
6	Type of family	11.52	.00069
7	Dietary Status	13.52	.00024
8	Age at Menopause (in years)	7.248	.02668
9	Duration since menopause (in years)	17.073	.0002
10	Source of Health Information	10.96	.01194

The data presented in Table 4 shows the association between stress scores and selected demographic variables. Two into two contingency table was used to calculate the association. The stress scores of post-menopausal women are independent of all demographic variables that are age, religion, educational status. Occupation, family income per month. Type of family, dietary status, age at menopause, duration since menopause, source of health information - it is considered as a not statistically significant for p>0.005.

DISCUSSION

Findings of Jayabharathi B (2016) are parallel to the present findings that the majority (70.4%) of postmenopausal women had a very high level of stress. The lower mean scores were found in physical, psychological, social, and environmental domains among postmenopausal women. Shadia F and Nabila S, (2018) findings are akin to the present findings that more than half of them had severe anxiety. Findings of the study conducted by Barkha D et al., (2018) show that menopause-related symptoms harmed the quality of life of postmenopausal women. Priya B, et al (2019) had conducted a study with similar findings which shows the prevalence of depression and anxiety are found to be high among middle-aged women. Findings of Bener A et al., (2016) show that a large number of factors were associated with experiencing menopausal and psycho-social problems which had negative effects on the quality of life among Arabian women. Nancy F et al., (2009) had conducted a study with the same findings that women who experience the menopausal transition are stressed because of changing biology, depressed mood, and poor health. The findings of these studies say that provision of health services for postmenopausal women is essential for early identification of the common menopausal symptoms so that they can help them make informed decisions.

CONCLUSION

The findings revealed that the majority (70%) of them had severe stress. This indicates that postmenopausal women should be sensitized for availing the health facilities for their health problems through information education and communication (IEC). Awareness regarding menopause and problems among women related to it need to be improved. The health workers can help women to understand the menopausal symptoms to reduce their level of stress.

IMPLICATIONS:

Nursing service:

The findings of this study will help the nursing professionals working with postmenopausal women to plan nursing care actions based on various levels of stress.

Counseling program has to be done for the postmenopausal women to overcome stress.

Nursing education:

The findings can be utilized in Ob. gyne nursing focusing on stress as a vital aspect of nursing intervention.

Nursing educators should, educate the nurses regarding the assessment of stress and motivate them in their care.

Nursing research:

The findings of the study can be utilized for conducting further research on assessing stress among postmenopausal women.
Educational programs can be done and evaluated.

RECOMMENDATIONS:

A Similar study can be undertaken for a large sample to generalize the findings.

A comparative study can be undertaken for a large sample to generalize the findings.

A comparative study can be carried out to assess the level of stress among rural and urban subjects.

A similar study can be undertaken in different stress factors separately and comparison can be done on coping mechanisms adopted by them.

REFERENCES

1. World Health Organization. Research on the menopause.1981. World Health Organ Tech Rep Ser. 670: 1 – 120.
2. Robert LR. (2006) Menopause Clinical Gynecology. Philadelphia: Elsevier, Churchill Livingstone.
3. Chen Y, Lin SQ, Gao HL (2008) Impact of menopause on quality of life in community-based women in china. 15(1): 144-9
4. Sengupta BS, Chattopadhyay SK, Varma TR (2007) Menopause, Gynecology for Postgraduates and Practitioners. 2nd edition. New Delhi: Elsevier. P. 292-300.
5. Cohen S, Kamarck T (1993) A global measure of perceived stress. Journal of health Social behavior, 24: 386-96.
6. Bansal P, Chaudhary A, Soni K, Sharma S (2015). Depression and anxiety among middle-aged women: A community-based study. Journal of Family Medicine Primary care 4: 576 – 581.
7. Charmchi N, Khalabari J (2011). A review of depression and anxiety during women's menopause. International Journal of Science and Advanced Technology 1:6
8. Freeman EW (2010). Associations of depression with the transition of menopause. Menopause 17: 823 – 827.
9. Bahrim N, Arafat M, Bahri N (2013). Investigating the relationship between the severity of menopausal symptoms with depression, anxiety other menopausal symptoms. Iran Journal of Obstetrics Gynecology and infertility 16: 14 – 20.
10. Zang H, He L, Chen Y, Ge J (2016). The association of depression status with menopause symptoms among rural midlife women in China. African Journal of Health Sciences 16: 97 -104.