



# A Pilot Study to Assess the Effectiveness of Integrated Community Based Nursing Interventions on Symptom Experience and Quality of Life Among Post Menopausal Women Residing in Selected Rural Areas of Bagalkot District.

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## KEYWORDS

Menopause women, quality of life, symptom experience.

## ABSTRACT:

**Introduction:** Menopause is when woman period stops permanently. Menopause is a normal part of a woman's life. It is sometimes called "the change of life." Menopause does not happen all at once. As woman body transitions to menopause over several years, may have menopause symptoms and irregular periods. Changes in woman body in the years around menopause may raise her risk for certain health problems. Low levels of estrogen and other changes related to aging (like gaining weight) can raise risk of heart disease, stroke, and osteoporosis.

**Objectives:** To assess the symptom experience and quality of life among postmenopausal women and to evaluate the effectiveness of Integrated Community Based Nursing Intervention by comparing post intervention scores of symptom experience and quality of life between the experimental and control group of postmenopausal women.

**Methods:** An evaluative true experimental approach with follow up of outcomes was adopted for the present study, using pre-test post-test control group design. Sample size comprises of 40 menopausal women i.e. 20 in experimental group and 20 in control group, residing in selected areas of Kadapati, Jamakandi taluk Bagalkot district. A non probability Purposive sampling techniques was used to select the samples for pilot study. The data was collected by using following tools. A structured questionnaire for assessing socio-demographic variables. Menopausal rating scale to assess the symptom experience of post menopausal women. WHO quality of life bref scale. The data was entered in MS excel sheet and transferred to SPSS 25 for analysis.

**Results:** Among 40 samples, majority of 12(60%) of the respondents belonged to the age group of 51-55 years and remaining 8(40%) of participants were belonged to age group of 45-50 years in experimental and control group. Majority 9(45%) were had primary education in experimental and control group. Majority 16(80%) were belonged to Hindu religion in experimental group 17(85%) were belonged to Hindu religion in control group. Majority 12(60%) were had one pregnancy in experimental group and 10(50%) were had one pregnancy in control group. The menopause symptom experience scores mean scores at the time pretest was 23.85, median was 23.50, mode was 12 with standard deviation  $\pm 8.33$  and scores ranged between 12-38. Among the participants of Control group, the menopause symptom score mean was 23.35, median was 23.50; mode was 16 with standard deviation  $\pm 6.33$  and scores ranged between 14-36. In **pretest**, majority 9 (45%) were had moderate level, 7(35%) were had severe level and remaining 4(20%) were had very severe level symptoms experience. After implementation of Integrated community based nursing intervention in **post test I** majority 13 (65%) were had moderate level and 7(35%) were had mild level symptoms experience. Significance of difference in symptom experience scores was computed by **paired t** test value. The obtained value of 't' = 11.55 (pretest to post test 1) with p value 0.001 is found significant; Among the Experimental group, the quality of life scores mean scores at the time pretest was



73.35, median was 77, mode was 79 with standard deviation  $\pm 22.55$  and scores ranged between 29-110. Among the participants of Control group, the quality of life score mean was 70.75, median was 72.50, mode was 69 with standard deviation  $\pm 19.19$  and scores ranged between 34-106. In **pretest**, majority 12 (60%) were had moderate level, 5(25%) were had poor level and remaining 3(15%) were had good level quality of life. In **post test 1**, majority 10(50%) were had moderate level, 6(30%) were had good level and remaining 4(20%) were had poor level quality of life. In **pretest and all posttests**, majority 12(60%) were had moderate level, 6(30%) were had poor level and remaining 2(10%) were had good level quality of life.

**Conclusions:** After obtaining the result for the present study the researcher noticed that there was significant difference was found between symptom experience and quality of life among menopausal women after implementation of integrated community based nursing intervention. The Study Concluded that life style modification is necessary for menopausal women to lead a healthy life.

