E-ISSN: 2663-0435
P-ISSN: 2663-0427
www.nursingpractice.net
IJMNP 2024; 7(2): 10-13
Received: 09-05-2024
Accepted: 16-06-2024

P Swathi
M.Sc. (N) II Year, SIMS College of Nursing, Mangaldas Nagar, Guntur. Andhra Pradesh, India

Indira V
Assistant Professor, SIMS College of Nursing, Mangaldas Nagar, Guntur. Andhra Pradesh, India

Corresponding Author:
P Swathi
M.Sc. (N) II Year, SIMS College of Nursing, Mangaldas Nagar, Guntur. Andhra Pradesh, India

A study to assess the effectiveness of structured teaching programme on knowledge regarding human papilloma virus vaccination among adolescent girls in selected colleges at Guntur

P Swathi and Indira V

DOI: https://doi.org/10.33545/26630427.2024.v7.i2a.166

Abstract
Background: The human life is the most beautiful gift of god to universe. The continuity of the life one art his maintain need by a birth of new human being and forth a the has created a very beautiful and precious thing that is "adolescent.
Objective: To assess the effectiveness of structured teaching programme on knowledge regarding HPV vaccination among adolescent girls in experimental and control group.
Materials and Methods: A quasi-experimental research design was adopted and a total of 60 adolescent girls were selected by using non-probability purposive sampling technique. Data were collected by using a structured knowledge questionnaire.
Results: Majority i.e., 21 (70%) of intranatal women in experimental group had severe labor pains in pre-test, where as in post-test 26(87%) of them had moderate labor pains. In the control group majority i.e. 18 (60%) had severe pains in pre-intervention and post intervention respectively. The pre-intervention mean of the intranatal women in experimental group was 8.0 with a standard deviation of 1.26 while in the post intervention, the mean was 4.46 with a standard deviation of 1.33. The calculated paired 't' test was 13.6 which was found to be significant at p=0.05. Age, gravidity and parity were found significantly associated with the labour pains.
Conclusion: Health education programmes must be conducted to further improve knowledge of adolescent girls regarding human papilloma virus vaccination.

Keywords: HPV vaccination, adolescent girls

Introduction

Human Papillomaviru (HPV) vaccination stands as a significant milestone in modern medicine's ongoing efforts to combat preventable diseases. HPV is a group of viruses that can lead to various health issues, including genital warts and certain types of cancers. The development of vaccine targeting specific HPV strains has revolutionized preventive healthcare, offering powerful protection against the most common and high risk forms of the virus introduced in the early 21st century, HPV vaccines have emerged as a cornerstone of public health initiatives aimed at reducing the incidence of HPV-related conditions. These vaccines work by stimulating the immune system to produce antibodies that effectively fight to HPV infections [1].

HPV vaccines are used to prevent HPV infection and therefore cervical cancer. Vaccinating females between the ages of nine to thirteen is typically recommended, with many countries also vaccinating males in that age range. In the United States, the CDC recommends that all 11 to 12-year-olds receive two doses of HPV vaccine, administered 6 to 12 months apart. The vaccines require three doses for those ages 15 and above. HPV vaccines are recommended in the United States for women and men who are 9-26 years of age, and are also approved for those who are 27–45 years of age [2].

Human papilloma virus (HPV) vaccines are vaccines that prevent infection by certain types of human papillomavirus (HPV). Available HPV vaccines protect against either two, four, or nine types of HPV. All HPV vaccines protect against at least HPV types 16 and 18, which cause the greatest risk of cervical cancer [3]. It is estimated that HPV vaccines may prevent 70% of cervical cancer, 80% of anal cancer, 60% of vaginal cancer, 40% of vulvar cancer,

and show more than 90% efficacy in preventing HPV positive oropharyngeal cancers. They additionally prevent some genital warts, with the quadrivalent and non-valent vaccines that protect against HPV types HPV-6 and HPV 11 providing greater protection [4].

