

# Effectiveness of Planned Teaching Programme on Knowledge Regarding Cervical Cancer among Female Attendants of Patients with Cancer Admitted in a Cancer Hospital of Guwahati, Assam

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**Abstract:** Introduction: Women's awareness of cervical cancer is critical, as it is the most common malignancy. Objectives: Primary Objectives: 1. To assess the pre test level of knowledge on cervical cancer among female attendants. 2. To assess the post test level of knowledge on cervical cancer among female attendants. 3. To evaluate the effectiveness of planned teaching programme on knowledge regarding cervical cancer among female attendants. Secondary Objective: 4. To find out the association between pre tests level of knowledge score on cervical cancer among female attendant with selected demographic variables. Methods: A quasi - experimental one group pre - test post - test research design was adopted. Purposive sampling used to select 55 female attendants. A self - structured questionnaire served as the tool. A pre - test and planned teaching programme was given to the participants. Post - test was held on the 7th day. **RESULTS:** Majority, 21 (38.2%) were of 20 - 30 years, 31 (56.4%) were Homemaker, 35 (63.6%) were Hindu, 42 (76.4%) were married, 17 (30.9%) were having secondary education, 16 (29.1%) had a family income of Rs ≤ 10, 000, 33 (60%) were from rural area, 48 (87.3%) didn't have any family history of cervical cancer, 31 (56.4%) had heard about cancer cervix, 10 (32.3%) had media as a source of information about cervical cancer. Majority of participants that is 61.8% had average knowledge during post test. Results after using paired t test revealed that at 0.05 level of significance mean post test knowledge score was  $13.89 \pm 2.72$  higher than pre - test mean knowledge score  $5.25 \pm 3.26$  with calculated value was statistically significant. Therefore, the study was effective. Chi square values of pre test knowledge was found to be having significant association with age and occupation of female attendant only. So, H2 is partially accepted. Conclusion: The education programme on cervical cancer was successful in raising the level of knowledge.

**Keywords:** Knowledge, Planned teaching Programme, Cervical cancer, Female attendants

## 1. Introduction

The most prevalent cancer among women from lower socioeconomic backgrounds is cervical cancer. It is a disease which is completely treatable and avoidable at very low risk and low expense only when screening facilities with proper treatment, diagnosis, and follow - up are available. <sup>[1]</sup>

Women's health is of utmost importance in health care. With the modernisation of education, electronic and health agencies, women are getting more concerned about their health status but still maximum percentages of women are neglecting their own health. They are unwilling to seek help from health workers due to certain factors in the society like social stigma, economic impediment and strict superstitious assumptions related to health problems.

The deadliness of the cervical cancer can only be avoided through programmes like awareness, prevention, early discovery and treatment. Therefore, a few suitable actions are required to raise awareness and enriching the knowledge of women to change their attitudes towards following healthy lifestyles, identifying risk factors, causes, determining screening and preventive measures along with vaccination which is of extreme importance for cervical cancer prohibition.

## 2. Objectives of the Study

Primary Objectives:

- 1) To assess the pretest level of knowledge on cervical cancer among female attendants.
- 2) To assess the post - test level of knowledge on cervical cancer among female attendants
- 3) To evaluate the effectiveness of planned teaching programme on knowledge regarding cervical cancer among female attendants.

Secondary Objective:

- 1) To find out the association between pre - test level of knowledge score on cervical cancer among female attendant with selected demographic variables.

### Hypothesis of the Study

Hypothesis is tested at 0.05% level of significance

H1: There is a significant difference between pre - test and post - test knowledge scores of the female attendants regarding cervical cancer.

H2: There is a significant association between pre - test knowledge score among female attendants with selected demographic variables.

### 3. Methodology

#### Research Approach

As the nature of the problem permits a quantitative approach, hence it was applied for evaluation of the effectiveness of a properly planned programme of teaching regarding knowledge of cervical cancer among the female attendants of patients with cancer those that were admitted to a cancer hospital in Guwahati, Assam.

#### Research Design

A quasi experimental one - group pre - test post - test research design was used in this investigation.

#### Sample Size

Sample size for the study was 55.

