**Impact Factor 2024: 7.101** 

# Effectiveness of Structured Teaching Programme on Knowledge and Attitude regarding HPV Vaccination among School Girls (Age Group 9-16 Years) in Selected Schools of Shimla, Distt. Shimla, H.P.

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Abstract: <u>Background</u>: Human papilloma virus (HPV) is responsible for malignancy and mortality in women across the world and has claimed the lives of thousands of women. Its mortality exemplifies health inequality, as its rates are higher in lower- and middle-income countries. The World Health Organization recommends human papilloma virus (HPV) vaccines as a part of routine vaccination in all countries along with other preventive measures. <u>Methods and Material</u>: Non- equivalent control group pre- test post- test design was used. The sample size was 100 school girls (age 9-16 years) selected by convenience sampling technique from Govt. Model Girls Senior Secondary School, Portmore and Govt. Girls Senior Secondary School, Lakkar Bazar. Data was collected by self-Structured knowledge questionnaire and attitude scale. Structured Teaching program was administered. <u>Results</u>: In pre-test knowledge, 20(40%) had good knowledge and majority 30(60%) had average knowledge. In post-test knowledge 5(10%) had very good knowledge, 40(80%) had good knowledge and 5(10%) had average knowledge. In pre-test attitude 1(2%) had a positive attitude, 49(88%) had a neutral attitude. In post-test attitude 8(16%) had positive attitude, 42(84%) had neutral attitude. <u>Conclusion</u>: The study findings concluded that the Structured Teaching programme was effective in improving the knowledge and attitude regarding Human Papilloma Virus Vaccine.

Keywords: Structured Teaching programme, Knowledge, Attitude, School Girls, HPV vaccination

### 1. Introduction

Health is the fundamental right of every human being. Since India is the most populous country, health or well-being of women is very important. The women of today's world not only face diseases of genetic origin, but also the diseases that arise from the poor habits of the society. Girl's reproductive health is a vital aspect of overall well-being because it influences their development from adolescence into adulthood. Today's girls are the mothers of future, embodying the potential to shape the next generation and influence societal progress. Therefore, such practices and essential policies are needed that support today's girls, paving the way for them to become strong and capable mothers thereby fostering a healthier, more prosperous future for all.

Human Papilloma Virus is the most common sexually transmitted infection. At least half of the sexually active population likely to become infected in their life time. [1] Human papilloma virus is a small, non- enveloped deoxyribonucleic acid virus that infects skin or mucosal cell. 13 or more than 100 known human papilloma virus (HPV) genotypes can cause cancer of the cervix. These types are also associated with other anogenital cancers and cancers of head and neck whose prevalence rate is 30.86%. The two most common high- risk genotypes (HPV 16 and 18) cause approximately 70% of all the cervical cancers. Human papilloma virus (HPV) was estimated to cause almost half a million cases and 250,000 deaths from cervical cancer in 2002, of which about 80% occurred in developing countries. Human papilloma virus (HPV) is highly transmissible, with peak incidence soon after the onset of sexual activity and most persons acquire infection at some times in their lives. [2]

Cervical cancer is the most common cause of cancer deaths among women in developing countries. Human papillomavirus (HPV) has caused severe infections globally including cervical cancer. Worldwide there are an estimated 4.7 lakhs new cases of cervical cancer that results in 2.3 lakhs deaths per year.[3] As per WHO fact sheet worldwide there are an estimated 6 lakhs 4 thousand new cases of cervical cancer that results in 3 lakhs 42 thousand deaths in 2020. Most of these cases and deaths occur in low- and middle-income countries. [4] Cancer of the cervix is the second most common cancer among women worldwide, with an estimated 5.3 lakhs new cases and 2.7 lakhs deaths in 2008. About 86% of the cases occur in developing countries.

