



Journal Homepage: - www.journalijar.com

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI: 10.21474/IJAR01/17078

DOI URL: <http://dx.doi.org/10.21474/IJAR01/17078>



RESEARCH ARTICLE

EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING CERVICAL CANCER AMONG REPRODUCTIVE AGE GIRLS IN SELECTED NURSING COLLEGE, LUCKNOW

Sarita Singh¹, Anjali Panday², Aneena Saji³, Deepika Tiwari⁴, Pragya Mishra⁵ and Divya Dwivedi⁶

1. Department of Community Health Nursing, College of Nursing, King George's Medical University, Lucknow, Uttar Pradesh, India.
2. Department of Community Health Nursing, SIPS, College of Nursing, King George's Medical University, Lucknow, Uttar Pradesh, India.
3. Fatima College of Nursing, 35-CMahanagar Nishat Ganj Lucknow, Uttar Pradesh.

Manuscript Info

Manuscript History

Received: 11 April 2023

Final Accepted: 14 May 2023

Published: June 2023

Key words:-

Reproductive Age Girls, Effectiveness,
Cervical Cancer, Structured Teaching
Programme

Abstract

Background: Cervical cancer is the most common malignancy and health problem in women of all sections of society. Cancer is a group of diseases characterized by the uncontrolled growth and spread of abnormal cells. Cervical cancer is the most common cause of death among women worldwide, with about 570,000 cases and 311,000 deaths, despite the fact that cervical cancer is preventable. It ranks as the first most frequent cancer among women between 21 – 44 yr of age.

Methods: A quantitative study was carried out in 35 adolescent girls and the non-probability purposive sampling technique was used for the selection of the subjects and the college. The data was collected through of using a structured knowledge questionnaire. A structured teaching program was developed and administered to the reproductive age girls (17-35 years).

Results: The data were analyzed by using descriptive and inferential statistics. The result revealed that after the intervention the mean and standard deviation of the post-test knowledge was 17.65 ± 2.11 being compared to mean and standard deviation of pre-test knowledge 7.2 ± 2.35 . The enhancement of knowledge score is the mean difference 10.54. It indicates that there was a significant improvement in the level of knowledge of participants. The calculated t- value (6.57) on analysis of the data was found to be significant at p value 0.05.

Conclusions: The study concluded that a structured teaching programme was significant effective to improving the level of knowledge of cervical cancer.

Copy Right, IJAR, 2023,. All rights reserved.

Corresponding Author:- Sarita Singh

Address:- Department of Community Health Nursing, College of Nursing, King George's Medical University, Lucknow, Uttar Pradesh, India.

Introduction:-

Therefore, in light, of present knowledge, advanced science and technologies, early detection and prompt treatment of cancer provide the best possible protection against cancer thereby providing empowerment for the individual, family, and society and for the nation as a whole.¹

Need For The Study

On a global brand breast cancer and cervical cancer are the most common female malignancies. Cervical cancer is the second most common type in women worldwide after breast cancer.² So every year, more than 300000 women die from cervical cancer and 80% of cervical cancer death occur in low & middle-income areas, So vaccination & proper knowledge of reproductive-age girls against HPV is safe & prevent cervical cancer. The incidence of cervical cancer is on the higher side in developing nations, as compared to developed countries. In the united states, the cervical cancer incidence and death rate declined by 50 %.³

About 25% of global mortality due to cervical cancer occurs in India. Yet in 2017, an estimated 12,820 new cases of cervical cancer were expected to be diagnosed and 4,210 women were estimated to die of the disease (American cancer society). The decline historically has been attributed to regular cervical cancer screening in the form of pap tests. If identified early to regular pap testing cervical cancer is one of the most successful treatable cancers. Currently, cervical pap testing is recommended for those with expected test results. The minimum is for every 3 yrs of age 21- 30yrs and then every 5 yrs from age 30 – 65 yrs within current testing for human papillomavirus. Routine screening has decreased the incidence of invasive cervical cancer in US where approximately 13,000 cases of invasive cancer and 59,000 cervical carcinomas in-situ are diagnosed. Investigators from past experience found that most women do not prevent themselves from early detection and seek treatment only in the advanced stage. So there is a need to improve the knowledge attitude of the women regarding cervical cancer which is possible only by health education.⁴