#### Sampling Criteria

##### Inclusion criteria:

- Female attendant who are willing to participate in the study.
- Female attendant who can understand Assamese and English.

##### Exclusion criteria:

- Female attendants who are health care professionals.
- Female attendants with critically ill patients.
- Female attendant with history of cancer of cervix.

#### Sampling Technique

Purposive sampling technique was used for the current research study.

#### Variables

- **Independent variable:** Planned teaching Programme regarding Cervical cancer.
- **Dependent Variables:** Knowledge on cervical cancer among female attendants of patients in a cancer hospital.
- **Demographic Variables:** In this study demographic variables included Age, Occupation, Religion, Marital status, Level of Education, Family Income, Place of residence, Family history of Cervical Cancer, Previous knowledge regarding cervical cancer.

#### Description of Tool

The tool consisted of the following parts:

**Section A:** Demographic proforma consisted of 9 specific questions that included specific questions on Age, Occupation, Religion, Marital status, Education level, Family Income, Place of residence, Family history of Cervical Cancer, Previous knowledge regarding cervical cancer.

**Section B:** Self structured knowledge questionnaire with respect to pre and post teaching programme on cervical cancer. It was comprised of 20 questions that consists of the following sub - sections:

- Knowledge in regard to cervical cancer.
- Knowledge in regard to risk factor.
- Knowledge in regard to sign and symptoms.
- Knowledge in regard to screening as well as treatment.
- Knowledge in regard to preventive measures.

The following is how the scoring was interpreted:

- 1) Poor knowledge: 0 - 7
- 2) Average knowledge: 8 - 14
- 3) Good knowledge: 15 - 20

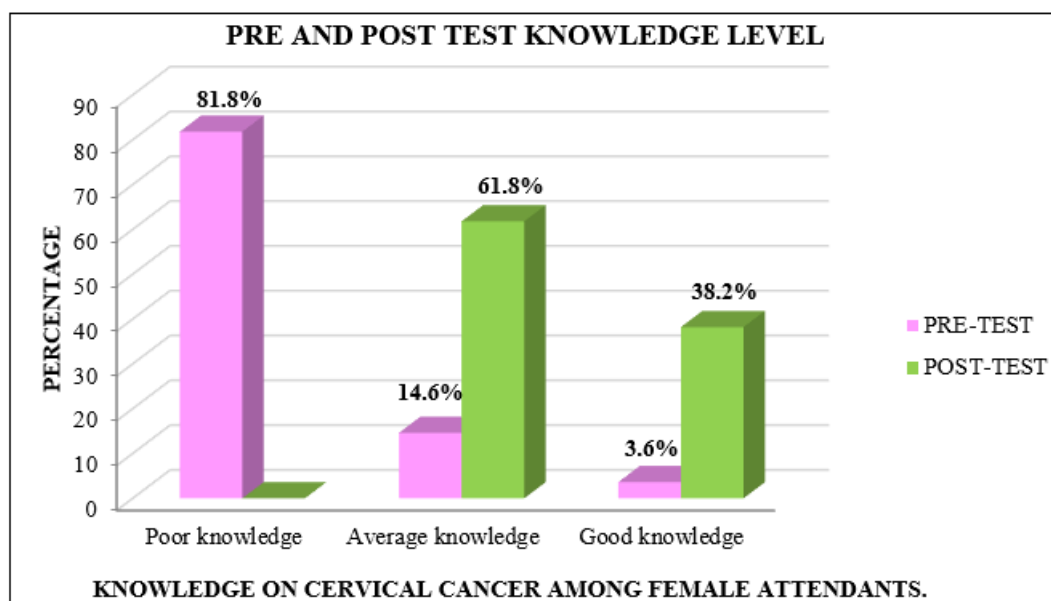
### 4. Results

#### Distribution of Pre - Test and Post - Test Level of Knowledge on Cervical Cancer among Female Attendants, n=55

Level of knowledge	Pre - test		Post - test	
	f	%	f	%
Poor knowledge (0 - 7)	45	81.8%	-	-
Average knowledge (8 - 14)	8	14.6%	34	61.8%
Good knowledge (15 - 20)	2	3.6%	21	38.2%
Total	55	100%	55	100%

The data presented in Table 1 showing the frequency and percentage distribution of knowledge score of the female attendants of patients with cancer where in Pre - test majority 45 (81.8%) had poor knowledge, 8 (14.6%) had average knowledge and 2 (3.6%) had good knowledge and in Post - test after the planned teaching programme majority 34 (61.8%) had average knowledge, 21 (38.2%) had good knowledge and none had poor knowledge

n=55



**Figure 1:** 3D Clustered Column Diagram Showing Distribution of Pre - Test and Post - Test Level of Knowledge on Cervical Cancer among Female Attendants.