The World Health Organization recommends human papilloma virus (HPV) vaccines as a part of routine vaccination in all countries along with other preventive measures. Vaccinating girls around the ages of nine to thirteen years is typically recommended. The vaccine provide protection for at least 5-10 years. [5] Widespread vaccination has the potential to reduce cervical cancer deaths around the world by as much as two thirds if all women were taken the vaccine. In addition, the vaccine can reduce the need for the medical care, biopsies and invasive procedures and anxieties related to abnormal pap smear test and follow up procedures. A pre-experimental study was conducted in schools of Greater Noida, U.P. among school girls aged 13-15 years to assess the effectiveness of Structured Teaching Programme on knowledge of HPV infection and vaccination. 60 girls were selected as a sample by purposive sampling technique. Knowledge questionnaire was used to collect the data. Descriptive and inferential statistics were used to analyze data. The study revealed that the in pre-test around 48.5% had poor level of knowledge, about 12.1% had average

Volume 14 Issue 7, July 2025
Fully Refereed | Open Access | Double Blind Peer Reviewed Journal
<a href="https://www.ijsr.net">www.ijsr.net</a>

**Impact Factor 2024: 7.101** 

knowledge and no one participants had good knowledge. Post-test findings revealed that around 51.5% of them were having average level on knowledge, about 3.0% of them having good level of knowledge and 5.1% of them had poor knowledge. The study concluded that the intervention was effective in improving the knowledge of adolescent's girls. [6]

### 2. Methodology

### Research Design

The research design for the study was quasi experimental nonequivalent control group pre- test post- test design to accomplish the main objective i.e. to evaluate the effectiveness of Structure Teaching Programme on knowledge and attitude regarding HPV vaccination among school girls (age 9-16 years) in selected Schools of Shimla.

### **Research Setting**

The Final study was conducted at Govt. Model Girls Senior Secondary School, Portmore and Govt. Girls Senior Secondary School, Lakkar Bazar.

### Sample Size

The sample size comprises 100 School girls of District Shimla of Himachal Pradesh. In this, 50 school girls were selected from one school which was experimental group and 50 from other school which was control group.

### **Research Sampling Technique**

The choice of sampling technique depends upon the nature of problem, the kind of variables included in the study, the type of research and the number of sampling unit. Sampling unit selected for present study was non- Probability Convenient sampling technique.

### **Selection and Development of Tool**

Tool was selected on the objectives of the study. Self - Structured Questionnaire and Likert Scale was used to evaluate the effectiveness of Structure Teaching Programme on knowledge and attitude regarding HPV vaccination among school girls (age 9-16 years). The tool was developed from various sources like textbook, journals and discussion with experts in field of Obstetrics and Gynaecology, community and blue print.

### **Ethical Considerations**

Research approval was approved by research committees prior to the pilot and main study. Permission was sought from ethical committee of S.N.G.N.C., I.G.M.C., Shimla, Principal, Sister Nivedita Govt. Nursing College, Shimla, Principal, Govt. Sr. Sec. School, Totu, Shimla, Principal, Govt. Sr. Sec. School, Boileauganj, Shimla, Principal, Govt. Model Girls Senior Secondary School, Portmore, Shimla, Principal, Govt. Girls Senior Secondary School, Lakkar Bazar, Shimla.

An informed consent was obtained from participants before the collection of data. Confidentiality and privacy of data was maintained.

### **Data Collection Procedure and Analysis**

Collection of data was done in two-phase i.e. pre-test and post-test. Written consent was taken from the study subjects. Pre-test of control group was conducted on 5/6/2024 and pre-test of experimental group was conducted on 10/6/2024 by using structured knowledge questionnaire and attitude scale. Structured teaching programme was administered on 20/6/2024. After 1 week on 27/6/2024 post-test was conducted by using same tool. After the collection of data researcher was thankful to the study subjects and concerned authority for their full cooperation. According to the objectives, hypothesis of the study and opinion of the experts it was planned to organize, tabulate, analyze and interpret with data by using both descriptive and inferential statistics.

