Bulletin of Environment, Pharmacology and Life Sciences
Bull. Env. Pharmacol. Life Sci., Vol 11 [3] February 2022 : 102-110

Online ISSN 2277-1808
Journal's URL:http://www.bepls.com
CODEN: BEPLAD

ORIGINAL ARTICLE **OPEN ACCESS**

A Study to Assess the Knowledge & Attitude Towards Carcinoma of The Cervix & It's Prevention among The Female School Teachers of Selected Schools of Vadodara District, Gujarat, India

Mallika F. Vhora[1], Vipul Gurjar[2]
1 PhD Nursing Scholar, 2 Professor, Dept. of Surgery, SBKSMIRC,
1 Medical Surgical Nursing,
Sumandeep Vidhyapeeth Deemed to be University, Piparia, Vadodara, Gujarat, India.
Correspondence Email: mallv80@gmail.com

ABSTRACT

Carcinoma of the Cervix has become the Universal threat and it is the 4th most common cancer diagnosed in female globally. More than 600,000 females were screened and found with Carcinoma of the Cervix and there were more than 3,00,000estimated deaths in year 2020. In absence of prompt steps, the death rate due to Carcinoma of the Cervix is estimated to raise over 4,00,000 in next two decades. In general, over 90% of the global cancer burden occurs in females of growing nations where the screening facilities & treatment modalities are not easily approachable by females. Persistent infection of HPV (Human Papilloma Virus) is a causative agent of carcinoma of the cervix. Every 8 minutes 1 female dies of cervical cancer in India and every 6 minutes one female is being diagnosed for it. Cervical cancer is avertible by educating and encouraging the females who are vulnerable to adopt routine cervical examination procedure. Enhancing female's knowledge & attitude towards the significance of cervical cancer may begin the active participation in its prevention strategies. An objective of this study is to assess the knowledge & attitude towards Carcinoma of the Cervix & it's prevention among the female school teachers. Materials & Methods: A cross sectional descriptive survey was applied on 105 female school teachers of selected schools with non-probability purposive sampling technique. Pre-tested, self-structured questionnaires on Knowledge & Attitude of Carcinoma of the Cervix& its prevention was introduced. The analytical tests were carried out using descriptive statistics, independent t test and chi square test at 95% confidence level. Results & Discussion: In a general sense, the knowledge level of Carcinoma of the Cervix& its prevention found to be extremely low (96%), whereas the large numbers of the respondents were having positive attitude (91%). The result found that only 4% were having moderate knowledge. The large numbers of the females had very low knowledge towards Carcinoma of the Cervix& its prevention. Many females had positive attitude. Residing in urban area and having higher education was not linked with the female's knowledge on Carcinoma of the Cervix& its prevention. An emerging need is to implement the Carcinoma of the Cervix education plan among the females. More studies are required with the strong designs.

Keywords: Attitude, Carcinoma of the Cervix, Knowledge, Prevention.

Received 12.11.2021 Revised 18.01.2022 Accepted 24.01.2022

INTRODUCTION

Carcinoma of the Cervix is global threat which can be prevented by educating and motivating the females who are vulnerable to get HPV infection, to adopt a routine cervical screening procedure. Enhancing female's knowledge about the significance of cervical cancer detection may motivate the females to take active participation in cervical cancer prevention campaign. (1). Every year almost 5 lakhs of females are diagnosed with Carcinoma of the Cervix, which may raise up to more than 10 lakhs by the year 2050. (2)It is the most common cancer among the females globally, which accounts 90% of mortality in under developed & developing countries. (1) Factors associated with increasing numbers of mortality in developing countries is low awareness. (3) Over 85% of females affected with Carcinoma of the Cervix are young and undereducated who live in the under developed & developing countries. Many are mothers having young children whose survival is subsequently shortened by the death of their mothers in young age. (4)

India has 48.35 crores female population of age group 15 years and above who are vulnerable to counter HPV infection & if not treated early may develop Carcinoma of the Cervix. Recent annual statistics indicates that 1, 23,907females are diagnosed and 77,348dieddue to Carcinoma of the Cervix. This disease is 2nd most occurring cancer among females between the age group 15 years to 44 years in India. Approximately 5 % of females in general have a risk of HPV-16/18 infection at a given time, and 83.2% of

