



# “A Study To Assess The Effectiveness Of Structured Teaching Programme On Lifestyle Modifications Among Postmenopausal Women In Selected Rural Areas, Tirupati.”

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## ABSTRACT:

**INTRODUCTION:** Menopause is a unique stage of female reproductive life cycle, a transition from reproductive to non-reproductive stage. In India, at some point after forties, a woman enters in to the third phase of her life. This phase of life is generally ignored and chooses to mourn silently. During the middle age, physiologically, menopause is the most notable event for women. So, the women need knowledge about what to expect and how to cope with changes. **OBJECTIVES:** To assess the knowledge on lifestyle modifications before & after structured teaching programme. To determine the effectiveness of structured teaching programme by comparing pre-test & post-test knowledge on postmenopausal women. To identify the association between knowledge regarding lifestyle modifications among post-menopausal women and the selected demographic variables. **METHODOLOGY:** A pre-experimental one group pre- test and post -test design was adopted for this study. Seventy-five postmenopausal women were selected by using non probability convenient sampling technique who are fall under inclusion criteria at selected rural areas Tirupati. A self- structured questionnaire was used to assess the knowledge on lifestyle modifications among postmenopausal women. **RESULTS:** The study findings revealed in pre- test out of 75 postmenopausal women 58.70 % (44) had inadequate knowledge 41.30 % (31) had moderate knowledge 0.00 % (0) had adequate knowledge on Lifestyle modifications whereas in post- test 70.70% (53) had adequate knowledge, 29.30(22) had moderate knowledge, and 0.00 % (0) had inadequate knowledge after structured teaching programme. This indicates that there was a significant improvement knowledge on lifestyle modifications among post menopausal women at  $p < 0.01$  levels.

**CONCLUSION:** The present study revealed that postmenopausal women have inadequate knowledge on lifestyle modifications and after structured teaching programme knowledge have improved among postmenopausal women.

**Key Words:** Menopause, post menopause, effectiveness, lifestyle modifications

## I. Introduction

The transitional changes of a girl start when she attains Menarche. Thus, a girl transformed to a woman. At last woman will reach the stage of menopause in which various physiological as well as psychological changes will take place. But these are usually neglected by most of the women. The increasing average length of the postmenopausal life span emphasizes the importance of menopause in today's society.

Menopause is derived from the Greek word Meno (monthly) and the root Pausis (cessation). Literally menopause means "the end of monthly cycles" (the end of monthly periods). Menopause is an event that typically (but not always) occurs in women midlife, during their late 40s or early 50s, and it signals the end of the fertile phase of a woman's life. Menopause is defined as the absence of menstrual periods for 12 months.

In the western world, the average age of menopause is 50.4 and average age of menopause in Indian women is 45 years. population of post- menopausal women ranges between 5 to 8 %, which makes up a relatively small proportion of the population in developing countries. where as in industrialized countries, it makes up over 15 % of the population. By 2030, this proportion is expected to increase drastically everywhere around the world.

**need for the study:** Global statistics of 2 billion women postmenopausal women among them 76.3 million women are diagnosable with orthopedic problems in India 62.5 million women are suffering postmenopausal symptoms. In India the census of 25-54 years age group is 40.2% (male 249,017,538/ female 235,042,251) and 55-64 years group are 6.8%) male 41,035,270/ female 40,449,880). according to the life expectancy of the women, about 1/3<sup>rd</sup> of the women life is in menopause. Approximately 645000 premenopausal and 1,4 million postmenopausal breast cancer cases were diagnosed worldwide in 2018, with more than 130000 and 490000 respectively. Average age of menopause is 47.5 years in Indian women with an average life expectancy of 71 years. In Andhra Pradesh 26% of women population are having postmenopausal symptoms. The governmental statistics shows that 79.7% of adult women above 50 yrs of age suffering with post-menopausal symptoms.