## 1. Introduction

Women are the vital setup and heart of the family. When women have been tired, whole family will be disturbed. Women are facing lot of problems throughout their lifespan one of the most common problem is menopause. Menopause is the permanent cessation of menstruation resulting in the loss of ovarian follicle development. The age at menopause appears to be genetically determined and is unaffected by race, socioeconomic status, age at menarche, or number of prior ovulations.<sup>1</sup>

Due to the rather long duration of the pre menopause, the impact of menopause on women's quality of life is noteworthy. Many symptoms, like hot flushes, night sweats, vaginal dryness, sleep disturbance and poor perceived health are associated with this process. Furthermore, menopause is associated with a number of physical, psychological and social changes<sup>2</sup>.

As per the proceedings of Indian menopause society there are about 65 million Menopausal women. Indians women over the age of 45 years and estimated that in the year 2026, the population of India will be 1.4 billion, people over 60 years will be 173 million and the menopausal population will be 103 million<sup>3</sup>.

The average age of Indian menopausal women is 47.5 years.<sup>4</sup> The studies conducted among the different population groups of India revealed that lower age at menopausal as compare to women of western countries<sup>5</sup>

## Objectives

- 1) To assess the symptom experience and quality of life among postmenopausal women.
- 2) To develop and administer the Integrated community based nursing intervention for postmenopausal women.
- 3) To evaluate the effectiveness of Integrated Community Based Nursing Intervention by comparing post intervention scores of symptom experience and quality of life between the experimental and control group of postmenopausal women.
- 4) To correlate among the symptom experience and quality of life among postmenopausal women of experimental group and control group.
- 5) To find out the association between symptom experience and quality of life with selected socio demographic variables of postmenopausal women of experimental group and control group.

## Methods

An evaluative, quantitative, true experimental approach with longitudinal measurement of outcomes was used and research design adopted for the present study was Pre-test post-test control group design.

**Study participants:** The study participants were the menopausal women who are residing in selected rural areas of Bagalkot.

**Setting of the study:** The present study was conducted at kadapatti rural area of Jamakandi Taluk Bagalkot District.



**Sampling technique:** The sample was selected by using non probability purposive sampling technique was used to select the samples at rural area of kadapati, Jamakandi Taluk Bagalkot.

#### Data collection instrument:

Data from postmenopausal women will be collected by using self report methods.

1. **Structured questionnaires-** for assessment of socio-demographic variables and clinical characteristics

2. **Meno pasual rating scale** – It consists of 11 items to assess the symptom experience of post menopausal women. Score range between 0-4.

**Scaling for each Item:** 0- none, 1-mild, 2- moderate, 3- severe, 4- very severe

3. **WHO quality of life bref scale:** It consists of 26 items distributed in 4 domains (Physical health, psychological, social relationships and environmental) with transformed total range of score 0-100 interpreted as Good, poor quality of life.

#### Reliability of data collection instruments:

Reliability of the tool was tested by test retest method by using Karl Pearson's Co-efficient of Correlation formula. Item analysis was done to test internal consistency. This is done by critically evaluating questions based on difficult index and Discriminative index.

The reliability of tools is as follows-

- Menopause Rating Scale (MRS) : 0.81
- WHO QOL-BREF SCALE :0.79

**Data collection procedure:** The formal permission obtained from the principal of sajjalashree institute of nursing sciences, Navanagar Bagalkot. Then permission was obtained Panchayat officer at Kadapatti village, Jamakandi taluk Bagalkot District. The investigator given self introduction explained the purpose of data collection to the subjects and subject's willingness to participate in the study was ascertained. The subject was assured the anonymity and confidentiality of the information provided by them. Menopause Rating Scale (MRS) to assess the symptom experience and WHO quality of life bref scale was used to assess the quality of life among menopausal women. Each participant has taken around 30 minutes to complete the questionnaires.

**Ethical clearance:** Ethical clearance certificate was obtained from institutional ethical clearance committee. B.V.V.S Sajjalashree Institute of nursing sciences Navanagar Bagalkot. Written consent of participation obtained from participants before the data collection.