Carcinoma of the Cervix are associated to Human Papilloma Virus 16/18 (5). The Asian population are more affected than the other regions of the world. (6)
Various strategies need to be formulated to enhance the knowledge of Carcinoma of the Cervix so that females can visit Clinics/health Centres in pre – cancerous stage. The way to increase life span of females is spreading knowledge, screening tests, and immediate treatment. Because of poor insight& scarcity of medical facilities in developing countries like India, the most females are diagnosed in terminal stage of diseases, which gives poor prognosis. Thus, improving the knowledge and adopting the screening practices can lead to favourable outcomes. (7)
Dr.Hayam Fathey A. endorsed that the educational institutes should take initiatives to sensitize all the students on the disease Carcinoma of the Cervix and its prevention. Furthermore, updated Health awareness programs for Carcinoma of the Cervix should be a part of their study. Campaigns should be implemented to sensitize the females on Carcinoma of the Cervix and screening with PAP smear test should be a normal practice for all reproductive age females. (8)
The schools are best example of socialization. In point of fact, the schools possess the capacities, skills and the waysto provide a positive influence on students' health. School Teachers are ***dynamic*** intermediates and likewise they are the important persons for cognitive and behavioural changes. They are the main representative for school and they are interacting with the school teachers, the students and the families. Present study was conducted on the school teachers with the aims to assess the knowledge and attitude toward Carcinoma of the Cervix & its prevention& to determine the Knowledge and Attitude level toward it.

MATERIAL AND METHODS

Design, Setting & Period of study: A Cross sectional descriptive Study was conducted from September-2021 to November-2021 among the school teachers of selected schools of Vadodara district. An effort was made to include all the Female school teachers in the study. Hence, Purposive sampling technique used to recruit the females school teachers. Prior permissions from the respective authorities were obtained to conduct the study. Consents were taken from the female school teachers before the data collection. Total 105 female school teachers were agreed to participate in the study.
Ho1: There is no difference in knowledge and attitude of school teachers towards Carcinoma of the Cervix with respect to demographic variable
Ho2: There is no association between attitude of school teachers towards Carcinoma of the Cervix with respect to demographic variable
Data Collection Tools& Techniques: A self-structured, self- administered tools including Socio-demographic information, Knowledge and attitude questions, was administered among the respondents. Questionnaire was prepared in the English. Questions were clear, short, understandable and readable to female school teachers. The questionnaires were tested for content validation by 5 nursing experts from academics. The content validity ratio is 0.99 indicating that the experts were in agreement with all the questions to be essential. In addition to that the questionnaire was pre tested initially on small number of randomly selected female school teachers. This data were excluded from the study. The cronbach's alpha value is 0.94 with P of 0.032 (less than 0.05) indicating high reliability of the questionnaire.
Variables: The Socio- demographic variables included characteristics such as age, education and place of residence. The score system classified respondents' responses in two categories (wrong response = 0, and complete response = 1).
The Female School teacher with a score less than 60% was categorised under poor knowledge. The total scoring was categorised as- Score- ≤60% considered as low;Score between -60–79% considered as accepted knowledge level; and Score - ≥80% considered as good knowledge level. Attitude was computed by 9 questions regarding risk factors and screening of Carcinoma of the Cervix by using Likert's scale, the question has positive & Negative responses on Likert's scale, ranging from Strongly agree 5, Agree 4, neither agree or nor disagree 3, Disagree 2, strongly disagree 1. The highest score is 45 and lowest is 9. If a female school teacher has scored ≥22, considered as having favourable attitude and below 22 score considered as having negative attitude towards the Carcinoma of the Cervix its prevention. The respondents themselves filled the questionnaire without any aided help. Information was obtained on respondents' socio-demographic data, Knowledge on Carcinoma of the Cervix, causes, risk factors, screening practices, prevention aspects and attitude toward the screening& prevention of it.
Data Processing & Analysis: The collected responses were given codes & recorded into the MS Excel 2010.Descriptive analysis of demographic characteristics and Knowledge and Attitude of the female school teachers were done in the form of numbers, percentages, mean, Standard deviation (SD), and represented in form of tables and graphs. Difference in knowledge and attitude score with respect to demographic variables was assessed with the Independent t-test while association of attitude score with

the demographic variables was assessed with the chi-square test.P<0.05 considered statistically significant. The IBM SPSS 23 was used for data analysis.