### 3. Results

### i. Socio-Demographic Characteristics

This section describes the characteristics of school girls of Govt. Model Girls Sr. Sec. School Portmore and Govt. Girls Sr. Sec. School Lakkar Bazar, Shimla as per age in years, religion, studies in, belong from, presently residing in, type of family, education status of mother, occupation of mother, education status of father, occupation of father, monthly income and previous knowledge. Frequency and percentage distribution were computed for describing the sample characteristics. The findings are presented in table 1.

Tabl	e 1: Freq	uency and	l percentag	e distr	ibution	of c	haracteri	stics o	f scho	ool g	girls	s in ex	perimental	and	control	group	)

Characteristics	Experime	ntal Group	Control Group		
Characteristics	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)	
Age in years					
9-10 years	2	4.0	0	0.0	
11-12 years	27	54.0	14	28.0	
13-14 years	15	30.0	27	54.0	
15-16 years	6	12.0	9	18.0	
Religion					
Hindu	49	98.0	46	92.0	
Muslim	1	2.0	2	4.0	
Sikh	0	0.0	2	4.0	
Christian	0	0.0	0	0.0	
Studied In					
Primary	0	0.0	0	0.0	
Middle	34	68.0	13	26.0	
High	7	14.0	36	72.0	
Senior Secondary	9	18.0	1	2.0	

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Belong From				
Urban	12	24.0	41	82.0
Rural	38	76.0	9	18.0
Presently Residing In				
Hostel	4	8.0	1	2.0
Home	46	92.0	49	98.0
PG	0	0.0	0	0.0
Type Of Family				
Nuclear	25	50.0	35	70.0
Joint	24	48.0	15	30.0
Extended	1	2.0	0	0.0
Occupation of Mother				
Govt. Employee	8	16.0	6	12.0
Private Employee	5	10.0	7	14.0
Home Maker	37	74.0	37	74.0
Educational Status of Mother				
No formal education	4	8.0	9	18.0
<matriculation< td=""><td>5</td><td>10.0</td><td>8</td><td>16.0</td></matriculation<>	5	10.0	8	16.0
Matriculation	9	18.0	13	26.0
Plus-Two	15	30.0	15	30.0
>Graduate	17	34.0	5	10.0
Occupation of Father				
Govt. employee	13	26.0	11	22.0
Private employee	19	38.0	29	58.0
Farmer	18	36.0	10	20.0
Educational Status of Father				
No formal education	1	2.0	2	4.0
<matriculation< td=""><td>6</td><td>12.0</td><td>15</td><td>30.0</td></matriculation<>	6	12.0	15	30.0
Matriculation	9	18.0	14	28.0
Plus-Two	18	36.0	8	16.0
>Graduate	16	32.0	11	22.0
Monthly income				
Less than 15,000	20	40.0	29	58.0
<15,000-25,000	17	34.0	9	18.0
<25,000-35,000	11	22.0	6	12.0
>35000	2	4.0	6	12.0
Previous knowledge				
Yes	0	0.0	0	0
No	50	100.0	50	100.0

### ii. Assessment of pre-test and post-test knowledge and attitude regarding HPV vaccination among school girls

Table 2: Comparison of pre and post interventional level of knowledge score in both experimental and control group, N=100

	Criteria Measure of Level of Knowledge											
			Experi	menta	1	Control						
Level of Knowledge	SCORE	Pre	-Test	Post- Test		Pre- Test		Post-Test				
		(f)	(%)	(f)	(%)	(f)	(%)	(f)	(%)			
Very Good	18-26	0	0	5	10	0	0	0	0			
Good	9-17	20	40	40	80	25	50	19	38			
Average	0-8	30	60	5	10	25	50	31	62			

Maximum Score=26 Minimum Score=0

**Table 2** depicts that **in pre-test knowledge of experimental group**, 20 participants (40%) fell within the good range (9-17) and majority of participants, 30 individuals (60%), scored in the average range (0-8). **In post-test knowledge of experimental group**, 5 participants (10%) achieved scores in the very good range (18-26), the number of participants with good knowledge scores increased to 40 (80%) and Only 5 participants (10%) retained average knowledge scores.