#### Statistical Analysis:

✚ **Percentage, mean, median and standard deviation** will be computed.

✚ **Paired't' test:** To analyze Pre test – Post Test difference in the experimental and control group.

✚ **Independent't' test:** To analyze the difference between experimental and control groups.

✚ **Chi square test:** To analyze association between selected socio-demographic and clinical characteristics and symptom experience, quality of life and selected psychosocial parameters of Postmenopausal women.

✚ **RM-ANOVA:** To identify the mean difference in the score of symptom experience, selected psychosocial parameters in all the levels of assessments .

## 2. Results

Results of the study is depicted as following sections;

### Section 1: description of selected personal variables of both groups

#### I. Frequency and percentage distribution of socio demographic variables of participants of both groups

The study consisted of 40 samples, 20 samples in experimental and 20 in control group each. Participants selected socio demographic variables are tabulated in master sheet and frequency and percentage is calculated. The findings are presented as shown in following in tables and figures.

**Table 1:** Distribution of participants according to their age. **N: 20+20**

S I N o	Demographic variables	Experimental group		Control group	
		Freq uenc y (f)	Perce ntage (%)	Freq uenc y (f)	Perce ntage (%)



1	Age (in yrs)				
	a) 45-50	8	40	8	40
	b) 51-55	12	60	12	60
2	Education of women				
	a) No formal education				
	b) Primary	8	40	6	30
	c) Secondary	9	45	9	45
	d) Pre-university	2	10	3	15
	e) Graduation and above	1	5	2	10
3	Education of Husband				
	a) No formal edn				
	b) Primary	7	35	5	25
	c) Secondary	8	40	8	40
	d) Pre-university	3	15	3	15
	e) Graduation and above	2	10	3	15

4	Occupation of women				
	a) House wife	7	35	10	50
	b) Labor /Coolie	9	45	7	35
	c) Business	3	15	3	15
	d) Govt servant	1	5	0	0
5	Occupation of Husband				
	a) Agriculture	6	30	7	35
	b) Labor /Coolie	10	50	9	45
	c) Business	3	15	2	10
	d) Govt servant	1	5	2	10
6	Religion				
	a) Hindu	16	80	17	85
	b) Muslim	3	15	1	5
	c) Christian	1	5	2	10
7	Family Income				
	a) Upto Rs.10,000	4	20	10	50
	b) Rs.10,001 to 20,000	9	45	8	40
	c) Rs.20,001 to 30,000	7	35	2	10



8	Marital status				
a)	Married	15	75	17	85
b)	Unmarried	1	5	0	0
c)	Divorced/separated	4	20	3	15
9	Type of family				
a)	Nuclear	16	80	15	85
b)	Joint	4	20	5	25
c)	Extended	0	0	0	0
10	Number of pregnancies				
a)	None	4	20	1	5
b)	One	12	60	10	50
c)	Two	3	15	5	25
d)	Three	1	5	4	20
e)	Four and above	0	0	0	0
11	Number of living children				
a)	None	1	5	0	0
b)	One	7	35	9	45
c)	Two	8	40	9	45
d)	Three	3	15	2	10
e)	Four and above				
12	History of fetal loss				
a)	Yes	5	25	2	10
b)	No	15	75	18	80

13	Diet				
a)	Vegetarian	8	40	12	60
b)	Non vegetarian	12	60	8	40
14	Habit of performing relaxation techniques				
a)	Yes	3	15	4	20
b)	No	17	85	16	80
15	Previous information on menopause				
a)	Yes	5	25	6	30
b)	No	15	75	14	70
	If yes, Source of information				
	- Media	1	5	1	5
	-Family members	2	10	4	20
	-Friends	1	5	2	10
	-Health personal	1	5	0	0
	-Magazine	0	0	0	0
16	Husbands' awareness of menopause				
a)	Yes	15	75	19	95
b)	No	5	5	1	5



17	Level of satisfaction with married life				
a)	High	5	15	6	30
b)	Mode rate	12	60	10	50
c)	Poor	3	15	4	20
18	Experience of stress event				
a)	Loss of house	1	5	0	0
b)	Children gone away	1	5	2	10
c)	Death of loved one	4	20	5	25

**Section 2:** Effectiveness of integrated community based nursing intervention.

### Part A: Description regarding participants symptom experience scores

#### I. Description of participant's symptom experience scores

The all tests symptoms experience scores obtained by the participants were tabulated to a master data sheet and the total scores obtained by each participant in the all tests were tabulated. Mean, standard deviation, median and range of all tests were computed. The findings were presented in the Table 2.