RESULTS

A total of 105 female school teachers filled the questionnaire, in these 40% of the respondents residing in the urban and 60% were in rural. 47% were having graduation and 53% were having post-graduation qualifications shown in the Table 1.1 and 1.2. Outcome of the knowledge assessment, 96% of the female school teachers were having low level of knowledge, only 4% of the female school teachers were having accepted level of knowledge and none of the respondents were having the score of good level of knowledge. Which in turn indicates the strong need of cervical cancer awareness program to reduce the cases of the disease in upcoming future. In spite of having poor knowledge level, majority of the female school teachers were having favorable attitude towards Carcinoma of the Cervix and its prevention as shown in the Figure 2.1. A Descriptive statistics of Attitude & Knowledge score shows that the minimum attitude score is 22 and maximum attitude score is 36 with mean value of 28.84 (SD ± 2.95), whereas the minimum knowledge score of female school teachers is 4 and maximum score is 13 with mean value 8.39 (SD± 1.95). These findings suggest that in spite of having poor knowledge level, the attitude among the respondents was high towards the learning about Carcinoma of the Cervix and its prevention among the Female school teachers as shown in the Table 2.1.

1. DEMOGRAPHIC DATA OF THE FEMALE SCHOOL TEACHERS:

Table 1.1 Residence of the School Teachers

		Frequency	Percent
Valid	Urban	42	40.0
	Rural	63	60.0
	Total	105	100.0

Table 1.2 Education of the School Teachers

		Frequency	Percent
Valid	Graduation	49	46.7
	Post-graduation	56	53.3
	Total	105	100.0

DESCRIPTIVE STATISTICS

Figure: 2.1. Bar Graph showing the knowledge level towards Carcinoma of the Cervix & its prevention:

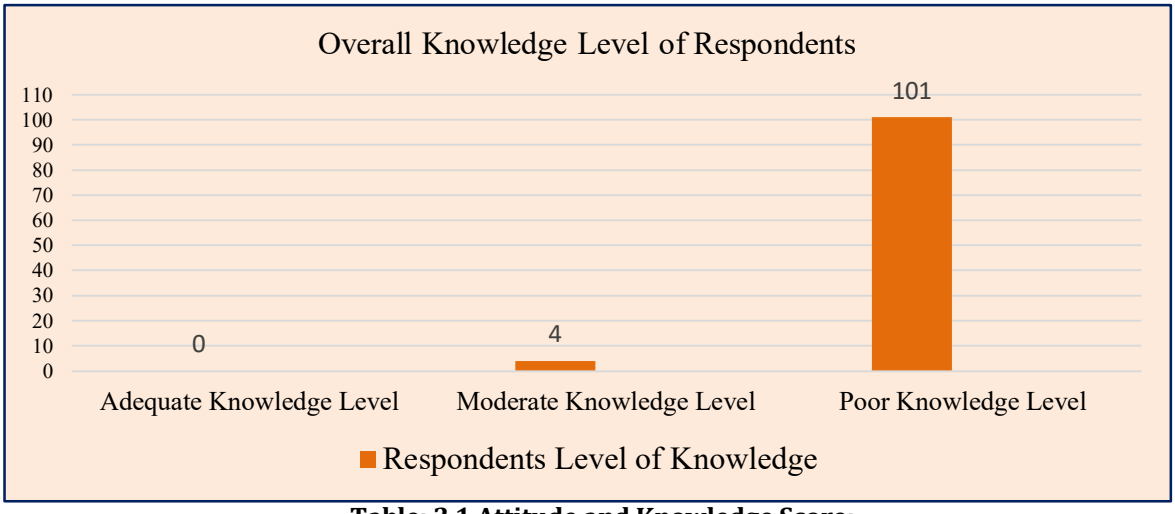

Table: 2.1 Attitude and Knowledge Score:

	N	Minimum	Maximum	Mean	SD
ATTITUDE SCORE	105	22	36	28.84	2.955
KNOWLEDGE SCORE	105	4	13	8.39	1.959

INFERENTIAL STATISTICS: Association of the socio demographic variable with Knowledge and Attitude score of the Respondents

Table: 3.1 Independent t-test of Knowledge score in relation to the Place of Residence of School Teachers

