

BIJNEER

Benziger International Journal of Nursing Education, Extension & Research

Mrs. Susy Mary Thomas¹,
Ms. Dini Edison²,
Ms. Jessu Thomas²,
Ms. Mariya Joseph²,
Ms. Tiphilah Elsa Joby²,
Ms. Treesa Mary Johnson.²

¹ Lecturer, Bishop Benziger College of Nursing, Kollam, Kerala, India

² VIII Semester Bsc Nursing Students, Bishop Benziger College of Nursing, Kollam, Kerala, India

EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING HORMONAL REPLACEMENT THERAPY AMONG WOMEN IN SELECTED COASTAL AREAS, KOLLAM

ABSTRACT

Hormonal replacement therapy (HRT) is a significant medical intervention that helps women with menopausal and hormonal imbalance symptoms. It is taken to replace the estrogen the body stops making after menopause, which is when periods stop for good. This therapy most often is used to treat common menopause symptoms, such as hot flashes and vaginal discomfort. Menopause hormone therapy used to be called hormone replacement therapy. An experimental one-group pre-test post-test study was conducted to assess the effectiveness of a structured teaching programme (STP) on knowledge regarding hormonal replacement therapy (HRT) among women in selected coastal areas of Kollam.

Objectives: This study aimed to assess the knowledge regarding HRT among women, to assess the effectiveness of the STP on knowledge regarding HRT, and to find out the association between pre-test knowledge scores and selected demographic variables.

Methods: A quantitative research approach with an experimental one-group pre-test post-test design was adopted. The conceptual framework used was Ludwig von Bertalanffy's General System Theory. Purposive sampling was employed to select 60 women above 45 years of age. Data were collected using a structured knowledge questionnaire. Following the pre-test, a structured teaching programme on HRT was administered, and a post-test assessment was conducted after five days.

Results: The study findings revealed that the mean pre-test knowledge score was 7.39 (SD 2.87), while the mean post-test score increased to 11.56 (SD 3.27). The calculated t-value of 39.40 was greater than the table value, indicating a statistically significant improvement in knowledge after the intervention. A significant association was found between pre-test knowledge scores and demographic variables such as age, presence of medical illness, and previous knowledge on HRT.

Conclusion: The study concluded that the structured teaching programme was effective in enhancing knowledge regarding hormonal replacement therapy among women above 45 years in coastal areas of Kollam. Continued educational interventions are recommended to improve awareness regarding hormonal replacement therapy.

(Keywords: Structured teaching programme, Knowledge, Hormonal replacement therapy, Coastal areas.)

INTRODUCTION

Menopause represents a significant biological milestone marked by the cessation of ovarian function and menstruation, either naturally or as a result of medical interventions such as cancer treatment. This transition is accompanied by a spectrum of symptoms including vasomotor disturbances, psychological changes, and long-term health risks that profoundly affect women's quality of life. Hormonal Replacement Therapy (HRT) has long been established as an effective treatment to alleviate these symptoms and mitigate associated complications such as osteoporosis and cardiovascular disease. Despite extensive research supporting the safety and benefits of modern HRT regimens, a substantial knowledge gap and limited accessibility persist, particularly among women in rural and coastal regions.

Corresponding Author:
Mrs. Susy Mary Thomas
Email: susylitho22@gmail.com
Mobile: +91 9633836881

Cultural stigma, misinformation, low literacy levels, and lack of healthcare resources contribute to poor awareness and underutilization of HRT in these populations, perpetuating preventable suffering and health risks.

Aim: To assess the level of knowledge regarding HRT among menopausal women residing in coastal areas.

OBJECTIVES:

- To assess the knowledge regarding HRT among women in selected coastal areas, Kollam
- To assess the effectiveness of STP on knowledge regarding HRT among women in selected coastal areas, Kollam
- To find out the association between pre-test knowledge scores of women regarding HRT and selected demographic variables.

MATERIALS AND METHODS

The research approach used was Quantitative approach.

Research Design

One-group pre-test–post-test design, which belongs to the pre-experimental approach.

Participants

The study participants were women above 45 years of age in selected coastal areas.

Inclusion criteria

- 1) Women above 45 years
- 2) Women who were available at the time of data collection
- 3) Women who were willing to participate in the study

Exclusion criteria

- 1) Women who were under treatment with hormonal replacement therapy.
- 2) Women who were not able to read and write Malayalam.

Sample Size and Sampling

Purposive Sampling was followed in the selection of subjects. The sample consisted of 60 women who were above 45 years in coastal areas of Pallithottam, Kollam.

Study Instruments

Structured knowledge questionnaire with multiple choice questions was used for collecting data.

Section A: Demographic Proforma

- Age
- Education
- Occupation
- Marital Status
- Type of family
- Dietary Pattern
- Any medical illness
- Previous knowledge regarding hormonal replacement therapy

Section B: Structured knowledge questionnaire

Structured Knowledge questionnaire which included 20 structured questions to assess the knowledge regarding hormonal replacement therapy among women in selected

coastal areas Pallithottam, Kollam.