Objectives

1. To assess the pre-test-post-test level of knowledge regarding Human Papilloma virus vaccination among adolescent girls in experimental and control group.
2. To determine the effectiveness of structured teaching programme on knowledge regarding Human Papilloma virus vaccination among adolescent girls in experimental group.
3. To compare the pre-test and post-test level of knowledge regarding Human Papilloma virus vaccination among adolescent girls in experimental and control group.
4. To find out the association between the knowledge regarding Human Papillomavirus vaccination with selected demographic variables among adolescent girls in experimental group and control group.

Hypothesis

H_1: There is a significant difference between the level of knowledge before and after STP in experimental and control group.

H_2: There is a significant association between post-test level of knowledge among adolescent girls in experimental and control group with their selected socio-demographic.

Materials and Methods

Research approach: Quantitative research approach.

Research design: Quasi-experimental pre-test posttest control group design.

Setting of the study: Kotharaghuramaiah junior college and Krishnaveni junior college, Guntur.

Sample and sampling technique: 60 adolescent girls i.e. 30 in experimental group and 30 in control group were selected using non-probability purposive sampling technique.

Method of data collection: A structured knowledge questionnaire was used.

The tool was organized under the following sections

Part-I: Socio demographic data

Demographic Variables include age, education, residence, types of family, religion, what is a birth order position, previous knowledge of human papilloma virus vaccination, source of information, family income.

Part-II: Structured knowledge questionnaire

Structured questionnaire consists of thirty (30) multiple choice questions. Each question consists of four (4) options in that one option was correct and each correct answer carries one (1) mark and each wrong answer carries zero (0). Total score was thirty (30).

Validity

Validity of the tool was obtained from 4 experts in obstetrical and Gynaecological nursing for their opinions and suggestion. Based on the suggestions of the experts the tool was modified before conducting main study.

Reliability: The r=0.84. Hence the tool was found highly reliable.

Pilot study

Self-administered structured questionnaire was given to 10 adolescent girls at Guntur krishnaveni junior collge, Guntur to check the feasibility, appropriateness of the instrument. 10 adolescent girls were selected conveniently. 5 experimental group and 5 control group adolescent girls were selected purposively. The average time taken to collect the data was 20 min. The data was collected from 4- 12-2023 to 10-12-2023.

Data collection procedure: The data were collected between 08/12/2023 to 25/1/2024 in the following phases

Phase I: Pre-test was conducted using structured knowledge questionnaire.

Phase II: STP was given on HPV vaccination in the classroom for a duration of 45minutes. All quesries were clarified.

Phase III: Post test was conducted on day 7 after STP using the same questionnaire.

Plan for data analysis

Descriptive statistics

Frequency and percentage were used to analyze demographic data.

Mean and standard deviation for analyzing the level of knowledge.

Inferential statistics

Paired 't' test to find effectiveness of STP.

Independent 't' test to compare between experimental and control group.

Chi-square to find association between knowledge with their sociodemographic data.

Results

Table 1: Frequency and percentage distribution of adolescent girls according to their sociodemographic data N=60

S. No.	Socio-demographic variable	Group			
		Exp.		Control	
		F	%	F	%
1.	**Age**				
	16 years	8	27	6	20
	17 years	10	33	4	13
	18 years	10	33	16	53
	19 years	2	7	4	13
2.	**Grade**				

	Intermediate I year	15	50	16	53
	Intermediate II year	15	50	14	47
3.	**Residence**				
	Urban	12	40	14	47
	Rural	15	50	13	43
	Tribal	2	7	1	3
	Slum	1	3	2	7
4.	**Religion**				
	Hindu	9	30	4	13
	Muslim	8	27	9	30
	Christian	7	23	11	37
	Others	6	20	6	20
5.	**Previous knowledge**				
	Yes	10	33	5	17
	No	20	67	25	83
6	**Sources of information**				
	Family	4	13	5	17
	Friends	6	20	5	20
	Media	12	40	10	33
	Others	8	27	10	33