With the raising life expectancy worldwide, significant proportion of women in the menopausal period will require special advice on women health strategies that will not only improve their quality of life, but will also allow them to objectively balance the benefits versus the risks of such strategies. Women were having a lot of problems regarding associated changes after menopause & management, and the post- menopausal

women not able to cope up the situation. Women need knowledge about what to expect and how to cope with changes.

### **Statement of the problem**

“a study to assess the effectiveness of structured teaching programme on lifestyle modifications among postmenopausal women in selected rural areas, Tirupati.”

### **Objectives of the study**

- 1.To assess the knowledge on lifestyle modifications before & after structured teaching programme.
- 2.To determine the effectiveness of structured teaching programme by comparing pre-test & post-test knowledge on postmenopausal women.
- 3.To identify the association between knowledge regarding lifestyle modifications among post-menopausal women and the selected demographic variables.

### **Research Hypothesis**

**H1:** The mean posttest knowledge scores of postmenopausal women after administration of structured teaching programme will be significantly higher than their mean pretest knowledge scores.

**H2:** There will be association between the knowledge scores and selected demographic variables.

### **Assumptions**

The present study assumed that,

- 1.The women aged 45-60 years would be willing to participate in the study.
- 2.Women would have some knowledge on postmenopausal period.

### **Delimitations**

The present study was delimited to the women who Were:

- In the aged 45- 60 years and attained menopause.
- Reside in the randomly selected rural areas of Tirupati.

## **II. Methodology**

**Research approach:** Quantitative research approach was adopted for this study

**Research Design:** Pre- Experimental one group pretest and post- test design was adopted for the study.

**Variables of the study:**

**Independent variable:** the independent variables of the study were structured teaching programme on lifestyle modification among the postmenopausal women.

**Dependent variable:** the dependent variable of the study was knowledge on lifestyle modifications among the postmenopausal women.

**Setting of the study:** The study was conducted at Thummalagunta and Chiguruwada rural areas of Tirupati.

**Sample:** Postmenopausal women in (45-60 age group) Thummalagunta and Chiguruwada. **Sample size:** Sample size consists of 75 who fall under inclusion criteria.

**Sampling technique:** Non probability convenient sampling technique was adopted for this study.

### III. Analysis and Interpretation

The data were collected from the postmenopausal women regarding the level of knowledge on lifestyle modifications were tabulated, analysed and interpreted.

#### 3.1. Demographic characteristics:

Out of 75 postmenopausal women the major findings of the study were 41.30% (31) above 55 years age group, education 40% (30) were illiterates, marital status 88% (66) were married, monthly income per month in rupees 61.30% (46) had 20000, religion 84% (63) were Hindus, age at menopause in years 48% (36) attained at 50-55, and 81.30% (61) taking milk and dairy products, servings of milk consuming in a day majority 50.80% (31) were consuming milk one time, diet consume majority 50.70% (38) consumed mixed diet, sample doing regular exercises 30.70% (23), among them weekly exercises 52.20% (12) were doing 2 times, type of exercises 87% (20) of 23 were practicing yoga and meditation, regarding sleep disturbances 50.70% (38) were not experiencing sleep disturbance, frequency of regular health check-up 53% (40) under the health regular health check-ups, type of health check up 58.70% (44) went for general health check-up, health problems 37.20% (28) majority were having arthritis/reproductive cancer. (Table-1)

#### 3.2. percentage and frequency distribution of pre- test and post- test knowledge among postmenopausal women

The results revealed that in pre -test the majority 58.70% (44) possess inadequate knowledge and 41.30% (31) had moderate knowledge and 0.00% (0) had adequate knowledge on lifestyle modifications related to post menopausal whereas in post-test the majority 70.70% (53) possess adequate knowledge and 29.30% (22) had moderate knowledge and 0.00% (0) had inadequate knowledge on lifestyle modifications related to post menopausal. (Table-2)

#### 3.3. comparison of pre-test and post-test mean and standard deviation and paired 't' test and p values of knowledge on lifestyle modifications among the postmenopausal women.

