



# International Journal of Midwifery and Nursing Practice

E-ISSN: 2663-0435  
P-ISSN: 2663-0427  
[www.nursingpractice.net](http://www.nursingpractice.net)  
IJMNP 2021; 4(2): 137-142  
Received: 03-05-2021  
Accepted: 05-07-2021

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## A study to assess menopausal symptoms and coping strategies among middle age women in rural areas of Chamarajanagar district

**Madhu S, Sathish DK and Vinay Kumar G**

### Abstract

**Objective:** To assess menopausal symptoms among women of age 40-60 years and to correlate identified menopausal problems with coping strategies found in middle age women in rural areas of Chamarajanagar district.

**Methodology:** Questionnaire on demographic Performa. Modified Menopause Rating Scale [MRS] questionnaire, 150 menopausal women aged 40-60 years were interviewed to document 11 symptoms (divided into somatic, psychological and urogenital domain) commonly associated with menopause. The women were asked whether or not they had experienced the 11 menopausal symptoms shown in the MRS in the previous one month (30 days) and grading was made to "present" or "absent" of symptoms.

**Results:** Present study reveals among 150 women majority of the Women in the age group between 40 to 45 years (44%). Majority of the women are in menopausal status (44.6%), majority of women are married (88%) and belongs to Hindu religion (92.7%). More number of women are housewives (74%) and their families had an income of rupees below 5001-10000/-(58%) with their education status is illiterate (49%) and BMI is 18.6-25(43.3%). 60% of the women having severe symptoms, 24% shows moderate symptoms and 16% of women having mild symptoms. Among 150 middle age women 98 women that is 65.3% adopt poor coping strategies and 52 women that is 34.7% women adopt good coping strategies. Among 150 women 129 (86%) having Hot flashes, sweating (episodes of sweating). 122(81.3%) having Heart discomfort (unusual awareness of heart beat, heart skipping, heart racing, tightness) Sleep problems. 134(89.3%) having (difficulty in falling asleep, difficulty in sleeping through the night, waking up early) 140 (93.3%) having Joint and muscular discomfort (pain in the joints, rheumatoid complaints). 111(74%) having Depressive mood (feeling down, sad, on the verge of tears, lack of drive, mood swings ). 128(85.3%) shows Irritability (feeling nervous, inner tension, feeling aggressive). 114 (76%) having Anxiety (inner restlessness, feeling panicky. 110(73.3%) having Physical and mental exhaustion (general decrease in performance, impaired memory, decrease in concentration, forgetfulness. 86 (57.3%) Sexual problems (change in sexual desire, in sexual activity and satisfaction. 101(67.3%) Bladder problems (difficulty in urinating, increased need to urinate, bladder incontinence. 99(66%) having Dryness of vagina (sensation of dryness or burning in the vagina, difficulty with sexual intercourse among 150 women 68(45.3) adopt Self-calming skills (Exercise, Yoga, Breathing relaxation exercise) as coping strategy. 74 (49.3%) women adopt dietary practice and weight controlling as coping strategy. Creative activities 81(54%) women practice, Creative activities and maintaining social relationship as coping strategy. Demographic variables such as Education and family income shows significance at the level of 0.005 to menopausal score and age, menopause status, marital status religion occupation and BMI are not significance at level of 0.005. that Demographic variables such as age and education shows significance at the level of 0.005 to coping score and menopause status, marital status religion occupation family income and BMI are not significance at level of 0.005.

**Conclusion:** study shows that majority of women in middle age suffer from severe menopausal symptoms and most of the women not aware of skill to adopt coping strategies.

**Keywords:** Menopausal symptoms, menopause rating scale, coping strategies, middle age women, coping skills

### Introduction

There are five reproductive stages in a woman's reproductive life cycle. These include premenarche (before the first menstrual period) stage, the reproductive, premenopausal stage, the early menopausal transition stage, the late menopausal transition stage, and finally, menopause. There is no single test to determine reproductive potential, but the menstrual cycle pattern and hormone level can give rough estimates [1].

Menopause literally means the end of monthly cycles or the end of monthly periods or menstruation.

The word menopause derived from a Greek word pause which means cessation and the root men means the month<sup>[2]</sup>. Word menopause simply refers to the permanent end of menstruation. Menopause has been considered a major transition point in women's reproductive and emotional life. Menopause is not a disease but a natural transition in a women's life that results from a decrease in the ovarian production of sex hormones such as Estrogen, Progesterone and Testosterone. By loss of reproductive potential and transition into later life she may become a victim of both physically and psychologically problems<sup>[3]</sup>.