A quasi-experimental study on the effectiveness of planned teaching programme regarding the prevention of cervical cancer in knowledge among women of reproductive age group in a selected rural community of Delhi and the convenient sampling technique was used to select a sample of 60 women of reproductive age group and the data was collected through a structured interview. The result revealed that the percentage of women having adequate knowledge increased from 0 % to 63.34% after giving a planned teaching programme. The study concluded that a planned teaching programme on cervical cancer was found to be effective.^{1 3} So, the investigator has decided to impact structured teaching programmes on early detection and prevention of cancer cervix.⁵

Objectives:-

1. To assess the knowledge regarding cervical cancer among reproductive age girls in selected nursing college, Lucknow
2. To determine the effectiveness of structured teaching programme regarding cervical cancer on knowledge among reproductive age girls in selected nursing college, Luck now.
3. To determine the association between Pre-test knowledge score and selected socio-demographic variables of reproductive age girls in selected nursing college, Luck now.

Methods:-

Study design

In this study, quasi-experimental (one group pre-test-post-test design) carried out in selected college of nursing, Lucknow, Uttar Pradesh.

Study population

The population comprises of all reproductive age girls of 17- 35 years of Fatima nursing College, Lucknow, Uttar Pradesh .

Study area

The setting of the study was selected Fatima college of nursing 35- C Mahanagar Lucknow,U.P.

Sample size

The sample size was 35.

In this study sample size calculated using the acceptable formula for quasi-experimental study as:

$$n = (Z\alpha + Z1-\beta)^2 \times SD/ d^2$$

$$d^2 Z\alpha=1.9,$$

$$Z1-\beta=1.28, SD=3.6,$$

$$d=1.5 \quad n = (1.96+1.28)^2 \times (3.6)^2 / (1.5)^2$$

$$n = (3.24)^2 \times (12.96) / (2.25)^2$$

$$n = 10.49 \times 12.96 / 2.25;$$

$$n = 60.42$$

$$n = 60 \text{ Minimum}$$

60 samples for a study group based on the previous study. Subtracting 10% to make up for incomplete or poor responses due covid-19(pandemic).
So the total sample size was n=35.

Sampling Method

Non-probability, purposive sampling technique was used.

Inclusion criteria

The study includes a client who is:

1. All reproductive age girls who are willing to participate in study.
2. Reproductive age girls who give consent are willing to participate.
3. Reproductive age girls who are able to read and write in Hindi/ English.
4. Reproductive age girls who are present at time of conducting the study.

Exclusion criteria

1. Girls below 13 years and above 19 years.
2. Previous exposure regarding cervical cancer.

Development And Description Of Data Collection Tool

The tools were prepared based on the theoretical reviews of suggestion and research guide.

Development of the tool

1. Review of literature
2. Discussion with experts in the various departments
3. Construction of the structure questionnaire
4. Content validity
5. Pre-testing the tool (pilot study)
6. Reliability of tool

Data collection tool

Section A: Socio-demographic

The demographic variable used in the study is reproductive age girls was Age, Religion, Type of residence, Type of family, economic status of your family, family income, and previous knowledge regarding cervical cancer. The source of information by

Section B: Knowledge Questionnaire

Semi-structured knowledge questionnaire. A structured questionnaire related to cervical cancer among reproductive age girls. It consists of 21 items.

Table1:- Structure Knowledge Questionnaire criteria.

Score	Score (%)	Level of knowledge
1-7	3% -33%	Poor Knowledge
8-14	37-67%	Average Knowledge
15-21	77-100%	Good Knowledge

Development of structured teaching programme and AV aids

The STP was prepared under the following headings:

The structured teaching programme was giving to reproductive age girls. The structured teaching programme consist on introduction, definition, causes, risk factor, pathphysiology, stages of cervical cancer sign and symptom

assessment and diagnostic finding, medical and surgical management, nursing management, and prevention regarding cervical cancer.

Data collection

Data was collected through structured knowledge questionnaire to the reproductive age girls, for duration of 2 months from July 2021 to September 2022.

Statistical analysis Data entered in Microsoft excel and analysis was carried in SPSS. The association between pre-test knowledge score of reproductive age girls and their selected socio-demographic variables was done by chi-square test and effectiveness of structured teaching programme was done by using paired 't' test. The level of significance was set at p value $p < 0.05$

Ethical clearance and informed consent

The study was carried out after obtaining approval from the institutional Ethical Committee of Fatima College of nursing CSSM University, Kanpur and also the formal written permission from Principal, Nursing College 35-C Mahanager Nagar, Lucknow.

Results:-

Level of knowledge score reproductive age girls regarding cervical cancer.