	Residence			N		Mean	SD
KNOWLEDGE SCORE	Urban			42		8.21	1.690
	Rural			63		8.51	2.124
Independent t-test							
	Equality of Means						
	T	df	P	Mean Difference	Std. Error Difference	95% CI of the Difference	
						Lower	Upper
Knowledge Score	-.751	103	.454	-.294	.391	-1.069	.482

The table 3.1 shows that an independent t-test was conducted to measure the knowledge score in relation to the residence of the respondents. No significant difference suggested (t (103) =0.751, p=0.454) in the score with mean for Urban (M 8.21, SD=1.690) was less than the mean of rural (M 8.51, SD=2.21). The significance of the difference in the means (-0.294, 95% CI:-1.069 to 0.482) as the P is > 0.05. This indicates that null hypothesis is failed to reject meaning that there is no difference in the knowledge score of the respondents in relation to the Urban & rural residence.

The Independent t-test was conducted to measure the knowledge score in relation to the Education of the respondents. No significant difference suggested (t (103) =0.611, p=0.543) in the score with mean for Graduation (M 8.27, SD=2.049) was less than the mean for post-Graduation (M 8.50, SD=1.88). The significance of the difference in the means (-0.235, 95% CI:-0.997 to 0.527) as the P> 0.05.This indicates that null hypothesis is failed to reject meaning that there is no difference in the knowledge score of the female school teachers in relation to the Graduation & Post Graduation education as presented in **table 3.2.**

The attitude score was measured with education of the respondents using an independent t-test. No significant difference observed (t (103) =0.268, p=0.789) in the score with mean for Graduation (M 28.76, SD=3.146) was less than the mean for Post-Graduation (M 28.91, SD=2.804). The significance of the difference in the means (-0.156, 95% CI:-1.307 to 0.996) was not significant as the P> 0.05. This indicates that the null hypothesis is failed to reject meaning that there is no difference in the score of the attitude of the female school teachers in relation to the Graduation & Post Graduation education as presented in the table 3.3.

The score of the attitude was measured with the residence of the respondents using an independent t-test. No significant difference observed (t (103) =1.025, p=0.308) in the score with mean for Urban (M 28.48, SD=2.94) was less than the mean for rural (M 29.08, SD=2.96). The significance of the difference in the means (-0.603, 95% CI:-1.770 to 0.564) was not significant as the P> 0.05. This indicates that the null hypothesis is failed to reject meaning that no difference in the attitude score of the female school teachers in relation to the Urban & rural residence as shown in the table 3.4.

To analyse the correlation between the knowledge and attitude score, Pearson correlation test performed. The results showed that there is a weak relationship between them as r = -0.032, n= 105 and p> 0.05 (0.745) as shown in the table 3.5.

The attitude statements was checked for association with demographic variable using chi square test of association. The results suggest that the independent variables are not associated with the dependent variable and there is no statistical relationships between the independent variables and attitude score of the respondents, as the P> 0.05, hence the null hypothesis is failed to reject. The chi square test result of the attitude question “highly prevalent & leading cause among females” suggest that the place of residence and education qualification are not associated and not having statistical relationships among them as the P is > 0.05 (0.55) (table 3.6) and (0.23) (table 3.7) respectively. Hence, the Null hypothesis is failed to reject. The chi-square test of all the attitude questions were analysed and the results were tabulated in a common table (table 3.8) to associate the independent variables with the knowledge and education qualification of the respondents.

The chi-square test result of the attitude question “HPV infection can transmit one person to another” suggested that the place of residence and education qualification are not associated and are not having statistical relationships among them as the P is > 0.05 (0.96) and (0.36) (table 3.8) respectively. Same as the chi-square test result of the attitude question “important to consult the doctor if there is a bleeding in-between the periods” suggested that the place of residence and education qualification are not associated and are not having statistical relationships among them as the P is > 0.05 (0.60) and (0.15) (table 3.8) respectively. Hence, the null hypothesis is failed to reject.

The chi-square test result of the attitude question "screening helps in prevention of Carcinoma of the Cervix" suggested that the independent variables are not associated and are not having statistical relationships among them as the P is > 0.05 (0.85) and (0.88) (table 3.8) respectively. Similarly, The chi-square test result of the attitude question "screening cause no harm" suggested that the independent variables are not associated and are not having statistical relationships among them as the P is > 0.05 (0.49) and (0.53) (table 3.8) respectively.

