

A Descriptive Study To Assess The Knowledge And Attitude Regarding Cervical Cancer And Prophylactic Vaccination For Preventing The Cervical Cancer Among The Nursing Students In College Of Nursing, Bathinda, Punjab, India

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Abstract:

Background: Cervical cancer is the fourth most common cancer affecting the women worldwide. If women in India undergo periodic screening for cervical cancer, it could be possible to detect the cancer in early stages and thereby reducing mortality and morbidity. Screening would be broadly influenced by knowledge about cervical cancer.

Objectives: To assess the level of knowledge and attitude of nursing students regarding prophylactic vaccination for cervical cancer and associate the knowledge and attitude scores of students of the nursing college with their selected sociodemographic variables.

Material and methods: A non-experimental descriptive research design was employed for this study. The population of this study includes nursing students those who studying in college of nursing in Bathinda. Hundred students who met inclusion and exclusion criteria were included in this study. Eligible subjects were selected by using non-randomized convenient sampling technique by applying inclusion and exclusion criteria.

Results: The finding of the study revealed that 28% of the participants had inadequate knowledge and 72% samples had moderately adequate knowledge on cervical cancer. Regarding attitude, 76 %students had average attitude and 24 %students had low attitude on cervical cancer and prophylactic vaccination.

Conclusion: The study results show that the students have moderately adequate knowledge regarding cervical cancer and its prophylactic vaccination. So it emphasizes the need for increasing student's knowledge on cervical cancer and its prophylactic vaccination to create awareness and prevent the occurrence of the disease.

Keywords: cervical cancer, prophylactic vaccination, nursing students.

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I. Introduction

Cervical cancer is the second most common cancer among women worldwide.¹ In India, cervical cancer is one of the most common causes of cancer-related deaths. According to National Institute of Cancer Prevention and Research, one woman dies of cervical cancer every 8 minutes in India.² Cervical cancer is the third largest cause of cancer mortality in India accounting for nearly 10% of all cancer-related deaths in the country.³ According to WHO about 5,10,000 new cases of cervical cancer are detected during each year. WHO estimates that each year over 1.30 lakh Indian women were diagnosed with cervical cancer and over 74,000 of women died.⁴ Cervical cancer is a malignant neoplasm arising from cells originating in cervix uteri. It may be completely asymptomatic in early stages.⁵ In advanced stages, it may present as persistent pelvic pain, unexplained weight loss, bleeding between periods, unusual vaginal discharge, bleeding, and pain after sexual intercourse.⁶ Infection with human papillomavirus (HPV) types 16 and 18 cause 75% of cervical cancer globally.⁷ Other risk factors include tobacco consumption, multiple sexual partners, early age of sexual intercourse, increasing parity, prolonged use of oral contraceptive pills, and sexually transmitted diseases.⁸ More than three-fourth of these patients are diagnosed in advanced stages leading to poor prospects of long term survival and cure.⁹ So if women in India undergo screening for cervical cancer, it is possible to detect the cancer in early stages thereby reducing mortality and morbidity. Screening would be broadly influenced by:

- Knowledge about cervical cancer, its screening among women
- Role of health care providers who come in contact with women in hospitals and the sources of information
- Facilities available and the awareness of facilities.⁹

HPV vaccination is for primary prevention (serotype- specific with limited cross protection) of carcinoma cervix.¹⁰ with access to HPV vaccine and early detection, most cases of cervical cancer are

preventable. Pap smear test has been credited with dramatically reducing the number of cases of cervical cancer in developed countries.¹¹ Unfortunately, despite the availability of methods for prevention, >95% of women in India have never been screened for cervical cancer.¹²

There are several barriers to cervical cancer screening uptake for women in low resource areas like India that include-low level of awareness and knowledge.^{13,14} of risk factors and early signs and symptoms of disease, prevention services, stigma and misconceptions about female cancer and gynecological diseases, socioeconomic limitations, and an overall lack of national cervical cancer screening guidelines and policies.¹⁵ A descriptive study to assess the knowledge and attitude regarding cervical cancer and prophylactic vaccination for preventing the cervical cancer among the nursing students in college of nursing, Bathinda, Punjab, India was conducted with the following objectives.