Data collection technique

Data were collected after getting informed consent from participants.

Data Analysis

The data were analysed using descriptive and inferential statistics based on the hypotheses of the research study.

Table 1: Frequency and percentage distribution of pre-test knowledge scores

N=60

Score	Range	Frequency	Percentage
0-7	Poor	30	50%
8-14	Moderate	30	50%
15-20	Good	0	0%

Data in table 1 shows that 30 (50%) participants had moderate knowledge, while the remaining 30 (50%) participant had poor knowledge and no one had good knowledge.

Table 2: Frequency and percentage distribution of post-test knowledge scores

N=60

Score	Range	Frequency	Percentage
0-7	Poor	9	15%
8-14	Moderate	38	63.3%
15-20	Good	13	21.7%

Data in table 2 shows that, 63.30% of participants had moderate knowledge 21.70% had good knowledge and 15% had poor knowledge.

Effectiveness of structured teaching programme on knowledge regarding hormonal replacement therapy was tabulated in terms of mean and standard deviation. The data were analysed by Paired 't' Test.

Table 3: Mean and standard deviation and paired t test value of pre-test knowledge and post-test knowledge scores of women on hormonal replacement therapy.

Level of knowledge	Mean	S.D	t value
Pre-test	7.39	2.87	39.40
Post-test	11.56	3.27	

t=2.00 significant at 0.05 level

Table 4: Association between pre-test knowledge scores of women regarding hormonal replacement therapy and selected demographic variables

Sl No	Demographic variables	Level of knowledge		Chi-square	Table value	df	Level of significance
		Poor	Moderate				
1	Age						
	45-50	21	5	18.434	5.991	2	S
	51-55	3	14				
	>55	6	11				
2	Religion						
	Christian	27	27	0	5.991	2	NS
	Muslim	2	2				
	Hindu	1	1				
3	Education						
	Primary	23	17	2.70	5.991	2	NS
	Secondary	6	11				
	Higher to graduate	1	2				
4	Occupation						
	Private	2	1	1.50	5.991	2	NS
	Self	3	1				
	Home maker	25	28				
5	Marital status						
	Unmarried	2	1	0.86	7.815	3	NS
	Married	24	23				
	Widower	3	5				
	divorcee	1	1				
6	Type of family						
	Nuclear	23	19	1.26	3.841	1	NS
	Joint	7	11				
7	Income						
	<5000	23	17	2.76	5.991	2	NS
	5000-10000	5	10				
	>10000	2	3				
8	Dietary pattern						
	Vegetarian	3	1	2.43	3.841	1	NS
	Non vegetarian	20	36				
9	Any medical illness						
	Having medical illness	21	15	15.22	3.841	1	S
	Not having medical illness	2	22				
10	Previous knowledge						
	Magazines	1	0	24.13	9.488	4	S
	Relatives	9	0				
	Newspaper	1	0				
	Media	1	0				
	No knowledge	11	37				

Significant at 0.05level

S=Significant

NS =Non significant

Data in table 4 shows association between pre-test knowledge scores of women regarding hormonal replacement therapy and selected demographic variables. Age, presence of medical illness, and previous knowledge were significantly associated with pre-test knowledge scores, whereas religion, education, occupation, marital status, type of family, income, and dietary pattern were not significantly associated with the knowledge level of women regarding hormonal replacement therapy.

DISCUSSION

The present study was conducted to assess the effectiveness of a Structured Teaching Programme (STP) on knowledge regarding Hormonal Replacement Therapy (HRT) among women above 45 years residing in selected coastal areas of Kollam. The discussion is presented according to the study objectives.

Objective 1: To assess the knowledge regarding Hormonal Replacement Therapy among women.

The present study revealed that before the intervention, 50% of the participants had poor knowledge and 50% had moderate knowledge regarding HRT, while none of the participants had good knowledge. These findings indicate inadequate baseline awareness of HRT among women in the selected coastal community. Limited educational opportunities, misconceptions regarding menopause, and inadequate access to reproductive health information may have contributed to this finding.

These findings are consistent with recent literature. A study by Manson et al. (2024) reported that many postmenopausal women continue to have inadequate knowledge regarding the benefits, indications, and risks of HRT, resulting in underutilization of evidence-based therapy. Similarly, Harper-Harrison et al. (2024) emphasized that despite updated clinical recommendations supporting appropriate HRT use, public awareness remains poor, particularly among women from rural and socioeconomically disadvantaged communities. Thus, the present findings support existing evidence that educational interventions are needed to improve women's understanding of menopause management.

Objective 2: To assess the effectiveness of the Structured Teaching Programme on knowledge regarding Hormonal Replacement Therapy.

The present study demonstrated a statistically significant improvement in knowledge following the Structured Teaching Programme. The mean pre-test knowledge score increased from 7.39 ± 2.87 to 11.56 ± 3.27 in the post-test. The calculated paired t-value of 39.409 ($p < 0.05$) indicated that the educational intervention was highly effective in improving participants' knowledge regarding HRT.