The mean and mean percentage were significantly high in post test scores in knowledge on lifestyle modification indicates that there was improvement of knowledge in postmenopausal women. Paired 't' test values was 34.103 and p value is <0.01 level in knowledge on lifestyle modifications among post-menopausal women. (Table-3)

### 3.4. association of post-test knowledge scores regarding lifestyle modifications with demographic variables of the postmenopausal women.

The association of demographic variables with post- test knowledge scores regarding lifestyle modifications shows age, educational status, age at menopause, servings of milk consume in a day, exercises, sleep disturbance, type of health check-ups, type of health problem was found significant at ( $p=<0.01$ ). Religion, milk and dairy products were found significant at ( $p=<0.05$ ). Marital status, monthly income, history of Hysterectomy, diet, exercise in a week, type of exercise practicing, regular health check-ups, duration of health check-ups, were not found significant. (Table- 4)

## Discussion

The discussion of the present study based on the findings obtained from the descriptive and inferential statistics.

The first objective of the study was to assess the knowledge before and after structured teaching programme on lifestyle modifications among postmenopausal women. In pre-test the majority 58.70(44) possess inadequate knowledge and 41.30(31) had moderate knowledge and 0.00(0) had adequate knowledge whereas in post-test the majority 70.70 (53) possess adequate knowledge and 29.30(22) had moderate knowledge and 0.00(0) having inadequate knowledge on lifestyle modifications related to post menopausal.

The second objective of the study was to assess the effectiveness of structured Teaching programme on lifestyle modifications among postmenopausal women. In post- test the majority 70.70 (53) possess adequate knowledge and 29.30(22) had moderate knowledge and 0.00(0) having inadequate knowledge on lifestyle modifications related to post menopausal. The reliability of the structured questionnaire was done by test-retest method and obtained 'r' was **0.92** which was highly reliable.

The third objective of the study was to assess the association between knowledge regarding lifestyle modifications among postmenopausal women with selected demographic variable. The association of demographic variables with post- test knowledge scores regarding lifestyle modifications shows age, educational status, age at menopause, servings of milk consume in a day, exercises, sleep disturbance, type of health check-ups, type of health problem was found significant at ( $p=<0.01$ ). Religion, milk and dairy products were found significant at ( $p=<0.05$ ). Marital status, monthly income, history of Hysterectomy, diet, exercise in a week, type of exercise practicing, regular health check-ups, duration of health check-ups, were not found significant.

Hence, the hypothesis  $H_2$  states that there will be association between the knowledge scores and selected demographic variables is accepted.

In 2020 at Sri Lanka, the study shows that there was improvement of knowledge on lifestyle modifications among postmenopausal women after effectiveness of educational intervention.

## **Conclusion:**

The present study revealed that postmenopausal women have inadequate knowledge on lifestyle modifications and after structured teaching programme knowledge have improved among postmenopausal women.

## **Nursing implications**

### **Nursing practice:**

- The present study revealed that most of the postmenopausal women had inadequate knowledge regarding lifestyle modifications. Increased efforts are needed by all the nurses to increase the knowledge and awareness regarding life style modifications on prevention of postmenopausal complications.

### **Nursing Education:**

- The students of nursing schools, colleges, and other nursing educational institutions should adequately be prepared to provide health education to the patient and postmenopausal women in community in prevention of postmenopausal complications.

### **Nursing Research:**

- The present study findings serves as the basis for professionals and the student nurses to conduct further studies on lifestyle modifications among the postmenopausal women with different research designs.

### **Nursing administration:**

- The nursing administrator can take part in developing protocols, regarding the health education programmes and strategies for women regarding life style modifications on postmenopausal women.