The chi-square test result of the attitude question "screening is expensive" suggested that the independent variables are not associated and are not having statistical relationships among them as the P is > 0.05 (0.96) and (0.19) (table 3.8) respectively. Similarly, The chi-square test result of the attitude question " HPV vaccine can prevent the cervical cancer" suggested that the independent variables are not associated and are not having statistical relationships among them as the P is > 0.05 (0.14) and (0.47) (table 3.8) respectively. The chi-square test result of the attitude question "screening takes only 10-15 minutes" suggested that the independent variable – place of residence is not associated and are not having statistical relationships among them as the P is > 0.05 (0.77), whereas the independent variable "education" is associated and has statistical relationship among them as the P is < 0.05 (0.04) (table 3.8) respectively. Hence, the null hypothesis is failed to reject for the independent variable – residence of place and the null hypothesis is accepted for the independent variable "education".

Discussion: Malignancy became the global illness of the century, mainly, Carcinoma of the Cervix is now the 4th utmost prevailing cancer in the world after the carcinoma of the breast to responsible for the female deaths. This cancer starts at the squamo-columnar junction of cervical canal. This area of junction observes many changes during late fetal life, adolescence and first pregnancy. The main aim of this study is to assess the knowledge and attitude towards the Carcinoma of the Cervix and its prevention among the female school teachers. The current study examined the knowledge and attitude among the female school teachers of selected schools of Vadodara district towards the Carcinoma of the Cervix & its prevention. This study reveals that larger numbers of the female school teachers were having deficit knowledge and positive attitude towards the cervical cancer & its prevention. Higher Education & Urban residence are likely to have adequate knowledge and favourable attitude towards the Carcinoma of the Cervix among the female school teachers, but the study findings are reversed, hence the null hypothesis is failed to reject.

Table: 3.2 Independent t-test of Knowledge score in relation to the Education of Female School Teachers

	Education	N	Mean	SD
Knowledge Score	Graduation	49	8.27	2.049
	Post-Graduation	56	8.50	1.888

		Independent t-test						
			Equality of Means					
		t	Df	P	Mean Difference	Std. Error Difference	95% CI of the Difference	
							Lower	Upper
Knowledge Score	Equal variances assumed	-.611	103	.543	-.235	.384	-.997	.527

Table: 3.3 Independent t-test of Attitude score in relation to the Education of School Teachers

	Education	N	Mean	SD	Std. Error Mean
Attitude score	Graduation	49	28.76	3.146	.449
	Post-Graduation	56	28.91	2.804	.375

		Independent t-test						
		Equality of Means						
		t	df	P	Mean Difference	Std. Error Difference	95% CI of the Difference	
							Lower	Upper
Attitude Score	Equal variances assumed	-.268	103	.789	-.156	.581	-1.307	0.996

Table: 3.4 Independent t-test of Attitude score in relation to the Place of Residence of School Teachers

	Residence	N	Mean	SD	Std. Error Mean
Attitude score	Urban	42	28.48	2.940	.454
	Rural	63	29.08	2.964	.373

Independent t-test

		Equality of Means						
		t	df	P	Mean Difference	Std. Error Difference	95% CI of the Difference	
							Lower	Upper
Attitude score	Equal variances assumed	-1.025	103	.308	-.603	.589	-1.770	.564

Table 3.5: Correlation of the Knowledge score with Attitude score

		Knowledge score	Attitude score
Knowledge score	Pearson Correlation	1	-.032
	P		.745
	N	105	105

Table: 3.8: Association of Demographic characteristics with attitude towards the Carcinoma of the Cervix and its prevention (n=105)