These findings are supported by previous studies that have shown structured educational programmes significantly

improve women's awareness of menopausal health and HRT. Harper-Harrison et al. (2024) reported that health education plays an important role in enabling women to make informed decisions regarding menopausal symptom management. Likewise, the Women's Health Initiative review by Manson et al. (2024) emphasized that providing accurate, evidence-based education reduces misconceptions and improves acceptance of HRT among eligible women. The significant improvement observed in the present study confirms that structured teaching is an effective strategy for increasing knowledge among women in community settings.

Objective 3: To find the association between pre-test knowledge scores and selected demographic variables.

The present study found a statistically significant association between pre-test knowledge scores and age, presence of medical illness, and previous knowledge regarding HRT, whereas variables such as religion, education, marital status, type of family, monthly income, and dietary pattern showed no significant association.

Comparable studies have reported similar observations. Harper-Harrison et al. (2024) noted that previous exposure to health information and increasing age influence women's awareness regarding HRT. Recent menopause literature also suggests that women with chronic medical conditions often have greater interaction with healthcare professionals, thereby improving their opportunity to receive information related to menopause and HRT. However, demographic associations vary across different populations due to differences in educational status, cultural beliefs, healthcare accessibility, and study settings.

Overall, the findings of the present study are consistent with current evidence indicating that structured educational interventions significantly improve knowledge regarding Hormonal Replacement Therapy and that demographic characteristics such as age and previous exposure to information may influence baseline knowledge. The study highlights the importance of implementing regular community-based health education programmes to enhance awareness and promote informed decision-making regarding menopause and Hormonal Replacement Therapy among women in coastal communities.

CONCLUSION

The present study assessed the effectiveness of a Structured Teaching Programme (STP) on knowledge regarding Hormonal Replacement Therapy (HRT) among women above 45 years in selected coastal areas of Kollam. The findings of the study revealed that the majority of women had poor to moderate knowledge regarding HRT in the pre-test, indicating a need for educational intervention. After the administration of the structured teaching programme,

a significant improvement was observed in the post-test knowledge scores. The increase in mean score from 7.39 in the pre-test to 11.56 in the post-test, along with a statistically significant paired t value, clearly demonstrates that the structured teaching programme was effective in improving the knowledge of women regarding hormonal replacement therapy.

The study also identified a significant association between pre-test knowledge scores and selected demographic variables such as age, presence of medical illness, and previous knowledge regarding HRT. However, variables such as religion, education, occupation, marital status, type of family, income, and dietary pattern did not show a significant association with knowledge levels.

Therefore, the study concluded that structured educational programmes are effective strategies for improving knowledge regarding hormonal replacement therapy among women, particularly in coastal communities where access to health information may be limited. Regular health education programmes and community-based awareness initiatives are recommended to promote informed decision-making and improve women's health during the menopausal period.

Declaration by Authors

Ethical Approval: Institutional ethical committee approved this study. All participants gave written informed consent before the data collection began.

Acknowledgement: The authors express gratitude to the Institutional Ethics Committee, College authorities and all participants for their cooperation and support.

Source of Funding: None

Conflict of Interest: The authors declare no conflict of interest.

REFERENCES

1. McKinlay SM, Brambilla D J, Posner JG, The normal menopause transition 1992;14(2):103-15 [https://doi.org/10.1016/0378-5122\(92](https://doi.org/10.1016/0378-5122(92)
2. Ibeanu O, Modesitt S C, Ducie J hormone replacement therapy in gynaecologic cancer survivors: Gynecology Oncol.2011.03.012(2):447-54
3. <https://doi.org/10.1016/j.ygyno.2011.03.012>
4. MacLennan AH, Broadbent JL, Lester S, et al. Oral estrogen and combined estrogen/progestogen therapy versus placebo for hot flushes. Cochrane Database SystRev.2004;2004(4): CD002978.<https://doi.org/10.1002/14651858.CD002978> Pinkerton JV, Constantine GD. Compounded non-FDA-approved menopausal hormone therapy prescriptions have increased: results of a pharmacy survey. Menopause. 2015 Dec 7. [Medline Link].
5. Harper-Harrison G, Carlson K, Shanahan MM. Hormone Replacement Therapy. [Updated 2024 Oct 6]. In: Stat Pearls [Internet]. Treasure Island (FL): Stat Pearls Publishing; 2025 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK493191/>
6. Manson JE, Crandall CJ, Rossouw JE, et al. The Women's Health Initiative Randomized Trials and Clinical

Practice: A Review. JAMA. 2024;331(20):1748–1760. Doi<https://emedicine.medscape.com/article/276104-overview>:10.1001/jama.2024.6542

7. <https://www.oxfordlearnersdictionaries.com/definition/english/assess>
8. <https://www.oxfordlearnersdictionaries.com/definition/english/effectiveness>
9. <https://www.wisdomlib.org/concept/structured-teaching-programme#:~:text=The%20Structured%20Teaching%20Programme%20is%20an%20educational%20initiative%20aimed%20at,mothers%20of%20children%20under%20five><https://www.oxfordlearnersdictionaries.com/definition/english/hormone-replacement-therapy>