Objectives

- To assess the level of knowledge and attitude of nursing students regarding prophylactic vaccination for cervical cancer by conducting pre-test.
- To find an association between pre-test knowledge score and attitude score among nursing students with their selected sociodemographic variables.

Assumption: The nursing students may have some knowledge and attitude on prophylactic vaccination for preventing the cervical cancer.

II. Materials and Methods

Research Design: Non experimental descriptive research design was employed for this study.

Setting: College of Nursing, Bathinda, Punjab

Population: The nursing students those who studying in the college of nursing, Bathinda.

Sample and Sampling Technique: Hundred students (100) who met inclusion and exclusion criteria were included in this study. Eligible students were selected by using non-randomized convenient sampling technique by applying inclusion and exclusion criteria.

Tools and Scoring: The tool divided into three sections A, B, C

Section -A: Questionnaire on Socio demographic variables

Section -B: Structured knowledge Questionnaire on cervical cancer and prophylactic vaccination, it covers various aspects in 40 questions which had dichotomous response, that is, correct and incorrect. Each correct response was scored as 1 and incorrect as 0. Maximum Score - 40 Minimum Score - 0

Section-C: Questionnaire on nursing student's attitude related to various aspects of cervical cancer and prophylactic vaccination. It measured by using 5 point Likert scale. Which were categorized as Strongly agree, Agree, Undecided, Disagree, and Strongly disagree.

III. Results

The data findings have been organized and finalized according to plan for data analysis and results are presented as under the followings.

Section I: Description of socio demographic characters of nursing students.

Section II: The level of knowledge and attitude of nursing students regarding prophylactic vaccination for cervical cancer.

Section III: Association between pre-test knowledge score and attitude score among nursing students with their selected sociodemographic variables.

Section I: Description of demographic characters of nursing students.

Table 1: Frequency and Percentage Distribution of Sociodemographic variables of nursing students. (N=100)

Socio Demographic Performance		Frequency(f)	Percentage (%)
Age (years)	18-20	39	39%
	21-23	59	59%
	24-26	2	2%
Sex	Male	17	17%
	Female	83	83%
Class	B.Sc. (N) 1st year	0	0%
	B.Sc. (N) 2nd year	32	32%
	B.Sc. (N) 3rd year	32	32%
	B.Sc. (N) 4th year	36	36%

Religion	Hindu	9	9%
	Sikh	70	70%
	Muslim	17	17%
	Christian	4	4%
Type of Family	Nuclear Family	64	64%
	Joint Family	24	24%
	Extended Family	12	12%
Area of Residence	Rural	48	48%
	Suburban	14	14%
	Urban	38	38%
Source of Information	Internet	63	63%
	Books and journals	31	31%
	Television	3	3%
	Newspaper	3	3%