**Effectiveness of planned teaching programme by comparing the difference between pre - test and post - test mean knowledge scores among female attendants of patients.**

**Table 2:** Effectiveness of Planned Teaching Programme on Knowledge Regarding Cervical Cancer Among Female Attendants, n=55

Effectiveness	Pre - test Mean±SD	Post - test Mean±SD	Mean D	Cal t value	Tab t value	df	p value
Knowledge	5.25±3.26	13.89±2.72	8.63	27.99	1.674	54	0.001*

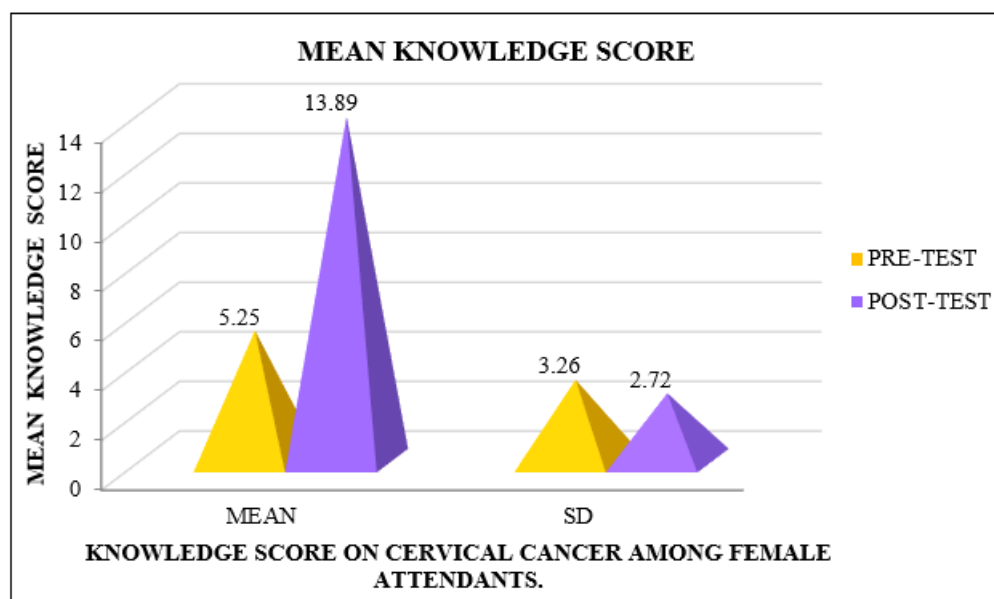
\*P<0.05 level of significance NS - Non significance

Table 2 illustrates the effectiveness of planned teaching programme on knowledge regarding cervical cancer among female attendants which was tested by using paired t test.

Result revealed that mean post - test knowledge score was  $13.89 \pm 2.72$  higher than pre - test mean knowledge score  $5.25 \pm 3.26$  with mean difference of 8.63 with calculated value ( $t=27.99$  at  $df=54$ ,  $p=0.001$ ) was statistically significant.

Findings showed that planned teaching programme was effective in improving the knowledge regarding cervical cancer among female attendants. At 0.05 level of significance and 54 df, tabulated t value is 1.674. As the tabulated t value is less than calculated t value, so there is a significant difference in pre - test and post - test knowledge score of the female attendants regarding cervical cancer. So,  $H_1$  is accepted.

n=55



**Figure 2:** 3D Clustered Pyramid Diagram Showing Mean Pre - Test and Post - Test Knowledge Score on Cervical Cancer Among Female Attendants

Figure 2 illustrates the effectiveness of planned teaching programme on knowledge regarding cervical cancer among female attendants which was tested by using paired t test.