**TABLE 2:** Mean, Median, mode, standard deviation and range scores of all tests regarding symptom experience scores.

N:20+20

GROU P	Time of test	Me an	Medi an	Mo de	Sd	Ran ge
Experi mental group	Pretest	23.85	23.50	12	8.33	12-38
	Post test 1-Day	12.30	12	12	4.32	6-21
	Post test 2-Day	11.90	12	9	4.33	6-20
	Post test 3-Day	11.95	12	12	4.43	6-21

Contr ol group	Pretest	23.35	23.50	16	6.33	14-36
	Post test 1-Day	23.30	23.50	16	6.38	14-36
	Post test 2-Day	23.25	23.50	16	6.34	14-36
	Post test 3-Day	23.25	23.50	16	6.46	13-36

Significance of difference in symptom experience scores during each test between the participants of experimental and control group.

To find out the significance of difference between means of symptom experience scores in each test, independent t test was computed. The data are presented in Table 6. To test statistical significance following null hypothesis was stated:

$H_{01}$ : There will be no significant difference between mean menopausal symptom experience scores during each test between participants of experimental and Control groups at 0.05 levels of significance.

**Table 3:** Comparison of each test mean menopausal symptom experience scores between Control groups.

N:20+20

Groups	Mean	Mean difference	Independent t Value	P value
Pretest				
Exp Group	23.85	0.50	0.21	0.832
Control group	23.35			
Day 30				
Exp Group	12.30	11.00	6.37	0.001*
Control group	23.30			
Day 60				
Exp Group	11.90	11.35	6.60	0.001*
Control	23.25			





group				
Day 90				
Exp Group	11.95	11.30	6.44	0.001*
Control group	23.25			

\*Significant

The data presented in the Table 3: shows that the mean difference between experimental and control group, in pretest is 0.50, in post test 1-day 30 is 11, in post test 2-day 60 is 11.35 and in post test 3-day 90 is 11.30. To find significance of the difference in menopausal symptom experience scores, score independent t test value was computed and the obtained value of 't' = 0.50 with p value 0.832 on pretest is found not significant, 't' = 6.37 with p value 0.000 on post test 1-day 30 is found significant, 't' = 6.60 with p value 0.000 on post test 2-day 60 is found significant and 't' = 6.44 with p value 0.000 on post test 3-day 90 is found significant.

It indicates that, the integrated community-based nursing intervention was helped participants of Experimental group to reduce their symptom experience, scores was sustained for day 30, day 60 and day 90.

Hence with respect to pretest scores the hypothesis H<sub>2</sub> is supported indicating no significant difference in symptoms scores between two groups and with respect to Post test 1, post test 2 and post test 3 the hypothesis H<sub>01</sub> rejected indicating significant differences in symptoms experiences scores between participants of experience group and control group. As mean values of experimental group are lower than control group, the participants of experimental group experienced fewer symptoms than control group.

## Part B: Description regarding participant's quality of life scores.

### I. Description of participant's quality of life scores

The all tests quality of life scores obtained by the participants were tabulated to a master data sheet and the total scores obtained by each participant in the all tests were tabulated. Mean, standard deviation, median and range of all tests were computed. The findings were

presented in the Table 4.