In pre-test knowledge of control group, half of the participants, 25 (50%), had good knowledge scores and half of the participants, 25 (50%), had average knowledge scores. In post-test knowledge of control group, none of the participants scored in the very good range (18-26%), 19 participants (38%) achieved scores in the good range (9-17) and majority of participants 31 individuals (62%), fell within the average range (0-8).

## International Journal of Science and Research (IJSR)

ISSN: 2319-7064 Impact Factor 2024: 7.101

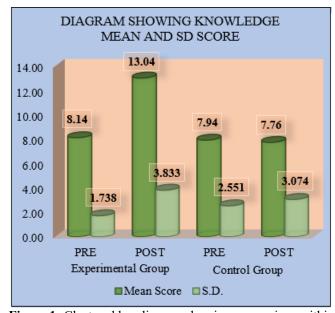
Table 3: Comparison within the Group with Paired & Unpaired 't' Test of Knowledge Scor, N=100

Table 5.	Table 5. Comparison within the Group with Fancti & Orpaned 1 Test of Knowledge Scot, 14-100											
			Knowled	ge Score		Paired T Test						
		Pret	est	Post	test							
Group	N	Mean	SD	Mean	S.D.	df	't'	T value at 0.05	Result			
Experimental Group	50	8.14	1.738	13.04	$\pm 3.833$	49	9.629	1.677	P value <0.001 ***			
Control Group	<u> </u>				$\pm 3.074$	49	0.459	1.677	P value 0.649 <sup>NS</sup>			
					t(4	19)= 1.6	ficant at 0.05 level Highly Significant					
				UNPAIRED 7	ΓTEST							
Gro	oup		df			t		p value				
Experimen	ntal Gro	up		98	7.598		P value		=<0.001***			
Control	Control Group				98 0			P value= 0.648 <sup>NS</sup>				
			t(98) = 1.661	Sign	nificant at 0.	05 level						
	***- Highly Significant											

Table 3 depicted that by using paired t-test, it was found that there is significant improvement in knowledge scores within the experimental group with t value 9.629 at degree of freedom 49. This finding suggests that the intervention or treatment applied to the Experimental Group was effective in enhancing their knowledge significantly. Hence hypothesis  $H_1$  (There will be a significant difference in the mean post-test knowledge score and attitude score among school girls between experimental and control group.) was accepted.

Conversely, the Control Group showed no significant difference in knowledge scores from pretest to post-test where t value is 0.459 at degree of freedom 49. This indicates that without the specific intervention received by the Experimental Group, there was no observable improvement in knowledge scores over time in the Control Group.

Furthermore, the unpaired t-test comparing the post-test scores between the Experimental and Control Groups showed a significant difference, t value of 7.598 with degree of freedom 98 indicating that the post-intervention knowledge scores were significantly higher in the Experimental Group compared to the Control Group.



**Figure 1:** Clustered bar diagram showing comparison within group level of knowledge representing effectiveness

Table 4: Comparison of pre and post interventional level of attitude score in both experimental and control group, N=100

	Criteria Measure of Level of Attitude												
Level of Attitude	Score		Experi	mental		Control							
Level of Attitude		Pro	e- Test	Po	st-Test	Pre-	Test	Post-Test					
	(f) (%)				(%)	(f)	(%)	(f)	(%)				
Positive	110- 150	1	2	8	16	0	0	0	0				
Neutral	69- 109	49	98	42	84	48	96	49	98				
Negative	30- 68	0	0	0	0	2	4	1	2				

Maximum Score=150

Minimum Score=30

Table 4 depicts that in pre-test attitude of experimental group, Only 1 participant (2%) had a positive attitude score, Majority of participants 49 (98%) had a neutral attitude score and no participants fell into the negative attitude score range (0%).

In post-test attitude of experimental group, 8 participants (16%) moved into the positive attitude score range, the number of participants with a neutral attitude decreased to 42 (84%) and no participants remained in the negative attitude range (0%).

