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ORIGINAL ARTICLE

Evaluate the Effectiveness of Planned Teaching on Knowledge Regarding Cervical Cancer among Reproductive Age Women at Selected Villages

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ABSTRACT

Background: Cervical cancer remains one of the leading causes of cancer-related deaths among women worldwide, particularly in developing countries. It is a **preventable and curable disease** when detected early through effective screening and timely management.

Aim and objectives: To assess the effectiveness of planned teaching programme on knowledge regarding cervical cancer among reproductive age group of women 2. To find out the association between post-tests level of knowledge regarding cervical cancer among reproductive age group of women with their selected demographic variables

Materials and Methods: A quantitative research approach with pre-experimental design one group pre-test and post-test design was adopted in the study. The study population comprised reproductive-age women residing in Thalambur. A total of

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30 participants were selected using a convenient sampling technique. Data were collected via a structured interview schedule. Subject experts established the tool's content validity, and the reliability coefficient was found to be r = 0.8, indicating good reliability.

Results: The study findings revealed that in the pre-test, **76.66%** of participants had **inadequate knowledge** regarding cervical cancer. Following the implementation of the planned teaching programme, the post-test results showed a **significant improvement**, with **73.33%** of women had **adequate knowledge.** The calculated paired *t*-test value **(t = 8.76**) was found to be **highly significant (p < 0.001). Conclusion:** The planned teaching programme was effective in enhancing knowledge of cervical cancer among reproductive-age women.

KEYWORDS

• Reproductive-Age Women • Cervical Cancer • Knowledge • Health Education

INTRODUCTION

Cervical cancer is one of the leading causes of cancer-related morbidity and mortality among women worldwide, especially in developing countries like India.[1] Despite being a preventable and curable disease, a large number of women are diagnosed at advanced stages due to lack of awareness, poor screening practices, and limited access to health education.[2] According to the World Health Organization (WHO), India accounts for nearly one-fifth of the global cervical cancer burden, with approximately 1.2 lakh new cases and 77,000 deaths reported annually. Most cervical cancer cases can be prevented through early detection of precancerous lesions using screening methods such as Pap smear and HPV testing.[3] However, many women in rural and semi-urban areas remain unaware of these preventive measures due to insufficient knowledge, cultural myths, and lack of health literacy.[4] Educating women during their reproductive years plays a key role in reducing the incidence and mortality associated with cervical cancer.[5] A **planned teaching programme** serves as an effective tool to enhance awareness, correct misconceptions, and motivate women to participate in regular screening and preventive practices.[6]

Statement of the problem

Evaluate the effectiveness of planned teaching programme on knowledge regarding cervical cancer among reproductive age women at thalambur, Chennai.

OBJECTIVES

1. To assess the effectiveness of planned teaching programme on knowledge regarding cervical cancer among reproductive age group of women.
2. To find out the association between post-tests level of knowledge regarding cervical cancer among reproductive age group of women with their selected demographic variables.

HYPOTHESES

H_1: There will be a significant difference between pre-test and post-test knowledge regarding cervical cancer among reproductive-age women.

H_2: There will be a significant association between post-test knowledge regarding cervical cancer among reproductive age women with their selected demographic variables.

MATERIALS AND METHODS

A pre-experimental research design with a one-group pre-test and post-test approach was adopted to assess the effectiveness of a planned teaching programme on knowledge regarding cervical cancer among reproductive-age women in Thalambur, Chennai. The study population included women aged 19–45 years residing in Thalambur who were able to understand and communicate in Tamil or English and were available during the data

collection period. A total of 30 women meeting the inclusion criteria were selected using a convenience sampling technique. Women who had been previously diagnosed with cervical cancer or any other reproductive tract malignancy or had received prior education on cervical cancer were excluded from the study. Data were collected using a structured tool comprising two sections: Section A captured demographic information including age, religion, education, occupation, income, duration of married life, and number of children, while Section B consisted of 20 multiple-choice questions assessing knowledge about cervical cancer. Each correct response was scored as one (1) mark and each incorrect response as zero (0), with scores categorized as <50% (inadequate knowledge), 51–75% (moderate knowledge), and >75% (adequate knowledge). Prior to data collection, written informed consent was obtained from all participants. The pre-test was conducted to assess baseline knowledge, followed by the implementation of the planned teaching programme, which provided education on causes, risk factors, symptoms, screening methods, and preventive measures for cervical cancer. The post-test was conducted on the seventh day using the same questionnaire to evaluate changes in knowledge. Each session and questionnaire completion took approximately 15–20 minutes, and participants were encouraged to ask questions for clarification, ensuring active engagement and understanding.