**Table 4: Mean, Median, mode, standard deviation and range scores of all tests regarding quality of life scores.**

N:20+20

GROU P	Time of test	Me an	Medi an	Mo de	Sd	Ran ge
Experi mental group	Pretest	73.35	77	79	22.55	29-110
	Post test 1-Day 30	84.20	85	105	20.94	42-118
	Post test 2-Day 60	84.20	85	105	20.94	42-118
	Post test 3-Day 90	84.40	85	91	20.91	43-118
Contr ol group	Pretest	70.75	72.50	69	19.19	34-106
	Post test 1-Day 30	70.85	72.50	69	19.06	34-106
	Post test 2-Day 60	70.85	72.50	69	19.08	34-106
	Post test 3-Day 90	71	72.50	69	19.02	34-106

The data presented in Table 4 shows that- **Pretest scores:** Among the Experimental group, the quality of life scores mean scores at the time pretest was 73.35, median was 77, and mode was 79 with standard deviation  $\pm 22.55$  and scores ranged between 29-110. Among the participants of Control group, the quality of life score mean was 70.75, median was 72.50; mode was 69 with standard deviation  $\pm 19.19$  and scores ranged between 34-106.

**Post test 1-Day 30 scores:** Among the Experimental group, the quality of life scores mean scores in day 30



was 84.20, median was 85, mode was 105 with standard deviation  $\pm 20.94$  and scores ranged between 42-118. Among the participants of Control group, the score mean was 70.85, median was 72.50, and mode was 69 with standard deviation  $\pm 19.06$  and scores ranged between 34-106.

**Post test 2 - Day 60 scores:** Among the Experimental group, the quality of life scores mean scores in day 60 was 84.20, median was 85, mode was 105 with standard deviation  $\pm 20.94$  and scores ranged between 42-118. Among the participants of Control group, the score mean was 70.85, median was 72.50, mode was 69 with standard deviation  $\pm 19.08$  and scores ranged between 34-106.

**Post test 3 - Day 90 scores:** Among the Experimental group, the quality of life scores mean scores on day 90 was 84.40, median was 85, mode was 91 with standard deviation  $\pm 20.91$  and scores ranged between 43-118. Among the participants of Control group, the score mean was 71, median was 72.50, mode was 69 with standard deviation  $\pm 19.02$  and scores ranged between 34-106.

## II. Description of participant's levels of quality of life scores

The quality of life scores in all tests of experimental and control group according to poor, average, and good is calculated and their Frequency and percentage is presented in the Table 5.

**TABLE 5:** Quality of life scores among participants of experimental and control groups. N:20+20

Time of test	Quality of life					
	Experimental group			Control group		
	Poor	Mode rate	Good	Poor	Mode rate	Good
	f(%)	f(%)	f(%)	f(%)	f(%)	f(%)
Pretest	5 (25)	12 (60)	3 (15)	6 (30)	12 (60)	2 (10)
Post test 1-	4 (20)	10 (50)	6 (30)	6 (30)	12 (60)	2 (10)

Day30						
Post test 2- Day 60	4 (20)	10 (50)	6 (30)	6 (30)	12 (60)	2 (10)
Post test 3- Day 90	4 (20)	10 (50)	6 (30)	6 (30)	12 (60)	2 (10)

The data presented in the Table 8 reveals the quality of life of the participants, it shows that,

### Experimental group:

In **pretest**, majority 12 (60%) were had moderate level, 5(25%) were had poor level and remaining 3(15%) were had good level quality of life.

In **post test 1**, majority 10 (50%) were had moderate level, 6(30%) were had good level and remaining 4(20%) were had poor level quality of life

In **posttest 2 and 3**, majority 10 (50%) were had moderate level, 6(30%) were had good level and remaining 4(20%) were had poor level quality of life

### Control group:

In **pretest and all posttests**, majority 12 (60%) were had moderate level, 6(30%) were had poor level and remaining 2(10%) were had good level quality of life

## I. Significance of difference in quality of life scores during each test among the participants of experimental and control group.

In order to find out the significance of difference between means of each test quality of life scores, **paired t** value was computed. The data are presented in Table 4 and 5. To test statistical significance following null hypothesis was stated:

**H<sub>03</sub>:** There will be no significant difference between the mean each test quality of life scores of participants who have received integrated community-based nursing intervention.