**Table 5:** Comparison within the Group with Paired & Unpaired T Test of attitude Scores, N=100

		Atti	tude Score		Paired T Test						
		Pretes	it	Pos	Post test						
Group	Group N Mean SD M		Mean	S.D.	df	't'	Result				
Experimental Group	50	88.06	7.560	99.38	±7.298	49	10.396	Pvalue =<0.001***			
Control Group	50	88.240	8.535	90.20	±7.793	49	1.508	P value= 0.138NS			
t	1.677		Significant	at 0.05 leve	l	***- Highly Significant					
UNPAIRED T TEST											

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Group	df	t	p value
Experimental Group	98	6.080	P value= <0.001***
Control Group	98	0.112	P value= 0.911NS
t(98)=1.661	Significant	at 0.05 level ***-	Highly Significant

Table 5 depicts that by using paired t-test, it was found that there is significant improvement in attitude scores within the Experimental Group with t value 10.396 at degree of freedom 49. This suggests that the intervention or treatment applied to the Experimental Group effectively enhanced their attitudes significantly. Hence hypothesis H<sub>1</sub> was accepted.

Conversely, the Control Group showed no significant difference in attitude scores from pretest to post-test with t value 1.508 at degree of freedom 49. This indicates that

without the specific intervention received by the Experimental Group, there was no observable improvement in attitudes over time in the Control Group.

Furthermore, the unpaired t-test comparing the post-test scores between the Experimental and Control Groups showed a significant difference with t value 6.080 at degree of freedom 98 indicating that the post-intervention attitude scores were significantly higher in the Experimental Group compared to the Control Group.

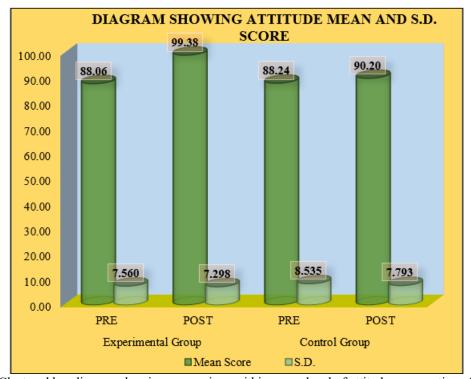


Figure 2: Clustered bar diagram showing comparison within group level of attitude representing effectiveness

### iii. Association of socio-demographic variables

Table 6: Association of post-test knowledge scores and demographic variables in experimental group, N=100

Socio-Demogr	raphic Variables	Association of Knowledge Score with Demographic Variables (Post Knowledge) Experimental Group									
Variables	Opts.	Very Good	Good	Average	$\chi^2$	df	Table Value	P Value			
	9-10 yrs	0	1	1	,,						
A co (In vicens)	11-12 yrs	3	21	3	5.542	6	12.592	0.476			
Age (In years)	13-14 yrs	2	12	1	3.342	O	12.392	NS			
	15-16 yrs	0	6	0							
	Hindu	5	39	5							
Religion	Muslim	0	1	0	0.255	2	5.991	0.880			
Kengion	Sikh	0	0	0	0.233	2	3.991	NS			
	Christian	0	0	0							
	Primary	0	0	0							
	Middle	5	26	3				0.303			
Studied in	High	0	7	0	4.853	4	9.488	0.303 NS			
	Senior Secondary	0	7	2				1/15			
D-1 F	Urban	1	10	1	0.110	2	5.001	0.947			
Belong From	Rural	4	30	4	0.110	2	5.991	NS			
Descently Desidie - In	Hostel	0	4	0	1.007	2	5 001	0.581			
Presently Residing In	Home	5	36	5	1.087		5.991	NS			