World Health Organisation (WHO) has defined post-menopausal women as those women who have stopped menstrual bleeding one year ago or stopped having periods as a result of medical or surgical intervention (Hysterectomy/Oophorectomy) or both. It usually begins between the ages of 45 and 55, but can develop before or after this age range<sup>[4]</sup>.

In the Western world, the most typical age range for menopause (last period from natural causes) is between the ages of 40 and 61 and the average age for the last period is 51 years. The elderly population is increasing every year, and it is projected that it would increase to about 12% of the total population by the year 2025. The average age of menopause is around 48 years, but it strikes Indian women as young as 30-35 years. Due to the increase in the life expectancy women will have to face longer periods of menopause<sup>[4]</sup>.

With increasing life expectancy, women spend 1/3rd of life in this phase. It is estimated that by the end of 2015, 130 million elderly women in India, necessitating substantial amount of care. Menopausal symptoms, though well tolerated by some women, may be particularly troublesome in others. Severe symptoms compromise overall quality of life for those experiencing them. There is under-reporting of symptoms among Indian women due to socio cultural factors. According to literature, at least 60% of ladies suffer from mild symptoms and 20% suffer severe symptoms and 20% from no symptom<sup>[5]</sup>.

In the months or years leading up to menopause (Perimenopause), woman might experience these signs and symptoms like Irregular periods, Vaginal dryness, Hot flashes, Chills, Night sweats, Sleep problems, Mood changes. Weight gain and slowed metabolism, Thinning hair and dry skin, Loss of breast fullness<sup>[5]</sup>.

During menopausal transition, there is a lot of fluctuation in the hormone levels, and thus women may experience many symptoms and conditions. However, the influence of this fluctuation varies from one woman to another. Some of the important and common symptoms women can experience during menopausal transition are changes in periods, hot flushes and night sweats, problems with vagina and bladder, changes in sexual desire, sleep problems, mood changes/swings, changes in the body, etc. There are also some serious medical concerns related to menopause as, first the loss of bone tissue that cause osteoporosis and second, heart disease risk may grow due to age-related increases in weight, blood pressure, and cholesterol levels. Some women have severe symptoms that profoundly affect their personal and social functioning, and quality of life (QOL)<sup>[6]</sup>.

### Need for the study

Each woman who deals with menopause may find that her typical stress-coping strategies may need to be adjusted

because of the high level stress that may be occurring as a result of physical changes during menopause. It does not automatically require any kind of medical treatment at all except from mental preparation. However in those case where the physical, mental, emotional effect of menopause are strong enough that they significantly disrupt the everyday life of the women<sup>[7]</sup>.

India has a large population, which has already crossed the 1 billion mark with 71 million people over 60 years of age and the number of menopausal women about 43 million. Projected figures in 2026 have estimated the population in India will be 1.4 billion, people over 60 years 173 million, and the menopausal population 103 million. Average age of menopause is 47.5 years in Indian women with an average life expectancy of 71 years. Menopause should be welcomed with a positive attitude for that a health care provider prepare her same like the education given prior to the menarche. Most of the women do not get such information so they are unaware of the problems which may happen during this period. The scientific evidence of each singular intervention is difficult to extract because there are so many confounding parameters. Moreover improvement in nutrition and diet has greatest impact on menopausal women .A total health care approach is still beneficial including exercise, a low fat and normal calcimic diet, healthy practices are mandatory to overcome the problems like hot flush, vaginal dryness, headache. Osteoporosis, weight gain and the psychological disturbance also<sup>[8]</sup>.

A study conducted to focus on menopause symptomatology of Indian women and how it differed from women in the United States was done on 100 Indian subjects and 117 American subjects. The results showed that the symptom profile of Indian women appears quite distinct from American women. While Indian women register higher number of health complaints during menopausal transition phase only, mean numbers of complaints were consistently higher among American women irrespective of age categories<sup>[9]</sup>.

A hospital based cross sectional study was conducted to evaluate the menopausal symptom and quality of life in middle age women. A survey using MENQOL questionnaire was conducted among 270 women aged 45-65 years and found the prevalence of classical menopausal symptoms hot flashes, night sweats and vaginal dryness were 36.8%, 20.8% and 55.3% respectively. Within the four domains of menopausal symptoms more suffering was reported in premenopausal and postmenopausal subjects and this had a significant decrease in quality of life<sup>[10]</sup>.