**H<sub>04</sub>:** There will be no significant difference between the mean each test quality of life scores of participants who have not received integrated community based nursing intervention



**Table 6:** Comparison of each test mean quality of life scores among Experimental group.

N:20

Aspects	Quality of life scores		Pairedt Value	P value
	Mean difference	SD difference		
Pretest-Post test 1	10.85	±1.61	12.24	0.001*
Post test 1-Post test 2	00	±00	--	--
Post test 2-Post test 3	0.20	±0.03	1.71	0.104

\*significant at 0.05 levels

The data presented in Table 6 shows that in Experimental group the mean difference between the pretest and post test 1 quality of life scores score is 10.85, between post test 1 to post test 2 is 00 and post test 2 to post test 3 is 0.20. This indicates a slight improvement in quality of life scores after undergoing integrated community-based nursing intervention.

To find significance of the difference in quality of life scores **paired t** test value was computed and the obtained value of 't' = 12.24 (pretest to post test 1) with p value 0.001 is found significant; - (between post test 1 to post test 2) with p value --- is not found significant and 1.71 (between post test 2 to post test 3) with p value 0.104 is found not significant at 0.05 level of significance, indicating that the integrated community based nursing intervention has helped participants to improve their quality of life scores from pretest to post test 1 and is sustained in post test 2 and post test 3.

Hence the null hypothesis  $H_{03}$  is not supported and research hypothesis is supported indicating that the improvement in quality of life after undergoing integrated community based nursing intervention and it was sustained even after 60 days and 90 days of pretest.

**Table 7:** Comparison of each test mean quality of life scores among Control group.

N:20

Aspects	Quality of life scores		Pairedt Value	P value
	Mean difference	SD difference		
Pretest-Post test 1	0.10	±0.13	1.00	0.330
Post test 1-Post test 2	0.05	±0.02	1.00	0.330
Post test 2-Post test 3	0.20	±0.06	1.00	0.330

\*significant at 0.05 levels

The data presented in Table 7: shows that in control group the mean difference between the pretest and post test 1 quality of life scores score is 0.10, between post test 1 to post test 2 is 0.05 and post test 2 to post test 3 is 0.20. This indicates a no difference in quality of life scores among the participants of control group.

To find significance of the difference in quality of life scores **paired t** test value was computed and the obtained value of 't' = 1.00 (pretest to post test 1) with p value 0.330 is found not significant; 1.00 (between post test 1 to post test 2) with p value 0.330 is not found significant and 1.00 (between post test 2 to post test 3) with p value 0.330 is found no significant at 0.05 level of significance, indicating that no significant improvement in the their quality of life scores from pretest to post test 1, 2 and 3.

Hence the null hypothesis  $H_{03a}$  is supported and research hypothesis is rejected indicating that no significant change in quality of life among the participants of control group from pretest to post tests.

## II. Significance of difference in quality of life scores during each test between the participants of experimental and control group.

To find out the significance of difference between



means of quality of life scores in each test, independent t test was computed. The data are presented in Table 11. To test statistical significance following null hypothesis was stated:

**H<sub>03</sub>:** There will be no significant difference between mean quality of life scores during each test between participants of experimental and Control groups at 0.05 levels of significance.

**Table 8:** Comparison of each test mean quality of life scores between Control group.

**N:20+20**

Groups	Mean	Mean difference	Independent t Value	P value
<b>Pretest</b>				
Exp Group	73.35	2.60	0.39	0.69
Control group	70.75			
<b>Day 30</b>				
Exp Group	84.20	13.35	2.10	0.042*
Control group	70.85			
<b>Day 60</b>				
Exp Group	84.20	13.40	2.11	0.041*
Control group	70.80			
<b>Day 90</b>				
Exp Group	84.40	13.40	2.12	0.041*
Control group	71.00			

\*Significant

The data presented in the Table 8 shows that the mean difference between experimental and control group, in **pretest** is 2.60, in **post test 1-day 30** is 13.35, in **post test 2-day 60** is 13.40 and in **post test 3-day 90** is 13.40. To find significance of the difference in quality

of life scores in dependent t test value was computed and the obtained value of 't' = 0.39 with p value 0.69 on pretest is found not significant, 't' = 2.10 with p value 0.042 on **post test 1-day 30** is found significant, 't' = 2.11 with p value 0.041 on **post test 2-day 60** is found significant and 't' = 2.12 with p value 0.041 on **post test 3-day 90** is found significant.