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	PG	0	0	0				
	Nuclear	2	20	3				0.055
Type of Family	Joint	3	19	2	0.669	4	9.488	0.955 NS
	Extended	0	1	0				
	Govt. employee	1	7	0				0.124
Occupation of Mother	Private employee	1	2	2	7.237	4	9.488	0.124 NS
	Home maker	3	31	3				
	No formal education	0	4	0	7.559	8	15.507	0.478
Educational Status	<matriculation< td=""><td>0</td><td>4</td><td>1</td><td>7.339</td><td>0</td><td>15.507</td><td>NS</td></matriculation<>	0	4	1	7.339	0	15.507	NS
of Mother	Matriculation	0	9	0				
of Mother	Plus- two	2	10	3				
	>Graduate	3	13	1				
0	Govt. employee	2	8	3	5.628			0.220
Occupation of Father	Private employee	1	16	2		4	9.488	0.229 NS
of Father	Farmer	2	16	0				
	No formal education	0	1	0				
Educational Status	<matriculation< td=""><td>0</td><td>6</td><td>0</td><td></td><td></td><td></td><td>0.507</td></matriculation<>	0	6	0				0.507
of Father	Matriculation	0	9	0	6.536	8	15.507	0.587 NS
of rather	Plus- two	3	13	2				
	>Graduate	2	11	3				
	less than 15,000	0	18	2				
M 41 I	<15000-25000	4	12	1	0.406		12.502	0.148
Monthly Income	<25,000-35000	1	9	1	9.486	6	12.592	NS
	>35000	0	1	1				
Previous	Yes	0	0	0			N.A	N.A
Knowledge	No	5	40	5			IN.A	IN.A

NS - Not significant

Table 6 shows the association between the level of knowledge score and sociodemographic variables. Based on the objectives Chi- square test was used to associate the level of knowledge score and selected demographic variables. The calculated chi-square values were less than the table values at 0.05 level of significance which shows that there is no

significant association between the knowledge score and demographic variables. Thus, knowledge of school girls in experimental group were independent of selected sample characteristics. Hence, research hypothesis was rejected and null hypothesis was accepted.

Table 7: Association of post-test attitude scores and demographic variables in experimental group, N=100

Socio-Demographic		Association of Attitude Score with Demographic Variables (Post Attitude)										
Variables			Ex	perimenta	l Group							
Variables	Opts	Positive	Neutral	Negative	$\chi^2$	df	Table Value	P Value				
	9-10 years	0	2	0								
A 22 (In 1122ms)	11-12 years	6	21	0	2.381	3	7.815	$0.497^{ m NS}$				
Age (In years)	13-14 years	2	13	0	2.361	3	7.813	0.497				
	15-16 years	0	6	0								
	Hindu	8	41	0								
Religion	Muslim	0	1	0	0.194	1	3.841	$0.659^{\mathrm{NS}}$				
Religion	Sikh	0	0	0	0.194	1	3.641	0.039				
	Christian	0	0	0								
	Primary	0	0	0								
Studied In	Middle	5	29	0	0.317	2	5.991	0.853				
Studied III	High	1	6	0	0.517			NS				
	Senior Secondary	2	7	0								
Belong From	Urban	2	10	0	0.005	1	3.841	0.942				
Belong From	Rural	6	32	0	0.003	1	3.041	NS				
	Hostel	0	4	0				0.363				
Presently Residing In	Home	8	38	0	0.828	1	3.841	0.303 NS				
	PG	0	0	0								
	Nuclear	5	20	0				0.702				
Type of Family	Joint	3	21	0	0.707	2	5.991	0.702 NS				
	Extended	0	1	0								
	Govt employee	1	7	0				0.935				
Occupation of Mother	Private employee	1	4	0	0.134	2	5.991	0.933 NS				
	Home maker	6	31	0								
	No formal education	0	4	0								
Educational Status of	<matriculation< td=""><td>2</td><td>3</td><td>0</td><td>4.637</td><td>1</td><td>9.488</td><td>0.327</td></matriculation<>	2	3	0	4.637	1	9.488	0.327				
Mother	Matriculation	2	7	0	4.03/	1.637 4	7. <del>4</del> 00	NS				
	Plus- two	3	12	0								