### **Recommendations:**

- A descriptive study can be conducted on Knowledge about Lifestyle modifications among large population.
- A similar study would be conducted by administering self-instructional materials on Lifestyle modifications.
- A comparative study can be done on Knowledge about Lifestyle modifications between urban and rural postmenopausal women.
- Longitudinal studies may be conducted to determine the effectiveness of structured teaching programme over a period of time.

**NOTE: All tables enclosed next to references.**



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**Table:1 Frequency and Percentage distribution of demographic characteristics of postmenopausal women (n=75)**

S.No.	Demographic variables	Frequency(f)	Percentage(%)	
1.	Age	Below 50 years	22	29.30
		51-55 years	22	29.30
		above 55 years	31	41.30
2.	Educational status	Illiterate	30	40.00
		Primary education	8	10.70
		Intermediate	22	29.30
		Graduate	15	20.00
3.	Marital status	Married	66	88.00
		Widow	8	10.70
		Divorced /separated	1	1.30
4.	Monthly income	10000	15	20.00
		20000	46	61.30
		30000	7	9.30
		40000	7	9.30
5.	Religion	Hindu	63	84.00
		Muslim	2	2.70
		Christian	3	4.00



		Others (Tamil)	7	9.30
6.	Age at menopause	35-40 years	7	9.30
		40-45 years	8	10.70
		45-50 years	24	32.00
		50-55 years	36	48.00
7.	history of hysterectomy	Yes	29	38.70
		No	46	61.30
8.	milk and dairy products	Yes	61	81.30
		No	14	18.70
9.	servings consume milk in a day	One	31	50.80
		Two	22	36.10
		Three	5	8.20
		Four	3	4.90
10.	Diet	Vegetarian	28	37.30
		Non vegetarian	7	9.30
		Ova vegetarian	2	2.70
		Mixed	38	50.70
11.	Exercises	Yes	23	30.70
		No	52	69.30
12.	Exercises in week	Two	12	52.20
		Three	7	30.40
		Four	2	8.70
		Five or more	2	8.70
13.	Type of exercises practicing	Yoga and meditation	20	87.00
		Strength training exercises	1	4.30
		Aerobic activities	1	4.30

		Pelvic floor exercises	1	4.30
14.	Sleep disturbance	Yes	37	49.30
		No	38	50.70
15.	Regular health check up	Yes	75	100
16.	health check-ups	Once in a year	4	5.30
		Once in two years	10	13.30
		Once in three years	6	8.00
		Whenever there in health problem	55	73.30
17.	Type of health check up	General health check up	44	58.70
		Breast & cervical examination	21	28.00
		Gynaecological examination	7	9.30
		Hormone's estimation	3	4.00
18.	Health problems	Diabetes milletus/kidney disease	3	4.00
		Hypertension/Heart disease	7	9.30
		Diabetes and hypertension	14	18.70
		Arthritis/Reproductive cancer	28	37.30
		No problem	23	30.70

**Table-2 percentage and frequency distribution of pre- test and post- test knowledge among postmenopausal women**

n=75

**Level of knowledge**

	pre test		post test	
	Frequency(f)	Percent (%)	Frequency(f)	Percent (%)
Inadequate	44	58.70	0	0.00
Moderate	31	41.30	22	29.30
Adequate	0	0.00	53	70.70