Plan for data analysis

The level of knowledge on cervical cancer among reproductive age women was analyzed using both descriptive and inferential statistics**.** The collected data were organized, tabulated, and analyzed using SPSS version 21.0. Descriptive statistics such as frequency, percentage, mean, and standard deviation were used to summarize the demographic characteristics of the participants and their knowledge scores. Inferential statistics, specifically the chi-square test**,** were used to assess the association between the level of knowledge and selected demographic variables such as age, religion, education, occupation, income, duration of married life, and number of children. This analytical approach helped to identify any significant relationships and patterns within the data.

RESULTS

Distribution of demographic variables of Reproductive age women

The socio-demographic data reveals that the majority of respondents in the age group of 30–36 years (43.34%), followed by 26–30 years (33.3%) and 21–25 years (23.3%). Most participants identify as Hindu (63.3%), Christians 33.4% and Muslims only 3.3%. Educationally, a significant proportion (73.33%) have completed schooling, while 16.67% are illiterate and only 10% have attained college-level education. Regarding occupation, 56.66% were engaged in manual labour, 36.67% were housewives, and 6.67% were employed in either private or government sectors. Income levels showed that 63.4% of respondents earned more than ₹5000 per month, while 20% earned between ₹3000–₹5000, and 16.6% earned less than ₹3000. With respect to the duration of married life, 46.67% had been married for 0–10 years, 30% for 11–15 years, and 23.33% for 15–20 years. In terms of family size, 60% of the respondents had two or more children, 40% had one child, and none reported being childless.

Table 1: Frequency and Percentage distribution of pre and post-test level of knowledge regarding cervical cancer among reproductive age women

Knowledge level	Pre-test		Post-test	
	N	%	n	%
Adequate	2	6.67	22	73.33
Moderate	5	16.67	6	20.00
Inadequate	23	76.66	2	6.67

Table 2: Effectiveness of planned teaching programme on knowledge regarding cervical cancer among reproductive age women

Variables	Test	Mean	Standard deviation	t- Value	df	P value
Knowledge	Pre-test	12.30	4.21	t= 8.76	29	<0.001
	Post-test	22.85	3.98			

*Significant at p< 0.05, **S** – Significant, **NS** – Non-Significant adolescents

Association between post-test level of knowledge regarding cervical cancer among reproductive age women

The demographic variables were analyzed to determine their association with the level of knowledge regarding cervical cancer among reproductive age women. The findings revealed that **none of the demographic variables showed a statistically significant association** with the level of knowledge such as age, religion, education, occupation, income, duration of married life, and number of children.

DISCUSSION

The current study was supported by Shiuli Akter (2024) evaluate the effectiveness of planned teaching programme on knowledge regarding cervical cancer among reproductive age group women in selected community area at Bengaluru. Findings of this study revealed that out of 60 samples, Majority 65% of them had poor knowledge (≤50%) scores, 35% of them had average knowledge (51.75%) scores and none of them had adequate knowledge (>75%) score in pretest regarding cervical cancer. In post-test among the 60 subjects under study, majority 63.33% of them had high knowledge level (>75% score), 36.67% had average knowledge level (51-75% Score) and none of them had poor knowledge level (≤ 50% score).[7]

Another study findings are consistent Kumar *et al*. (2018) conducted a quasi-experimental study among 60 rural women in Karnataka and reported a significant improvement in knowledge scores after structured teaching on cervical cancer (mean pre-test = 9.2, mean post-test = 18.6; $p < 0.001$).[8]

Taneja *et al.* (2020) emphasized the importance of health education in rural communities and concluded that structured teaching significantly improved knowledge regarding HPV vaccination and Pap smear testing among women. Their study reinforces the current findings and suggests the need for regular community-based teaching programs.[9]

The present study was supported by Rani PR *et al*. (2016) conducted a study to evaluate the effectiveness of a structured teaching programme on cervical cancer awareness among women. A total of 60 participants were assessed using a pre-test and post-test design. The findings revealed a significant improvement in knowledge scores after the educational intervention. Additionally, demographic variables such as age, level of education, occupation, and number of children showed **no statistically significant association** with the level of post-test knowledge.[10]

CONCLUSION

The findings of the study revealed that the majority of women had inadequate knowledge regarding cervical cancer, its warning signs, risk factors, prevention, and screening methods in the pre-test. After the implementation of the planned teaching program, there was a significant improvement in the post-test knowledge scores of the participants. This indicates that the structured health education intervention was highly effective in enhancing awareness among reproductive age group women. The study emphasizes that lack of awareness is one of the major barriers to early detection and prevention of cervical cancer. Since cervical cancer is preventable and curable if detected early, educating women about screening methods such as the Pap smear and HPV testing is essential. The findings clearly suggest that community-based planned teaching programs are a practical and powerful strategy to improve women's health knowledge, particularly in rural and underserved areas.

Declaration of Conflicting Interest

The authors declared no conflict of interest.

Statement of Consent and Funding

Informed consent was obtained from all participants prior to data collection after explaining the purpose of the study, confidentiality of data, and the right to withdraw at any stage without any penalty. No external funding was received for this study. The research was self-financed by the investigator.

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