International Journal of Science and Research (IJSR)
ISSN: 2319-7064
Impact Factor 2025: 7.089

Effectiveness of a Structured Teaching Programme on Knowledge Regarding Cervical Cancer among Nursing Students in Himachal Pradesh

Kiran Kumari

Murari Lal Memorial School and College of Nursing, Solan, Himachal Pradesh, India
Email: *kiran89u[at]gmail.com*

Abstract: ***Cervical cancer is an important public health concern, and nursing students can support prevention through health education. This quasi-experimental study assessed the effectiveness of a structured teaching programme on cervical cancer knowledge among 60 first-year B.Sc. Nursing students at a nursing college in Solan, Himachal Pradesh. Purposive sampling was used to allocate 30 students to an experimental group and 30 to a control group. Knowledge was assessed using a structured questionnaire before and after the intervention. The experimental group's mean score increased from 11.87 (SD 2.763) to 20.77 (SD 2.885), while the control group's mean increased from 10.93 (SD 2.599) to 11.83 (SD 3.041). After the intervention, 28 (93.3%) students in the experimental group were classified as having adequate knowledge, compared with 2 (6.7%) in the control group. The findings suggest that the structured teaching programme was associated with improved knowledge. The score range and test statistics should be verified against the original dataset before publication.***

Keywords: Cervical cancer; Nursing students; Knowledge; Structured teaching programme; Quasi-experimental study

1. Introduction

Cervical cancer is a preventable cause of illness and death among women. Prevention includes human papillomavirus (HPV) vaccination, appropriate screening, early diagnosis and timely treatment. Nursing students are future health professionals who may educate individuals and communities about risk factors, prevention and screening.

This study assessed pre-test and post-test knowledge regarding cervical cancer among nursing students and evaluated the effectiveness of a structured teaching programme.

2. Materials and Methods

Design and Setting: A quantitative, quasi-experimental, non-randomized control-group pre-test–post-test design was used at Murari Lal Memorial School and College of Nursing, Solan, Himachal Pradesh, India.

Participants: Sixty first-year B.Sc. Nursing students were selected by purposive sampling. Thirty students were included in each group.

Instrument and Procedure: A structured questionnaire included socio-demographic information and 24 knowledge items. The stated score range was 0–24, categorized as inadequate (0–8), moderate (9–16) and adequate (17–24). Data collection was reported in April 2025. Both groups completed a pre-test; the experimental group then received a structured teaching programme using a PowerPoint presentation and handouts. A post-test was conducted after seven days.

Analysis and Ethics: Frequencies, percentages, means, standard deviations, paired t-tests and chi-square tests were reported, with significance set at 0.05. The thesis reports written informed consent and confidentiality procedures. Main-study ethics approval details must be confirmed before submission.

3. Results

Sixty students participated, 30 in each group. At pre-test, most students in both groups had moderate knowledge. In the experimental group, 25 (83.3%) had moderate, 3 (10.0%) inadequate and 2 (6.7%) adequate knowledge. In the control group, 24 (80.0%) had moderate, 5 (16.7%) inadequate and 1 (3.3%) adequate knowledge.

After the intervention, 28 (93.3%) students in the experimental group had adequate knowledge and 2 (6.7%) had moderate knowledge. In the control group, 2 (6.7%) had adequate knowledge and 28 (93.3%) had moderate knowledge. No students were reported in the inadequate category at post-test.

Table 1: Pre-test and post-test knowledge scores

Assessment	Group	Mean score	SD	Mean %
Pre-test	Experimental	11.87	2.763	49.44
Pre-test	Control	10.93	2.599	45.56
Post-test	Experimental	20.77	2.885	86.53
Post-test	Control	11.83	3.041	49.31

Table 2: Distribution of knowledge levels before and after intervention

Time / group	Adequate n (%)	Moderate n (%)	Inadequate n (%)
Pre-test – Experimental	2 (6.7)	25 (83.3)	3 (10.0)
Pre-test – Control	1 (3.3)	24 (80.0)	5 (16.7)
Post-test – Experimental	28 (93.3)	2 (6.7)	0 (0.0)
Post-test – Control	2 (6.7)	28 (93.3)	0 (0.0)

4. Discussion

The experimental group's mean knowledge score increased from 11.87 to 20.77, compared with an increase from 10.93 to 11.83 in the control group. The distribution of knowledge levels also shifted substantially toward the adequate category in the experimental group after teaching. These findings suggest that structured teaching may improve nursing students' knowledge of cervical cancer.

5. Conclusion

Among the students studied, the structured teaching programme was associated with improved cervical cancer knowledge. Larger studies with clearly documented ethical approval, verified statistical results and longer follow-up are recommended.

Declarations

Ethics approval and consent: Confirm and insert the main-study ethics committee name, approval number and date. The thesis reports written informed consent.

Funding: [Insert the accurate funding statement.]

Conflict of interest: [Insert the author's confirmed declaration.]

Data availability: [Insert an accurate data availability statement, as required by the journal.]

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