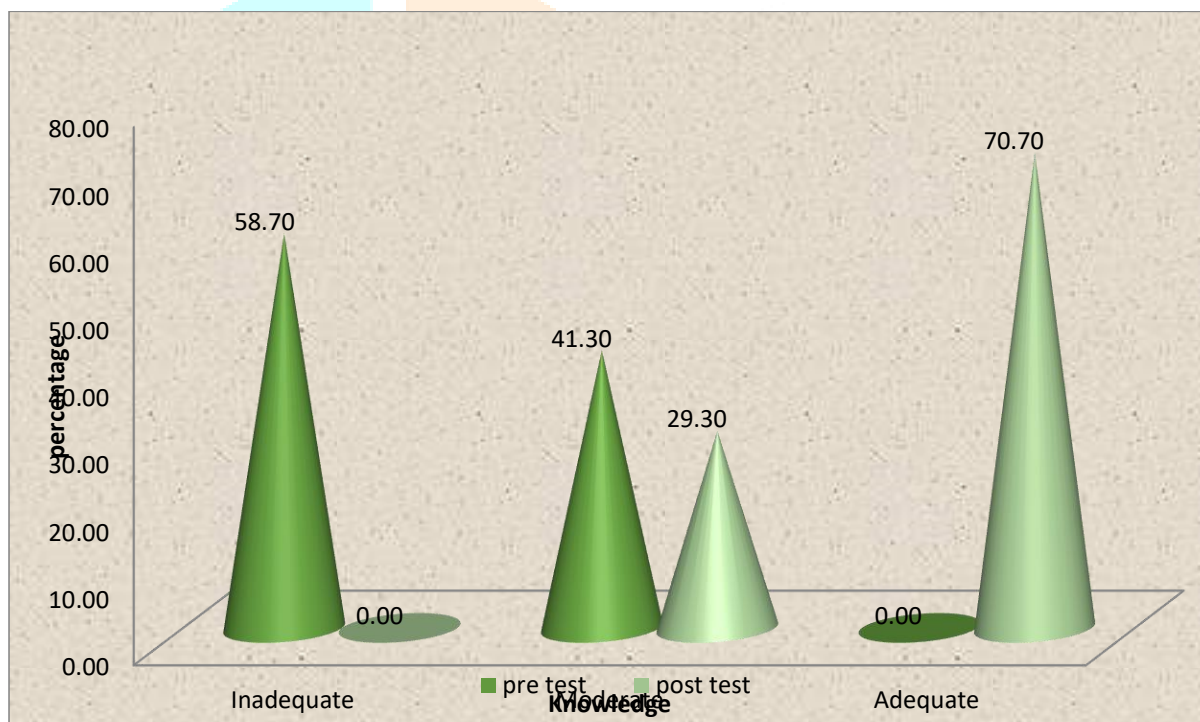


Table -3 comparison of pre-test and post-test mean and standard deviation and paired 't' test and p values of knowledge on lifestyle modifications among the postmenopausal women.

n=75

Paired Samples Statistics : Mean, SD and t-value					
		Mean	Std. Deviation	t-value	p value
Pair 1	Pre test knowledge	18.63	6.365	34.103**	0
	Post test Knowledge	34.48	3.850		
Paired Samples Correlations					
		Correlation	Sig.		
Pair 1	Pre test knowledge & Post test Knowledge	0.798	0.000		



**Table 4 association of post-test knowledge scores regarding lifestyle modifications with demographic variables of the postmenopausal women.**

Demographic variable	Classification	N/%	post test knowledge		Chi-square	p value
			Moderate	Adequate		
1.Age	Below 50 years	N	1	21	9.258**	0.010
		%	1.30%	28.00%		
	51-55 years	N	9	13		
		%	12.00%	17.30%		
	above 55 years	N	12	19		
		%	16.00%	25.30%		
2 Educational status	Illiterate	N	14	16	22.636**	0.000
		%	18.70%	21.30%		
	Primary education	N	6	2		
		%	8.00%	2.70%		
	Intermediate	N	1	21		
		%	1.30%	28.00%		
	Graduate	N	1	14		
		%	1.30%	18.70%		
3 Marital status	Married	N	19	47	2.491 NS	0.288
		%	25.30%	62.70%		
	Widow	N	2	6		
		%	2.70%	8.00%		
	Divorced/separated	N	1	0		
		%	1.30%	0.00%		
4 Monthly income	1	N	7	8	5.871 NS	0.118
		%	9.30%	10.70%		
	2	N	14	32		
		%	18.70%	42.70%		
	3	N	1	6		
		%	1.30%	8.00%		
	4	N	0	7		
		%	0.00%	9.30%		