Age at menopause affects health status of the women. Women who have premature menopause (less than 40 years of age) are at an increased risk of osteoporosis and cardiovascular diseases. Whereas delayed menopause increases the risk of breast, endometrial and ovarian cancers. Many women experience menopausal symptoms during menopausal transition and postmenopausal years. The symptoms of menopause as a result of oestrogen deficiency due to primary ovarian failure are reflected not only in the female genital tract but also in the skeletal, cardiovascular and psychological system. Thus, menopause is characterized by major physical, psychological and social changes and may adversely affect quality of life<sup>[11]</sup>.

Menopause is associated with many symptoms and coping with menopause may be difficult, but there are some effective ways to alleviate the symptoms. From various

studies it is clear that different women experience menopause in different ways coping strategies need to be tailored to individual. It is therefore, currently considered as an important public health problem. Hence, detection and management of menopause related problems are essential for designing appropriate health care services to ensure a healthy and enjoyable life in this age group. Therefore the present study attempts to determine the menopausal symptoms and coping strategies adapted among the middle age women in our region.

### Objectives

1. To identify the menopausal symptoms of middle age (40-60 Years) women in rural areas of Chamarajanagar District
2. To assess the coping strategies adopted by the middle age (40-60 Years) women in rural areas of Chamarajanagar District
3. To find the relationship between menopausal symptoms and coping strategies
4. To find the association between the menopausal symptoms and selected demographic variables
5. To find the association between the coping strategies and selected demographic variables

### Hypothesis

The following hypothesis will be tested at 0.05 level of significance

**H<sub>1</sub>:** There will be significant relationship between menopausal symptoms and coping strategies

**H<sub>2</sub>:** There will be significant association between menopausal symptoms and selected demographic variables

**H<sub>3</sub>:** There will be significant association between the coping strategies and selected demographic variables.

### Research methodology

#### Materials and Methods used

**Source of data:** Data was collected from the middle age women residing in selected rural areas of Chamarajanagar District

**Demographic variables:** Age, Menopausal status, marital status, Religion, Occupation, Education, Family Income & BMI.

**Research Design:** Non experimental Descriptive survey was adopted.

**Settings:** The study conducted in selected rural areas of Chamarajanagar District.

**Population:** The population selected for the study is middle age women (40-60 Years) in selected rural areas of Chamarajanagar District.

#### Methods of Data Collection

**Sampling procedure:** Non Probability Convenient sampling method.

**Sample size:** A sample of 150 middle age women (40-60 Years).

**Inclusion criteria:** It includes;

1. Women between 40-60 years of age

2. Willing to participate in the study
3. Available at the time of data collection procedure

**Exclusion criteria:** The women who are

1. Secondary menopause
2. Having gynaecological malignancy undergoing treatment
3. Serious illness

#### Instruments used

1. Socio demographic proforma
2. Menopausal rating scale
3. Coping scale

#### Results

**Table 1:** Frequency and percentage distribution of middle age women according to their demographic variables, n=150

S. No	Variables	Frequency	Percentage
1.	<b>Age in years</b>		
	40-45 years	66	44.0
	46-50 years	43	28.7
	51-55 years	21	14.0
	56-60 years	20	13.3
2.	<b>Menopause status</b>		
	Pre-menopausal	37	24.7
	Perimenopause	46	30.7
	Post-menopausal	67	44.6
3.	<b>Marital Status</b>		
	Married	132	88.0
	Unmarried	3	2.0
	Widows/Divorce	15	10.0
4.	<b>Religion</b>		
	Hindu	139	92.7
	Muslim	2	1.3
	Christian	9	6.0
5.	<b>Occupation</b>		
	Professional	9	6.0
	Skilled/Unskilled worker	25	16.7
	Housewife	111	74.0
	Others	5	3.3
6.	<b>Education</b>		
	Illiterate	49	32.7
	Primary Education	46	30.7
	Middle School Education	26	17.3
	Secondary education	29	19.3
7.	<b>Family Income</b>		
	Below Rs. 5000	44	29.3
	Rs. 5001-10000	58	38.7
	Rs. 10001-15000	40	26.7
	Rs. 15001-20000	8	5.3
8.	<b>BMI</b>		
	Less than 18.5	37	24.7
	18.5-25	65	43.3
	25-30	41	27.3
	Above 30	7	4.7

The data presented in the table 1 shows that majority of the Women in the age group between 40 to 45 years (44%), Majority of the women are in menopausal status (44.6%), majority of women are married (88%) and belongs to Hindu religion (92.7%). More number of women are housewives (74%) and their families had an income of rupees below 5001-10000/-(58%) with their education status is illiterate (49%) and BMI is 18.6-25(43.3%).