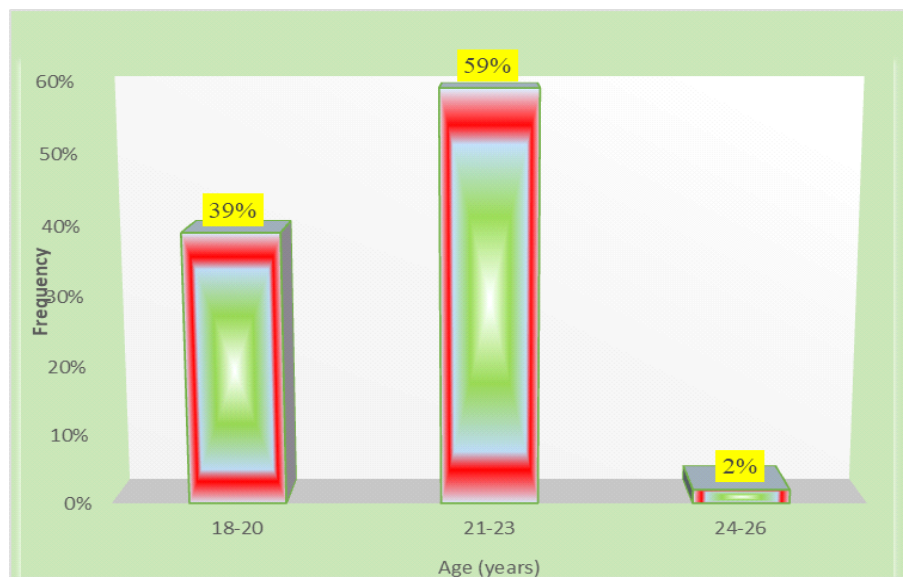


Figure 1: Frequency distribution of nursing students and their age

Figure 2: Frequency distribution of nursing students and their sex.

Figure 3: Frequency distribution of nursing students and their class.

Figure 3 shows that there were 32 (32%) respondents were in B.Sc. (N) second and third year , and 36(36%) respondents were from the B.Sc.(N) fourth year.

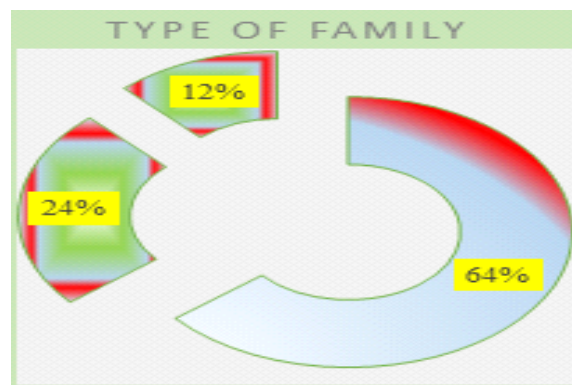


Figure 4: Distribution of nursing students and type of family.

Figure 4 Majority of the respondents, 64 (64%) were from nuclear family, whereas only 24 (24%) from joint family and 12(12%) were from extended family.

Figure 5: Frequency distribution of nursing students and their area of residence.

Figure 5 The majority of the respondents, 48 (48%) were from rural area, 38(38%) were from urban area, and only 14 (14%) respondents were from suburban.

Section II: Assess the level of knowledge and attitude of nursing students regarding prophylactic vaccination for cervical cancer.

Table 2: Knowledge Score of the students

Category Score	Percentage	Frequency
Adequate knowledge(27-40)	0	0
Moderately adequate knowledge (14-26)	72	72
Inadequate knowledge (0-13)	28	28

Figure 6: Measure of Knowledge score

Table 3: Mean and standard deviation of the Attitude score among nursing students (N = 100)

ATTITUDE SCORE					
Frequency Distribution		Mean %	Mean	SD	N
Age (years)	18-20	57.0%	62.72	4.70	39
	21-23	58.1%	63.93	5.09	59
	24-26	60.5%	66.50	0.71	2
Sex	Male	55.9%	61.47	4.21	17
	Female	58.1%	63.93	4.97	83
Class	B.Sc. (N) 1st year	0.0%			0
	B.Sc. (N) 2nd year	58.3%	64.16	4.68	32
	B.Sc. (N) 3rd year	55.8%	61.38	4.33	32
	B.Sc. (N) 4th year	58.9%	64.83	5.10	36
Religion	Hindu	59.0%	64.89	3.95	9
	Sikh	57.3%	63.04	4.81	70
	Muslim	58.6%	64.41	5.99	17
	Christian	58.9%	64.75	3.77	4
Type of Family	Nuclear Family	57.4%	63.11	5.29	64
	Joint Family	58.1%	63.92	4.29	24
	Extended Family	58.9%	64.83	3.93	12
Area of Residence	Rural	56.3%	61.90	4.19	48
	Suburban	59.4%	65.36	5.43	14
	Urban	59.0%	64.87	5.04	38
Source of Information	Internet	57.5%	63.25	4.92	63
	Books and journals	58.4%	64.23	5.28	31
	Television	57.0%	62.67	1.53	3
	Newspaper	56.7%	62.33	3.79	3

Section III: Association between pre-test knowledge score and attitude score among nursing students with their selected sociodemographic variables.