The knowledge scores of the reproductive age girls in pre-test and post-test under the category's poor, average and good. In pre-test there was 77.14% of the respondents had poor level of knowledge, followed by 22.85% had average level of knowledge and none of them had good knowledge and the post test result indicated that 5.71% of the respondents had achieved average knowledge and 94.28 % of the population had gained good knowledge (Table-2)

Table 2:- Level of knowledge score reproductive age girls regarding cervical cancer (n=35).

Knowledgelevel	Category	Classification of respondents			
		Pre-test		Post-test	
		(f)	(%)	(f)	(%)
Good	70-100% (16-21 score)	00	00	33	94.28
Average	37-67% (8-15 score)	08	22.85	2	5.71
Poor	3-33% (<10 score)	27	77.14	00	00

Effectiveness of structured teaching programme by comparing the pre-test and post-test knowledge scores of reproductive age girls.

The mean and standard deviation of post-test knowledge i.e. 17.65 ± 2.11 being compared to mean and standard deviation of pre-test knowledge i.e. 7.11 ± 2.35 . The enhancement of knowledge score that was the mean difference of 10.54 indicate that there was a significant improvement in the level of knowledge of the sample which indicates that structured teaching programme was effective in improving the level of knowledge of regarding cervical cancer. The researcher calculated the paired t-test value for the tabulated data.

The calculated 't' value was 6.57. Then the researcher compared the calculated t value with the tabulated value. The tabulated value for this study with 34 degrees of freedom was 2.02. Since the calculated 't' value was higher than the tabulated value the researcher rejected the null hypothesis and accepted the alternative hypothesis. That means there is a significant change in the knowledge level of reproductive age girls in pre-test and post-test. So, this is evident that the structured teaching programme regarding cervical cancer was effective in terms of knowledge score (Table 3)

Table 3:- Effectiveness of Structured teaching programme on knowledge regarding cervical cancer.

Knowledgescore	Mean	Standarddeviation	Mean difference
Pre-test	7.11	2.35	10.54

Post-test	17.65	2.11
------------------	-------	------

Level of significance $p < 0.05$

Association between pre-test knowledge score of reproductive age girls with their socio-demographic variables.

The association of pre-test knowledge score with their selected demographic variables by using Chi-square, the result revealed that in experimental group there was no significant association of pre-test level of knowledge with the socio-demographic variables i.e. knowledge level, age, religion, type of residence, type of family, education of father & mother, occupation of mother, occupation of father, family income and source of knowledge observe. (Table-4)

Variables	Category	Respondents knowledge			P value Df	χ^2 value NS
		Good 70-100% (16-21 score)	Average 37-67% (8-15 score)	Poor 33% (1-7 score)		
Age (in years)						
15-17	3	0	0	3	7.81 Df=3	0.0738 NS
18-21	25	0	05	20		
22-24	06	0	0	06		
Above 24 years	01	0	0	0		
Religion						
Hindu	24	0	4	21	3.84 Df=1	0.125 NS
Muslim	0	0	0	0		
Christian	11	0	4	6		
Sikh/ Others	0	0	0	0		
Educational Qualification						
Primary	0	0	0	0	5.99 Df=2	0.006 NS
Higher.Secondary	7	0	4	3		
Graduate	27	0	3	24		
Post-Graduate	1	0	1	0		
Residential area you belong						
Urban	15	0	0	15	3.84 Df=1	0.0137 NS
Rural	20	0	7	13		
Slum	0	0	0	0		
Under Privilege	0	0	0	0		
Type of family						
Large	10	0	0	2	7.81 DF=3	0.0363 NS
Joint	15	0	5	5		
Nuclear	08	0	2	13		
Broken family	2	0	0	8		
Economic status						
High					3.84 Df=1	1NS
Low	0	0	0	0		
Middle	35	0	8	27		
Below poverty line	0	0	0	0		
Family Income(Rs)						
Below 5000	27	0	5	21	7.81 Df=3	0.594 NS
5,0001-1lakh	05	0	1	4		
1lakh-1.5 lakh	2	0	1	1		
Above 1.5 lakh	1	0	0	1		

Previous Knowledge						
Yes	5	0	2	3	3.84	1.724 NS
No	30	0	8	27	Df=1	
Source of knowledge						
TV	0	0	0	0	3.84 Df=1	1NS
Books	35	0	8	27		
Family /friends	0	0	0	0		
Seminars	0	0	0	0		

Table 4: Association between the pre-test knowledge score of reproductive age girls and their selected socio-demographic variables. (n=35).