**Table 2:** Frequency and percentage distribution of menopausal symptoms in middle age women according to severity of symptoms n=150

Sl. No	Menopausal symptoms	Frequency	Percentage (%)
a.	Mild Symptoms	24	16.0
b.	Moderate Symptoms	36	24.0
c.	Severe symptoms	90	60.0
	Total	150	100

Table-II shows that 60% of the women having severe symptoms, 24% shows moderate symptoms and 16% of

women having mild symptoms.

**Table 3:** Frequency and percentage of coping strategies adopted by middle age women n=150

Sl. No	Coping Level	Frequency	Percentage (%)
a.	Poor Coping	98	65.3
b.	Good Coping	52	34.7
	Total	150	100

Table-III shows among 150 middle age women that 98 women that is 65.3% adopt poor coping strategies and 52 women that is 34.7% women adopt good coping strategies.

**Table 4:** Mean, Median and SD of menopausal symptoms and coping scores among middle age women n=150

Sl. No	Variable	No. of Items	Max Score	Mean	Mean %	Median	SD
<b>Menopausal Symptoms</b>							
a.	Somatic	4	4	3.5	87.5	4	0.775
b.	Psychological	4	4	3.09	77.25	4	1.170
c.	Urogenital	3	3	1.91	63.66	2	0.944
d.	Overall Menopause scores	11	11	8.49	77.18	9	2.362
e.	Overall Coping Scores	4	4	2	50.0	2	1.105

**Table 5:** Frequency and percentage distribution of Menopausal symptoms in middle age women n=150

Sl. No	Symptoms	Frequency	Percentage%
<b>Somatic</b>			
1.	Hot flashes, sweating (episodes of sweating)	129	86.0
2.	Heart discomfort (unusual awareness of heart beat, heart skipping, heart racing, tightness)	122	81.3
3.	Sleep problems (difficulty in falling asleep, difficulty in sleeping through the night, waking up early)	134	89.3
4.	Joint and muscular discomfort (pain in the joints, rheumatoid complaints)	140	93.3
<b>Psychological</b>			
5.	Depressive mood (feeling down, sad, on the verge of tears, lack of drive, mood swings )	111	74.0
6.	Irritability (feeling nervous, inner tension, feeling aggressive)	128	85.3
7.	Anxiety (inner restlessness, feeling panicky)	114	76.0
8.	Physical and mental exhaustion (general decrease in performance, impaired memory, decrease in concentration, forgetfulness)	110	73.3
<b>Urogenital</b>			
9.	Sexual problems (change in sexual desire, in sexual activity and satisfaction)	86	57.3
10.	Bladder problems (difficulty in urinating, increased need to urinate, bladder incontinence)	101	67.3
11.	Dryness of vagina (sensation of dryness or burning in the vagina, difficulty with sexual intercourse)	99	66.0

Table V shows that Among 150 women 129 (86%) having Hot flashes, sweating (episodes of sweating).122(81.3%) having Heart discomfort (unusual awareness of heart beat, heart skipping, heart racing, tightness) Sleep problems. 134(89.3%) having (difficulty in falling asleep, difficulty in sleeping through the night, waking up early)140 (93.3%).having Joint and muscular discomfort (pain in the joints, rheumatoid complaints).111(74%)having Depressive mood (feeling down, sad, on the verge of tears, lack of drive, mood swings ).128(85.3%) shows Irritability (feeling

nervous, inner tension, feeling aggressive). 114 (76%) having Anxiety (inner restlessness, feeling panicky. 110(73.3%) having Physical and mental exhaustion (general decrease in performance, impaired memory, decrease in concentration, forgetfulness. 86 (57.3%) Sexual problems (change in sexual desire, in sexual activity and satisfaction. 101(67.3%) Bladder problems (difficulty in urinating, increased need to urinate, bladder incontinence. 99(66%) having Dryness of vagina (sensation of dryness or burning in the vagina, difficulty with sexual intercourse.

**Table 6:** Frequency and percentage distribution of Coping Scores among middle age women n=150

Sl. No	Coping strategies	Frequency	Percentage
1	Self-calming skills (Exercise, Yoga, Breathing relaxation exercise )	68	45.3
2	Awareness about diet and weight controlled	74	49.3
3	Maintain sense of achievement ( Creative activities, maintain social relationship)	81	54.0
4	Medical treatment	77	51.3

Table IV shows that 68(45.3%) women adopt Self-calming skills (Exercise, Yoga, Breathing relaxation exercise) as coping strategy. 74 (49.3%) women adopt dietary practice and weight controlling as coping strategy. 81 (54%) women

practice, Creative activities and maintaining social relationship as coping strategy and another 77(51.3%) adapt for medical treatment as coping strategy.