Table 4: Association between knowledge Scores with selected socio demographic Variables (N=100)

Socio demographic Variables		Levels(N=100)		Association with KNOWLEDGE Score				
Variable	Opts	MODERATELY ADEQUATE	INADEQUATE	Chi Test(X ²)	P Value	df	Table Value	Result
Age (years)	18-20	24	15	3.937	0.14	2	5.991	Not Significant
	21-23	46	13					
	24-26	2	0					
Sex	Male	15	2	2.678	0.102	1	3.841	Not Significant
	Female	57	26					
Class	B.Sc. (N) 1st year	0	0	2.189	0.335	2	5.991	Not Significant
	B.Sc. (N) 2nd year	20	12					
	B.Sc. (N) 3rd year	25	7					
	B.Sc. (N) 4th year	27	9					
Religion	Hindu	4	5	4.775	0.189	3	7.815	Not Significant
	Sikh	54	16					
	Muslim	11	6					

	Christian	3	1					
Type of Family	Nuclear Family	48	16	1.414	0.493	2	5.991	Not Significant
	Joint Family	17	7					
	Extended Family	7	5					
Area of Residence	Rural	39	9	4.297	0.117	2	5.991	Not Significant
	Suburban	8	6					
	Urban	25	13					
Source of Information	Internet	46	17	3.227	0.358	3	7.815	Not Significant
	Books and journals	20	11					
	Television	3	0					
	Newspaper	3	0					

Table 4 shows that there is no significance association between the level of knowledge scores and other socio demographic variables such as age in (years),sex, class, religion, type of family, area of residence and source of information. .The calculated chi-square values were less than the table value at the 0.05 level of significance.

Table 5: Association between Attitude scale with selected sociodemographic variables (N=100)

Demographic Variables		Levels(N=100)		Association with ATTITUDE Score				
Variable	Opts	AVERAGE	LOW	Chi Test	P Value	df	Table Value	Result
Age (years)	18-20	30	9	0.715	0.699	2	5.991	Not Significant
	21-23	44	15					
	24-26	2	0					
Sex	Male	14	3	0.453	0.501	1	3.841	Not Significant
	Female	62	21					
Class	B.Sc. Nursing 1st year	0	0	0.802	0.670	2	5.991	Not Significant
	B.Sc. Nursing 2nd year	26	6					
	B.Sc. Nursing 3rd year	23	9					
	B.Sc. Nursing 4th year	27	9					
Religion	Hindu	5	4	2.320	0.509	3	7.815	Not Significant
	Sikh	55	15					
	Muslim	13	4					
	Christian	3	1					
Type of Family	Nuclear Family	46	18	2.344	0.310	2	5.991	Not Significant
	Joint Family	19	5					
	Extended Family	11	1					
Area of Residence	Rural	43	5	9.757	0.008	2	5.991	Significant
	Suburban	8	6					
	Urban	25	13					
Source of Information	Internet	45	18	2.983	0.394	3	7.815	Not Significant
	Books and journals	25	6					
	Television	3	0					
	Newspaper	3	0					

Table 5: indicates that the level of attitude was significantly associated with the area of residence at the level of P 0.05 but, the other demographic variables were not associated with the level of attitude.

IV. Conclusion

- The nursing students had low and average knowledge on cervical cancer and prophylactic vaccination.
- The nursing students had average attitude on cervical cancer and prophylactic vaccination.
- No association between knowledge score and attitude with their selected socio demographic variables

Nursing Implications:

Nursing Practice:

Educational programs with effective teaching strategies make it easy for the students to understand the concepts in better way.

Nursing Education:

The nursing curriculum consists of knowledge related to health information and appropriate strategy to imparting the knowledge.

Nursing Administration:

Nurse administrators are the key persons to plan, organize and conduct the educational programs. Nurse administrator's supports are needed to conduct and evaluate health educational programs on cervical cancer and prophylactic vaccination.

Nursing Research:

The researcher should be able to conduct the research on each and every aspects of cervical cancer in order to generate in-depth and relevant scientific data.

Recommendations

- This study can be replicated with large samples.
- An interventional study can be conducted among women.
- A comparative study can be done in urban and rural setting

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