Level of significant at ($p < 0.05$); S=Significant; NS=Non-significant

Discussion:-

The discussion of findings of study is to assess the level of knowledge regarding cervical cancer among reproductive age girls in selected nursing college, lucknow.

Section 1: Level of knowledge of cervical cancer among reproductive age girls.

The level of knowledge of reproductive age girls in pre test and post test was categorized in poor, good and average. In pre-test (22.85%) girls have average knowledge 77.14% girls have poor knowledge and 0 % girls have good knowledge. After implementing the intervention 94.28% girls has good knowledge 5.71 % have average knowledge and 0% has poor knowledge. The above mentioned findings are supported by the following study:

The result revealed that majority of reproductive age girls have average knowledge in pre-test (22.85%) and 94.28% girls have good knowledge in post test .The study concluded that structured teaching programme was effective in improving of knowledge level among reproductive age girls.

Section 2: Effectiveness of structured teaching programme regarding cervical cancer among reproductive age girls.

The researcher calculated the paired t- test value for the tabulated data. The calculated 't' value is 6.57. Then the researcher compared the calculated 't' value with the tabulated value .the tabulated value for this study with 34 degree of freedom is (2.02) Since the calculated value is lies greater than the tabulated value the researcher rejected the null hypothesis and accepted the alternative hypothesis that means there is a significant change in the level of knowledge of respondents in pre-test and post-test .

So, this was evident that the structured teaching programme on knowledge regarding cervical cancer was effective.

Section 3: Association between pre-test knowledge score of reproductive age girls with their socio-demographic variables.

The association of pre-test knowledge score with their selected demographic variables by using Chi-square, the result revealed that in experimental group there was no significant association of pre-test level of knowledge withthe socio-demographic variables i.e. knowledge level, age, religion, type of residence, type of family, education of father& mother, occupation of mother, occupation of father,family income and source of knowledge observe.

Conclusion:-

Based on these findings of the study, it shows that the level of knowledge regarding Cervical Cancer on knowledge among reproductive age girls in the pre-test score was lower than the post –test score. The mean and Standard deviation in pre- test and post-test knowledge score of the reproductive age girls. The data shows the mean knowledge score of the respondents in pre- test was 7.11 in post-test was 17.657. The Standard deviation in pre-test was 2.35 and post- test were 2.11 . The study finding proved that the structured teaching program intervened by the researcher was effective to increase the level of knowledge regarding Cervical Cancer among reproductive age girls. So there is a need of providing proper information and demonstration and education regarding Cervical Cancer, its importance, benefits and disease related to lack of knowledge. So, the health care providers should provide health education to improve their knowledge regarding Cervical Cancer or knowledge among reproductive age group girls.

A study carried out on College girls, which explored only the knowledge has reported low levels of awareness.

Recommendations:-

Similar studies can be replicated on larger samples for wider generalization mainly in the community. Similar studies can be conducted as a comparative study in rural and urban settings.

Acknowledgements:-

Authors would like to thank the college management, Principal Sister. Dhaniya Assistant Professor, CSSMU, Fatima College of Nursing, Lucknow, Uttar Pradesh and research coordinator Sister. Titty, Assistant Professor, department of obstetrics and Gynecology, CSSMU, Fatima College of Nursing, Lucknow,

Funding:

No funding sources Conflict of interest: None declared

Ethical approval:

The study was approved by the Institutional Ethics Committee of Fatima College of nursing, Lucknow, Uttar Pradesh.

References:-

1. India State-Level Disease Burden Initiative Collaborators. Nations within a nation: Variations in epidemiological transition across the states of India, 1990–2016 in the Global burden of disease study. *Lancet*. 2017;390:2437–60. [PMC free article] [PubMed] [Google Scholar]
2. [https:// www.cmro,WHO ,into/ non communicable disease / campaign /cervical cancer](https://www.cmro,WHO ,into/ non communicable disease / campaign /cervical cancer). (Last cited on June 2021)
3. Saha A, Chaudhary AN, Bhowmik P, Chatterjee R. Awareness of cervical cancer among female students of premier colleges in Kolkata, India. *Asian Pac J Cancer Prev*. 2010;11:1085–90. [PubMed] [Google Scholar]
4. Kumar HH, Tanya S. A study on Knowledge & Screening for cervical cancer among women in mangalore city. *Ann Med Health Sci (Res)*, 2014; 4 (5):751-756
5. Dagar N. 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; 8(8):196-204.