**Table 7:** Correlation between menopausal and coping scores among middle age women n=150

Si. No	Variable	Mean	SD	r Value	Remarks
a.	Menopausal Symptoms	8.49	2.362	0.129	Very Low negative Correlation
b.	Coping	2	1.105		

Table VII Menopausal symptoms and coping score shows very low negative correlation

**Table 8:** Association of menopausal scores among middle age women with demographic variables. n=150

Si. No	Variables	Below Median	Median and above	Chi square	Df	P value (0.05)	Inference
1.	<b>Age in years</b>						
	40-45 years	29	37	6.972	3	0.073	NS
	46-50 years	20	23				
	51-55 years	3	18				
	56-60 years	8	12				
2.	<b>Menopause status</b>						
	Pre-menopausal	13	24	1.879	2	0.598	NS
	Premenopausal	22	24				
	Post-menopausal	25	42				
3.	<b>Marital status</b>						
	Married	53	79	2.279a	2	0.320	NS
	Unmarried	0	3				
	Widows/Divorce	7	8				
4.	<b>Religion</b>						
	Hindu	55	84	2.252	2	0.324	NS
	Muslim	0	2				
	Christian	5	4				
5.	<b>Occupation</b>						
	Professional	4	5	0.981	3	0.806	NS
	Skilled/Unskilled worker	10	15				
	Housewife	43	68				
	Others	3	2				
6.	<b>Education</b>						
	Illiterate	11	38	25.453	3	0.000	S
	Primary Education	17	29				
	Middle School Education	9	17				
	Secondary education	23	6				
7.	<b>Family Income</b>						
	Below Rs. 5000	12	32	13.008	3	0.005	S
	Rs. 5001-10000	19	39				
	Rs. 10001-15000	25	15				
	Rs. 15001-20000	4	4				
8.	<b>BMI</b>						
	Less than 18.5	11	26	3.223	4	0.521	NS
	18.5-25	29	36				
	25-30	18	23				
	Above 30	2	5				

Table VIII shows that Demographic variables such as Education and family income shows significance at the level of 0.005 to menopausal score and age, menopause status,

marital status religion occupation and BMI are not significance at level of 0.005

**Table 9:** Association of Coping scores among middle age women with demographic variables, n=150

SI. No	Variables	Below Median	Median and above	Chi square	Df	P value (0.05)	Inference
1.	<b>Age in years</b>						
	40-45 years	16	50	11.481	3	0.009	S
	46-50 years	8	35				
	51-55 years	12	9				
	56-60 years	7	13				
2.	<b>Menopause status</b>						
	Pre-menopausal	10	27	0.594	2	0.898	NS
	Perimenopausal	14	32				
	Post-menopausal	19	48				
3.	<b>Marital status</b>						
	Married	38	94	1.366	2	0.505	NS
	Unmarried	0	3				
	Widows/Divorce	5	10				
4.	<b>Religion</b>						

	Hindu	41	98	1.848	2	0.397	NS
	Muslim	1	1				
	Christian	1	8				
<b>5.</b>	<b>Occupation</b>						
	Professional	3	6	0.445	3	0.931	NS
	Skilled/Unskilled worker	7	18				
	Housewife	31	80				
	Others	2	3				
<b>6.</b>	<b>Education</b>						
	Illiterate	26	23	21.389	3	0.000	S
	Primary Education	8	38				
	Middle School Education	5	21				
	Secondary education	4	25				
<b>7.</b>	<b>Family Income</b>						
	Below Rs. 5000	10	34	1.321	3	0.724	NS
	Rs. 5001-10000	19	39				
	Rs. 10001-15000	12	28				
	Rs. 15001-20000	2	6				
<b>8.</b>	<b>BMI</b>						
	Less than 18.5	14	23	3.176	4	0.529	NS
	18.5-25	18	47				
	25-30	9	32				
	Above 30	2	5				

Table IX shows that Demographic variables such as age and education shows significance at the level of 0.005 to coping score and menopause status, marital status religion occupation family income and BMI are not significance at level of 0.005.

### Conclusion

By the study it shows that commonest menopausal symptoms were joint and muscular discomfort. Most women suffer from severe menopausal symptoms but adopt poor coping strategies. Educated women and women in age group of 40-45 years adopt good coping strategies. Most of the menopausal women suffer severe symptoms that profoundly affect their personal and social functioning, and quality of life. With increasing life expectancy, women spend 1/3rd of life in this phase so it cannot be ignored and may require counselling and care at primary level to provide healthy life for all.

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