Attitudes	Responses	Urban (n=42)	Rural (n=63)	x^2 (p-value)	Graduation (n=49)	Post-Graduation (n=56)	x^2 (p-value)
Highly prevalent and leading cause among woman	SA	5	7	0.55	3	9	0.23
	A	17	21		21	17	
	NA/DA	3	12		7	8	
	DA	12	17		11	18	
	SDA	5	6		7	4	
	Total	42	63		49	56	
Any female including yourself can have HPV infection	SA	8	11	0.69	10	9	0.84
	A	12	13		11	14	
	NA/DA	6	16		9	13	
	DA	9	13		12	10	
	SDA	7	10		7	10	
	Total	42	63		49	56	
Cervical cancer can transmitted from one person to another	SA	1	2	0.96	1	2	0.36
	A	4	7		7	4	
	NA/DA	7	8		7	8	
	DA	20	33		27	26	
	SDA	10	13		7	16	
	Total	42	63		49	56	
It is very important to consult doctor if there will be bleeding between periods	SA			0.60			0.15
	A						
	NA/DA						
	DA	30	42		37	35	
	SDA	12	21		12	21	
	Total	42	63		49	56	
Screening helps in prevention of cervical cancer	SA	1	2	0.85	1	2	0.88
	A	8	13		10	11	
	NA/DA	8	8		6	10	
	DA	16	29		23	22	
	SDA	9	11		9	11	
	Total	42	63		49	56	
Screening causes no harm to client	SA	7	8	0.49	9	6	0.53
	A	17	19		17	19	
	NA/DA	13	20		16	17	
	DA	4	13		5	12	
	SDA	1	3		2	2	
	Total	42	63		49	56	
Important to consult	SA	7	10		10	7	

doctorif you have bleeding in-between periods	A	15	26	0.96	15	26	0.19
	NA/DA	14	17		13	18	
	DA	5	8		9	4	
	SDA	1	2		2	1	
	Total	42	63		49	56	
HPV vaccine can prevent the cervical cancer	SA	3	6	0.14	3	6	0.47
	A	12	18		18	12	
	NA/DA	19	15		14	20	
	DA	5	14		9	10	
	SDA	3	10		5	8	
	Total	42	63		49	56	
Screening takes only 10-15 minutes	SA	5	5	0.77	2	8	0.04
	A	7	14		13	8	
	NA/DA	9	12		6	15	
	DA	11	21		15	17	
	SDA	10	11		13	8	
	Total	42	63		49	56	

[Key words: SA: Strongly agree, A: Agree, NA/DA: Neither agree or Disagree, DA: Disagree, SDA: Strongly disagree]

This findings are having uniformity with the research study done in the Gondar town, North West Ethiopia, in the year 2020, suggested that the total knowledge of females towards Carcinoma of the Cervix was low, and over all half of the females had a favourable attitude towards the Carcinoma of the Cervix and its prevention.(9) Similar study conducted in 2016, among the Female Students of Mizan Tepi University in Ethiopia, in the year 2016, suggested that the knowledge and practice of cervical cancer screening was (33.97%) very low, whereas the total attitude (61.24%) was favourable to majority of a female students towards cervical cancer and its screening.(10)A study conducted in Kampong Speu (2018) revealed that, 74% of participants were usually familiar with the word cervical cancer, and 34% of females were familiar with the word screening test, hence, the knowledge level about Carcinoma of the Cervix and screening was low among females but the attitude to participate in the screening test was favourable. (11)

Similar KAP study conducted in Butajira, rural Ethiopia (2020), the results showed that knowledge of Carcinoma of the Cervix and its prevention and risk factors, mainly HPV, was less among females, whereas the attitude findings are opposite to current study, that 59.2% were having negative attitude towards the cervical cancer.(12) These findings are uniform with the research study conducted by Pramila Baral in the year 2020 in Nepal, suggested that out of 170 only 17 (11.3%) had adequate awareness regarding cervical cancer screening and 75 (46.6%) of the females had positive attitude towards cervical cancer screening.(13)In similar manner according to Niresh Thapa, (2018, Nepal) out of 360 participants > 87% had knowledge, but around 72% had a favourable attitude towards cervical cancer screening. This study did not found any significant association of knowledge score between the independent variables like Education and Place of residence as majority of the respondents were having deficit knowledge score towards cervical cancer and its prevention.(14) Similarly, Nguyen Toan Tran (2011) had done a similar research study in the Korea and findings suggested that there was no significant difference between rural and urban females in their knowledge of cervical cancer and the reasons for less screening were lack of knowledge of screening (48%). (15) This study result is in consistent with the survey conducted by the Kadian L. (2021), in India found that knowledge of symptoms and risk factors was very low in both rural and urban areas. The author urged to educate females about cervical cancer and its preventive measures by implementing awareness programs to educate females about cervical cancer in India. (16) Similarly a study conducted by Degarege, (2018) In India to assess the knowledge of parents found no significant difference among parents in the urban and rural areas in their beliefs about cervical cancer and its prevention for their daughters.(17)A study conducted by the Shreshtha j, (2013) in Nepal mentioned that respondents who had primary school education had adequate KAP scores compared with secondary and higher school education, contrary to place of the residence, where respondents who were from urban had better KAP score compared to the from Rural, which is differ from the current study findings and recommended that as the discrepancies as per the school educational level was not statistically significant, there is an urge to increase cervical cancer education programs on screening at national level.(18)A similar study conducted on the school teachers at Chandigarh in (2021) by Aprajita Singla mentioned that awareness of risk factors, signs and symptoms is low in even educated population like school teachers of a Chandigarh.(19)