Table 2: Level of knowledge of adolescent girls in experimental group N=30

S. No.	Level of knowledge	Pre		Post	
		F	%	F	%
1.	Inadequate	26	87	0	0
2.	Moderate	4	13	6	20
3.	Adequate	0	0	24	80

Table 3: Level of knowledge of adolescent girls in control group N=30

S. No.	Level of knowledge	Pre		Post	
		F	%	F	%
1.	Inadequate	27	90	28	93
2.	Moderate	2	7	2	7
3.	Adequate	1	3	0	0

Table 4: Effectiveness of STP on HPV vaccination in experimental group N=30

S. No.	Group	Pre-test		Post-test		Paired 't' test
		M	SD	M	SD	
1.	EG	11.9	4.5	21.8	3.9	8.1*

Table 5: Comparison between pretest and posttest knowledge among adolescent girls in experimental and control group N=60

S. No.	Criteria	EG		CG		Unpaired 't' test
		M	SD	M	SD	
1.	Post-test	11.9	4.5	15.5	1.5	4.3*
2.	Post-test	21.8	3.9	15.8	1.4	

Table 6: Association between level of knowledge among adolescent girls with their sociodemographic variables in experimental and control group. N=60

S. No.	Sociodemographic variables	χ^2 value (p=0.05)	
		EG	CG
1.	Age	2.6	1.6
2.	Grade	2.16	2.9
3.	Residence	5.2	4.8
4.	Religion	2.8	14.9*
5.	Previous knowledge	3.6	2.6
6.	Sources of information	4.4	3.8

***** Denotes significant

Discussion

The present study was conducted to assess the effectiveness of STP on knowledge regarding HPV vaccination among adolescents girls.

In the present study, majority of the intermediate 1st and 2nd year students had moderate (54%) knowledge while (46% had inadequate knowledge and none had adequate knowledge of HVP vaccination. This finding was supported by Chowdhury S, *et al*. (2022) in which 42.5% adolescent girls participants showed good 58 knowledge. The paired 't' test was 8.1 which was found significant while the unpaired 't' test was 4.3. This finding is supported by a study conducted by Lalia (2023) in which a comparison was fund with paired 't' test 15.5 [6]. Hence, H1 was accepted. From among the variables only religion was found significant at 0.05 LOS.

Conclusion

Further, the health education activities must be conducted by hospital personnel in community settings to create awareness among adolescent girls to prevent cervical cancer.

Recommendations

- A similar study can be done on a large sample to generalize the findings.
- A similar study can be carried out to evaluate the effectiveness of various other teaching methods.
- A comparative study can be done.
- A descriptive study can be done to assess the level of knowledge.

Ethical clearance: Written permission from the authorities of the ccolleges was obtained before conducting the study.

Sources of funding: Self.

Conflict of interest: Nil.

References

1. Wang X, Han S, Li X, Wang X, Shan W, Ma L. Prevalence and distribution of human papillomavirus. Virol J. 2022;19(37):1.
2. Choi S, Ismail A, Gagos GP, Boussios S. HPV and cervical cancer. Pathogen J., 2023, 12(2).
3. Addisu D, Gebeyehu NA, Belachew Y. Knowledge, attitude, and uptake of HPV vaccinations among adolescents. BMC Women's Health. 2023;23(279):1.
4. Khatiwada M, Kartasasmita C, Suzanamediani H, Delprat C, Van Hal G, Dochez C. Knowledge, attitude,

and acceptability of the HPV vaccination among university students. Front Public Health. 2021;9:616456.
5. Chowdhury S, Ara R, Roy S, *et al*. Knowledge, attitude, and practices regarding human papillomavirus and its vaccination among young medical professionals and students in Bangladesh. Clin. Exp. Vaccine Res. 2022 Jan;11(1):63-71. DOI: 10.7774/cevr.2022.11.1.63. PMID: 35223666; PMCID: PMC8844672.
6. Lalia H. Assess the effectiveness of a structured teaching programme on knowledge of HPV infection and vaccination among adolescent girls at a selected school in Greater Noida, UP. Zenodo. 2023;8:329-331. DOI: 10.5281/zenodo.10021338.

How to Cite This Article
Swathi P, Indira V. A study to assess the effectiveness of structured teaching programme on knowledge regarding human papilloma virus vaccination among adolescent girls in selected colleges at Guntur. International Journal of Midwifery and Nursing Practice 2024; 7(2): 10-13.