Result revealed that mean post - test knowledge score was  $13.89 \pm 2.72$  higher than pre - test mean knowledge score  $5.25 \pm 3.26$ . Findings showed that planned teaching programme was effective in improving the knowledge regarding cervical cancer among female attendants.

The association between pre - test level of knowledge score on cervical cancer among female attendant with selected demographic variables which was tested by using chi - square test. Result revealed that age and occupation of female attendant was found significant association at  $p < 0.05$  with pre - test level of knowledge score on cervical cancer. So,  $H_2$  is accepted in terms of age and occupation.

$H_2$  is rejected for other demographic variables such as religion, marital status, level of education, family income, place of residence, any family history of cervical cancer and previous knowledge of cancer cervix. They were found to be non - significant with pre - test level of knowledge score on cervical cancer among female attendant.

## 5. Discussion

### Description of frequency and percentage distribution of socio - demographic variables of female attendants.

- Majority 21 (38.2%) were of the age group of 20 - 30 years.
- Majority 31 (56.4%) were Homemaker
- Majority 35 (63.6%) were Hindu.
- Majority 42 (76.4%) were Married.
- Majority 17 (30.9%) were having Secondary Education.
- Majority 16 (29.1%) had a family income of Rs  $\leq$  10, 000.
- Majority 33 (60%) were from rural area.
- Majority 48 (87.3%) didn't have any family history of cervical cancer.
- Majority 31 (56.4%) had heard about cancer cervix.

- Majority 10 (32.3%) had media as a source of information regarding prevention of cervical cancer.

The study findings are supported by a similar study conducted by Fawzy AM, Hossien YS, Ibrahim EM, Taba RR (Dec 2023) who have conducted a study on Effect of Educational Program on Knowledge and Attitudes towards Cervical Cancer Screening among Women of Reproductive Age. Purposive samples of 100 women were used for the study. Results reported that majority 36 (36%) were having secondary education, 57 (57%) of the participant women were a housewife.

### Frequency and percentage distribution of Pre - test and Post test knowledge of female attendants regarding cervical cancer.

In the present study results revealed that in Pre - test majority 81.8% had poor knowledge, 14.6% had average knowledge and 3.6% had good knowledge and in Post - test after the planned teaching programme majority 61.8% had average knowledge, 38.2% had good knowledge and none had poor knowledge.

The study findings are inconsistent with a similar study conducted by Said S, Hassan H, Sarhan A (March 2018) on Effect of an educational intervention on women's knowledge and attitude regarding cervical cancer. A purposive sample of (65) women' were included in the study. The study result showed that 75.4% had poor knowledge, 13.8% had average knowledge and 10.8% had good knowledge in Pre intervention phase and in Post intervention phase after majority 64.6 % had good knowledge, 24.2% had average knowledge and 9.2% had poor knowledge.

### Effectiveness of planned teaching programme by comparing the difference between pre - test and post - test mean knowledge scores among female attendants of patients.

In the present study, result revealed that mean post - test knowledge score was  $13.89 \pm 2.72$  higher than pre - test mean

knowledge score  $5.25 \pm 3.26$  with mean difference of 8.63 with calculated value ( $t=27.99$  at  $df=54$ ,  $p=0.001$ ) was statistically significant. Findings showed that planned teaching programme was effective in improving the knowledge regarding cervical cancer among female attendants. At 0.05 level of significance and 54 df, t value is 1.674. As the tabulated value is less than calculated value, so there is a significant difference in pre - test and post - test knowledge score of the female attendants regarding cervical cancer. So, the  $H_1$  is accepted.

The results are congruent with Naregal PM, Mohite VR, Katti AV, Hiremath P, Chendake M (2017) who studied on Effectiveness of planned teaching programme on knowledge regarding cervical cancer among women and concluded that the mean post - test knowledge score was  $11 \pm 1$  of women was significantly higher than their pre - test knowledge score  $7 \pm 2$ . The computed t - test statistic value was 10.229, since the p value for the test is  $<0.05$  so the planned teaching programme was effective enough to increase the knowledge of women regarding cervical cancer.