It indicates that, that the integrated community-based nursing intervention was helped participants of Experimental group to improve their quality of life scores was sustained for day 30, day 60 and day 90.

Hence with respect to **pretest** scores the hypothesis **H<sub>04</sub>** is **supported** indicating no significant difference in quality of life scores between two groups and with respect to **Post test 1, post test 2 and post test 3** the hypothesis **H<sub>04</sub>rejected** indicating significant differences in quality of life scores between participants of experience group and control group. As mean values of experimental group are higher than control group, the participants of experimental group experienced improved quality of life than control group.

### Section 3: Findings related to association of participants of both groups pretest levels of symptom experience scores, quality of life with their selected personal variables

Association of pretest levels of symptom experience scores, quality of life, levels of participants with their related personal variable was calculated using chi-square and data are presented as follows.

#### I) Association between participants of both group pretest levels Symptom experience scores and socio demographic variables

**H<sub>05</sub>:** There will be no significant association between pretest levels of symptom experience with their selected personal variables at 0.05 levels of significance

The calculated chi square values between pretest levels of symptom experience is significantly associated with occupation of participant's husbands and not significantly associated with other socio demographic variables. Hence, the null hypothesis **H<sub>05</sub>** and research hypothesis is partially supported. Indicating the both group participants pretest levels of symptom experience is significantly associated with their husband's



occupation.

## II) Association between participants of both group pretest levels quality of life scores and socio demographic variables

**H<sub>06</sub>: There will be no significant association between pretest levels of quality of life with their selected personal variables at 0.05 levels of significance**

The calculated chi square values between pretest levels of quality of life is significantly associated with occupation of women, religion, and marital status and not significantly associated with other socio demographic variables. Hence, the null hypothesis **H<sub>06</sub>** and research hypothesis **H<sub>6</sub>** is partially supported. Indicating the both group participants pretest levels of quality of life is significantly associated with their occupation, religion, marital status.

## 3. Discussion

An evaluative study to assess the level of symptom experience and quality of life and to evaluate the effectiveness of integrated community based nursing intervention among postmenopausal women residing in selected areas of Bagalkot. following study results were supported by a similar randomized controlled trials study which was conducted by Aimee Spector, Zishi Li, Roopal Desai et.al to assess the effectiveness of Cognitive Behavioral Therapy (CBT) and Mindfulness-Based Interventions (MBI) on depression and anxiety were examined by subgroup analysis. Pre- and post-test means and standard deviations for groups were extracted and used to calculate effect sizes. The results of thirty studies comprising 3501 women were included. From meta-analysis, mood symptoms significantly benefited from CBT (anxiety:  $d = -0.22$ , 95 % CI = -0.35, -0.10; depression:  $d = -0.33$ , 95 % CI = -0.45, -0.21) and MBI (anxiety:  $d = -0.56$ , 95 % CI = -0.74, -0.39; depression:  $d = -0.27$ , 95 % CI = -0.45, -0.09). Psychosocial interventions were also found to significantly improve cognition ( $d = -0.23$ , 95 % CI = -0.40, -0.06) and quality of life ( $d = -0.78$ , 95 % CI = -0.93, -0.63). Mean total therapy hours ('dose') was lower for CBT (11.3) than MBI (18.6), indicating reduced costs and burden for women. The study concluded that psychosocial interventions helps in improving non-physiological symptoms (particularly depression and anxiety) during menopause, noting the

heterogeneity of findings and importance of implementing effective interventions.

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