Jain S M et al (2016) in India mentioned that 42% respondents were not having knowledge of a single risk factor and 27% were not aware of a single symptom of cancer cervix and reported high level of

knowledge because the respondents were nurses from paramedical educational background, whereas current study's samples were female school teachers and from non-medical background which reveals that educational status has important role in knowledge. Findings suggest that there is need for more educational programs to aware. (20)

STRENGTH AND LIMITATIONS

The current study provides insights in to the Knowledge and Attitude on Carcinoma of the Cervix &its prevention among the Female school teachers and given demographic characteristics. These findings may be useful to design and implement the health education plan on Carcinoma of the Cervix & its prevention strategies among the society to aware each and every female who are vulnerable of acquiring the HPV infection. The main limitation of this study was its conducted on very small group with limited resources and practice related to cervical cancer screening was not included in the study. Hence, the findings cannot be generalized.

CONCLUSION AND RECOMMENDATION

The study suggested that female school teachers have very deficit knowledge level towards Carcinoma of the Cervix. However, a positive attitude was seen among the study group. The high attitude can be considered a stepping stone in increasing the awareness and knowledge on this topic. Planned Health Awareness on cervical cancer & its prevention may help in reducing risk and may increase the adoption of screening tests for early identification of Carcinoma of the Cervix. As School Teachers are having pivot role in society, and they are considered as motivators and influencer for their students in to the society, Hence, its highly recommended to prepare and implement the health awareness trainings, camps on cervical cancer to increase the knowledge and turn favourable attitude in to the practice to adopt the screening practice should be conducted for the all the school teachers and for every females in India, irrelevant to their education, age, place of residence etc.

ACKNOWLEDGEMENTS

The investigator would like to express gratitude to all the participants who are involved in this cross-sectional descriptive study. We are heartedly thankful to the persons those who helped directly or indirectly in the study and helped to complete the study.

Conflict of Interest: The investigator declares no conflicts of interest

REFERENCES

1. WHO. (2020). WHO Technical Guidance and Specifications of Medical Devices for Screening and Treatment of Precancerous Lesions in the Prevention of Cervical Cancer 2020. Geneva, Switzerland: WHO.
2. Varughese, J., & Richman, S. (2010). Cancer care inequity for women in resource-poor countries. *Reviews in Obstetrics and Gynecology*, *3*(3), 122.
3. Marek, E., Dergez, T., Rebek-Nagy, G., Szilard, I., Kiss, I., Ember, I., ... & D'Cruz, G. (2012). Effect of an educational intervention on Hungarian adolescents' awareness, beliefs and attitudes on the prevention of cervical cancer. *Vaccine*, *30*(48), 6824-6832.
4. Global strategy to accelerate the elimination of cervical cancer as a public health problem. Geneva: World Health Organization; 2020. Licence: CC BY-NC-SA 3.0 IGO.
5. ICO/IARC information centre on HPV and cancer. India Human papillomavirus & related cancers, Factsheet 2021(2021-10-22), www.hpvcentre.net/statistics/reports/IND-FS.pdf.
6. Bray F, Colombet M, Mery L, Piñeros M, Znaor A, Zanetti R, et al. *Cancer Incidence in Five Continents* Vol 11. Lyon: International Agency for Research on Cancer; 2017.
7. Balasubramaniam, G., Gaidhani, R. H., Khan, A., Saoba, S., Mahantshetty, U., & Maheshwari, A. (2021). Survival rate of cervical cancer from a study conducted in India. *Indian Journal of Medical Sciences*, *73*(2), 203-211.
8. Eittah, H. F. A., Aljohani, K. A. S., & Aljohani, M. S. E. (2020). Enhancing the knowledge of cervical cancer screening among female nursing students: an interventional educational program. *Sudan Journal of Medical Sciences*, *15*(4), 431-439.
9. Mengesha, A., Messele, A., & Beletew, B. (2020). Knowledge and attitude towards cervical cancer among reproductive age group women in Gondar town, North West Ethiopia. *BMC Public Health*, *20*(1), 1-10.
10. Mulatu, K., Motma, A., Seid, M., & Tadesse, M. (2017). Assessment of knowledge, attitude, and practice on cervical cancer screening among female students of Mizan Tepi University, Ethiopia, 2016. *Cancer Biol Ther Oncol*, *1*(1), 1-5.
11. Touch, S., & Oh, J. K. (2018). Knowledge, attitudes, and practices toward cervical cancer prevention among women in Kampong Speu Province, Cambodia. *BMC cancer*, *18*(1), 1-8.
12. Ruddies, F., Gizaw, M., Teka, B., Thies, S., Wienke, A., Kaufmann, A. M., ... & Kantelhardt, E. J. (2020). Cervical cancer screening in rural Ethiopia: a cross-sectional knowledge, attitude and practice study. *BMC cancer*, *20*(1), 1-10.