5 Religion	Hindu	N	20	43	9.146*	0.027
		%	26.70%	57.30%		
	Muslim	N	2	0		
		%	2.70%	0.00%		
	Christian	N	0	3		
		%	0.00%	4.00%		
Others (Tamil)	N	0	7			
	%	0.00%	9.30%			
6 Age at menopause	35-40 years	N	0	7	24.882**	0.000
		%	0.00%	9.30%		
	40-45 years	N	16	20		
		%	21.30%	26.70%		
	45-50 years	N	0	24		
		%	0.00%	32.00%		
50-55 years	N	6	2			
	%	8.00%	2.70%			
7 History of hysterectomy	Yes	N	14	32	0.070 NS	0.792
		%	18.70%	42.70%		
	No	N	8	21		
		%	10.70%	28.00%		
8 taking milk and dairy products	Yes	N	21	40	4.089*	0.043
		%	28.00%	53.30%		
	No	N	1	13		
		%	1.30%	17.30%		
9 servings of milk consume in a day.	One	N	17	14	14.494**	0.002
		%	27.90%	23.00%		
	Two	N	1	21		
		%	1.60%	34.40%		
	Three	N	2	3		
		%	3.30%	4.90%		
Four	N	1	2			
	%	1.60%	3.30%			



10 Type of diet	Vegetarian	N	13	15	6.799 NS	0.079
		%	17.30%	20.00%		
	Non vegetarian	N	1	6		
		%	1.30%	8.00%		
	Ova vegetarian	N	0	2		
		%	0.00%	2.70%		
Mixed	N	8	30			
	%	10.70%	40.00%			
11 Exercises	Yes	N	0	23	13.770**	0.000
		%	0.00%	30.70%		
	No	N	22	30		
		%	29.30%	40.00%		
12 Exercise in a week	Two	N	0	12	0.000 NS	1.000
		%	0.00%	52.20%		
	Three	N	0	7		
		%	0.00%	30.40%		
	Four	N	0	2		
		%	0.00%	8.70%		
Five or more	N	0	2			
	%	0.00%	8.70%			
13 Type of exercises	Yoga and meditation	N	0	20	0.000 NS	1.000
		%	0.00%	87.00%		
	Strength training exercises	N	0	1		
		%	0.00%	4.30%		
	Aerobic activities	N	0	1		
		%	0.00%	4.30%		
Pelvic floor exercises	N	0	1			
	%	0.00%	4.30%			
14 Sleep disturbance	Yes	N	19	18	17.079**	0.000
		%	25.30%	24.00%		
	No	N	3	35		
		%	4.00%	46.70%		
	Yes	N	22	53	0.000	1.000

15 Regular health check up		%	29.30%	70.70%	NS	
16 duration of health check up	Once in a year	N	2	2	2.740	0.434
		%	2.70%	2.70%	NS	
	Once in two years	N	1	9		
		%	1.30%	12.00%		
	Once in three years	N	2	4		
		%	2.70%	5.30%		
When ever there in health problem	N	17	38			
	%	22.70%	50.70%			
17 Type of health check up	General health check up	N	13	31	14.734**	0.002
		%	17.30%	41.30%		
	Breast & cervical examination	N	2	19		
		%	2.70%	25.30%		
	Gynaecological examination	N	6	1		
		%	8.00%	1.30%		
Hormones estimation	N	1	2			
	%	1.30%	2.70%			
18 Type of health problem	Diabetes milletus/Kidney disease	N	0	3	20.922**	0.000
		%	0.00%	4.00%		
	Hypertension/Heart disease	N	0	7		
		%	0.00%	9.30%		
	Diabetes and hypertension	N	12	2		
		%	16.00%	2.70%		
	Arthritis/Reproductive cancer	N	8	20		
		%	10.70%	26.70%		
No problem	N	2	21			
	%	2.70%	28.00%			

Note : \*\* = Significant at 0.01 level \* = Significant at 0.05 level NS= no significant