#### Association between the knowledge with demographic variables.

In the present study result revealed that age and occupation of female attendant was found significant association at  $p<0.05$  with pre - test level of knowledge score on cervical cancer. So, the  $H_2$  is accepted.

However,  $H_2$  is rejected in terms of other demographic variables such as religion, marital status, level of education, family income, place of residence, Any family history of cervical cancer and Previous knowledge of cancer cervix. They were found to be non - significant with pre - test level of knowledge score on cervical cancer among female attendant.

These results are agreed with a study conducted by Said S, Hassan H, Sarhan A (March 2018) on Effect of an educational intervention on women's knowledge and attitude regarding cervical cancer. A purposive sample of (65) women were included in the current study and was conducted at outpatient clinic affiliated at obstetric department at Benha University Hospital. Results found that there was a significant relation between knowledge and educational qualification and their occupational status at pre intervention phase.

## 6. Conclusion

The research was focused with the aim to assess the effectiveness of a planned teaching programme on knowledge regarding cervical cancer of female attendants of patients with cancer in the Dr. B. Borooah Cancer Institute. A self - structured knowledge questionnaire was used to gather the data. The participants were then given planned instruction that same day, and on the seventh day, a post - test was conducted. Based on data analysis, the investigator concluded that among 55 female attendants, the majority 61.8% had average, 38.2% had good, and none had poor knowledge after implementation of the planned teaching programme. So, the planned teaching programme was effective in improving the knowledge regarding cervical cancer among female attendants. There was a significant association at  $p<0.05$

between the pre - test knowledge with age and occupation except other demographic variables. Thus,  $H_1$  is accepted, but  $H_2$  has been accepted only in cases of age and occupation. For other demographic variables,  $H_2$  has been rejected. The study enables the investigator to conclude that there is a lack of knowledge and awareness among the women regarding cervical cancer. So, widespread awareness and screening programmes among all age groups are necessary by collaborating with other health care team members to improve the health status of women.

## References

- [1] Dagar MN. A Study To Assess The Effectiveness Of Planned Teaching Programme Regarding Prevention Of Cervical Cancer In Terms Of Knowledge And Attitude Among Women Of Reproductive Age Group In Selected Rural Community Of Delhi. *Int J Health Sci Res.* 2018 Aug; 8 (8): 196 - 204.
- [2] Kataki AC. Principles And Practice Of Common Cancer. Guwahati: Bhabani Offset And Imaging Systems Pvt. Ltd.; 2022. 67 - 83 p.
- [3] Department of Biotechnology, About Cervical cancer (Internet). Global Alliance for Chronic Diseases (GACD); Government of India; 2021. URL: <https://prescriptec.org/countries/india/>
- [4] United Nations. Cervical cancer (Internet). News Room; World Health Organization; 2022 Feb 22. URL: <https://www.who.int/news-room/fact-sheets/detail/cervical-cancer>
- [5] Indian Council of Medical Research. Profile of cancer and related health indicators in the north east region of India. Bengaluru: Director, ICMR - National Centre for Disease Informatics and Research, 4 March 2021. Available from: [https://ncdirindia.org/All\\_Reports/NorthEast2021/resources/NE\\_chapter\\_3.pdf](https://ncdirindia.org/All_Reports/NorthEast2021/resources/NE_chapter_3.pdf).
- [6] Singh D, Vignat J, Lorenzoni V, Eslahi M, Ginsburg O, Secretan BL, et al. Global estimates of incidence and mortality of cervical cancer in 2020: a baseline analysis of the WHO Global cervical cancer elimination initiative. *Lancet Glob Health* (Internet). 2022 Dec; 11 (2): 197 - 206. Available from: [https://www.thelancet.com/journals/langlo/article/PIIS2214109x\(22\)00501-0/fulltext](https://www.thelancet.com/journals/langlo/article/PIIS2214109x(22)00501-0/fulltext) DOI: [https://doi.org/10.1016/S2214-109X\(22\)00501-0](https://doi.org/10.1016/S2214-109X(22)00501-0).
- [7] ICO Information Centre on HPV and Cancer (HPV Information Centre). Human papilloma virus and related cancers in India Summary Report 22 - 10 - 2022. <http://www.hpvcentre.net/statistics/reports/IND.pdf>.