13. Baral, P., Pokharel, J., & Gachhadar, R. (2020). Awareness and attitude regarding cervical cancer screening among reproductive age women. *Age*, *15*(24), 38.
14. Thapa, N., Maharjan, M., Petrini, M. A., Shah, R., Shah, S., Maharjan, N., ... & Cai, H. (2018). Knowledge, attitude, practice and barriers of cervical cancer screening among women living in mid-western rural, Nepal. *Journal of gynecologic oncology*, *29*(4).
15. Tran, N. T., Taylor, R., Choe, S. I., Pyo, H. S., Kim, O. S., & So, H. C. (2011). Knowledge, attitude and practice (KAP) concerning cervical cancer and screening among rural and urban female healthcare practitioners in the Democratic People's Republic of Korea. *Asian Pac J Cancer Prev*, *12*(11), 3023-3028.
16. Kadian, L., Gulshan, G., Sharma, S., Kumari, I., Yadav, C., Nanda, S., & Yadav, R. (2021). A Study on knowledge and awareness of cervical cancer among females of rural and urban areas of Haryana, North India. *Journal of Cancer Education*, *36*(4), 844-849.
17. Degarege, A., Krupp, K., Fennie, K., Li, T., Stephens, D. P., Marlow, L. A., ... & Madhivanan, P. (2018). Urban-rural inequities in the parental attitudes and beliefs towards human papillomavirus infection, cervical cancer, and human papillomavirus vaccine in Mysore, India. *Journal of pediatric and adolescent gynecology*, *31*(5), 494-502.
18. Shrestha, J., Saha, R., & Tripathi, N. (2013). Knowledge, attitude and practice regarding cervical cancer screening amongst women visiting tertiary centre in Kathmandu, Nepal. *Nepal Journal of Medical Sciences*, *2*(2), 85-90.
19. Singla, A., Goel, N. K., Mor, S., & Kalia, M. (2021). Knowledge and Perception about Risk Factors and Symptoms of Cervical Cancer in Female Teachers of Government and Private Schools of Chandigarh. *Journal: Healthline*, (1), 70-75.
20. Jain, S. M., Bagde, M. N., & Bagde, N. D. (2016). Awareness of cervical cancer and Pap smear among nursing staff at a rural tertiary care hospital in Central India. *Indian Journal of Cancer*, *53*(1), 63.
21. Narayana, G., Suchitra, M. J., Sunanda, G., Ramaiah, J. D., Kumar, B. P., & Veerabhadrappa, K. V. (2017). Knowledge, attitude, and practice toward cervical cancer among women attending Obstetrics and Gynecology Department: A cross-sectional, hospital-based survey in South India. *Indian journal of cancer*, *54*(2), 481.

CITATION OF THIS ARTICLE

Mallika F. Vhora, Vipul Gurjar. A Study to Assess The Knowledge & Attitude Towards Carcinoma of The Cervix & It's Prevention Among The Female School Teachers of Selected Schools of Vadodara District, Gujarat, India. Bull. Env. Pharmacol. Life Sci., Vol 11[3] Feb 2022 : 102-110.