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	>Graduate	1	16	0					
	Govt employee	1	12	0				0.506	
Occupation of Father	Private employee	4	15	0	1.034	2	5.991	0.596 NS	
	Farmer	3	15	0					
	No formal education	0	1	0					
Educational Status of	<matriculation< td=""><td>0</td><td>6</td><td>0</td><td rowspan="3">3.497</td><td></td><td rowspan="3">9.488</td><td rowspan="2"><math>0.478^{\mathrm{NS}}</math></td></matriculation<>	0	6	0	3.497		9.488	$0.478^{\mathrm{NS}}$	
Father	Matriculation	1	8	0		4			
raulei	Plus- two	5	13	0					
	>Graduate	2	14	0					
	less than 15,000	2	18	0					
Monthly Income	<15000- 25000	3	14	0	1.991	3	7.815	0.574 <sup>NS</sup>	
Wionung meonie	<25,000-35000	3	8	0	1.991	3	7.013	0.574	
	>35000	0	2	0					
Previous Knowledge	Yes	0	0	0			N.A	N.A	
	No	8	42	0			IN.A	IN.A	

NS - Not significant

Table 7 shows the association between the level of attitude score and sociodemographic variables. Based on the objectives Chi- square test was used to associate the level of attitude score and selected demographic variables. The calculated chi-square values were less than the table values at 0.05 level of significance which shows that there is no significant association between the attitude score and demographic variables. Thus, attitude of school girls in experimental group were independent of selected sample characteristics. Hence, research hypothesis was rejected and null hypothesis was accepted.

### 4. Discussion

The purpose of this study was to assess the effectiveness of Structured Teaching Programme on knowledge and attitude regarding HPV vaccination among school girls (age group 9-16 years). The present study findings show that majority of school girls in both experimental and control groups having average level of knowledge regarding Human Papilloma Virus Vaccination in pre-test and also shows neutral attitude. The findings are similar with the existing literature by Tiwari SB, Kumari S, Kumari S, Ekka AA et al (2023). In this study, 54.2% students had the poor knowledge, 43.1% had good knowledge and 2.8% had the average knowledge. In other hand in the post test score majority (62.5%) of the students had good knowledge 36.1% had average knowledge and only 1.4% had the poor knowledge regarding Human papilloma Virus Vaccination. The mean post-test knowledge score was 15.08 which was higher than the mean pre-test knowledge score 8.63. The study concluded that structured teaching program (STP) was effective.

The present study findings indicate that by using paired t-test, there is significant improvement in knowledge scores within the experimental group. In pre-test mean score was 8.14 and in post-test mean score was 13.04 with 't' value 9.629 at degree of freedom 49. This finding suggests that the intervention or treatment applied to the Experimental Group was effective in enhancing their knowledge significantly. Furthermore, the unpaired t-test comparing the post-test scores between the Experimental and Control Groups showed a significant difference, 't' value of 7.598 with degree of freedom 98 indicating that the post-intervention knowledge scores were significantly higher in the Experimental Group compared to the Control Group. The findings are similar to the study by Prakasam Anita, Choudhary Virendra Singh

(2019). The result revealed that there was significant difference between the pre-test and post-test knowledge score and attitude score regarding cervical cancer. There was increase in knowledge score and attitude of nursing students after administering planned teaching program which shows that planned teaching program regarding prophylactic vaccination for cervical cancer was effective in improving knowledge and attitude.

### 5. Conclusion

The following conclusions were drawn from the findings of the study:

- Deficit in knowledge and neutral attitude of school girls regarding Human Papilloma Virus Vaccine was found in all area and minimum in the area of assessment.
- School girls had significant enhancement in knowledge and improvement in the attitude regarding Human Papilloma Virus Vaccine after administration of Structured Teaching Programme.
- Structured Teaching Programme was effective in enhancing the knowledge and attitude regarding Human Papilloma Virus Vaccine.
- Moderately positive correlation was found between knowledge score and attitude score of school girls regarding Human Papilloma Virus Vaccine.

Thus, the Structured Teaching Programme regarding Human Papilloma Virus Vaccine was effective in enhancing the knowledge and attitude.

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**Impact Factor 2024: 7.101** 

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