



## A Descriptive Study to Assess Women's Knowledge on Cancer of Cervix

Mallika F. Vhora<sup>1\*</sup>, Vipul Gurjar<sup>1</sup>

<sup>1</sup>Department of Nursing Scholar, Sumandeep Vidhyapeeth Deemed to be University, India

<sup>2</sup>Department of Surgery, Sumandeep Vidhyapeeth Deemed to be University, India

### ABSTRACT

**Background:** Cancer cervix affects the lives of women during the most reproductive age of their life. Last year, in 2020, more than half a million women diagnosed with cervical cancer, and about 342 000 women died as a result most in the developing countries though it is preventable and treatable. It is the 2<sup>nd</sup> most common cancer in women globally after breast cancer. (World Health Organization, 2020). Human Papillomavirus is the greatest causative risk factor associated with cervical cancer. Women should undergo the HPV DNA detection in a screen and treat approach starting at the age of 30 years with regular screening every 5 to 10 years. Women with precancerous lesions usually have no indicating symptoms until a precancerous lesion becomes a true invasive cancer and metastasizes into surrounding tissues. Awareness cancer cervix and its causes may help in adoption of the screening program can help in reducing the risk of cervical cancer and death among women.

**Methods and findings:** To assess the level of knowledge on cancer cervix among women and to find out the association between knowledge score of cancer cervix with selected demographic variables of women.

**Design:** A descriptive survey design was used to conduct the study. A study was conducted in the urban areas of the Vadodara city, Gujarat.

**Participants:** 580 women who fulfill the inclusion criteria were selected as sample.

**Methods:** The study design was descriptive survey research design. The convenient sampling technique was used to select the five hundreds and eighty samples. The data were collected by administering the structured knowledge questionnaire 56 on cancer cervix to assess the level of knowledge among women.

**Results:** The study finding revealed that the women had 406 (70%) inadequate knowledge, 87 (22%) had moderate knowledge and only 46 (8%) were having good knowledge regarding cancer cervix. Some of the demographic variables like educational level, occupation are significantly association at ( $p < 0.05$ ) with knowledge score of women. The overall knowledge score was  $9.15 \pm 5.5$  which is very low on the score of 30.

**Conclusion:** The Knowledge level on cancer cervix among the women is below average and there is a need to organise various health camps and campaign to spread the awareness on cancer cervix and its prevention.

**Keywords:** Cancer; Cervix; Knowledge

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**Corresponding author** Mallika F. Vhora, Department of Nursing Scholar, Sumandeep Vidhyapeeth Deemed to be University, India, E-mail: mallv80@gmail.com

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## INTRODUCTION

Cervical cancer has become the global threat and it is the 4<sup>th</sup> most common cancer diagnosed in women worldwide. Over 600,000 women were diagnosed with cervical cancer and there were an estimated 342,000 deaths in year 2020 [1]. Without an immediate action, the number of cervical cancer related deaths is projected to increase to over 480,000 deaths by 2040. In general, over 90% of the global cancer burden occurs in women are residing in developing countries where most of the women do not have access to screening, treatment, and prevention programs [2]. Persistent infection of HPV (Human Papilloma Virus) is a causative agent of carcinoma of the cervix. Every 8 minutes 1 woman dies of cervical cancer in India and every 6 minutes one woman is being diagnosed for cervical cancer [3]. Cervical cancer can be prevented by educating and encouraging the women who are at risk to adopt a regular cervical screening procedure. Enhancing women's knowledge and attitude towards the significance of cervical cancer may encourage women to be actively participate in cervical cancer prevention initiatives. Cervical cancer accounts 90% of death in low and middle-income countries among women [4]. Factors associated with increasing numbers of death in developing countries include lack of knowledge [5]. More than 85% of women affected with cervical cancer are young and undereducated who live in the Low and middle-income countries. Many are mothers of young children whose survival is subsequently shortened by the death of their mothers in young age [6].

India has a population of 48.35 crores women ages 15 years and more who are at risk of developing cervical cancer. Current annual statistics indicates that 1, 23,907 women are diagnosed and 77,348 die from the cervical cancer. This disease ranks as the 2<sup>nd</sup> most frequent cancer among women in India and the 2<sup>nd</sup> most frequent cancer among women between 15 and 44 years of age. About 5.0% of women in the general population are estimated to have a risk of cervical HPV-16/18 infection at a given time, and 83.2% of invasive cervical cancers associated to HPVs 16 or 18 [7]. The incidence in Asian population was higher than that seen in other regions of the world [8]. Various strategies need to be formulated to increase awareness of cervical cancer so that women arrive at health facilities at an early stage of disease. The key to improve survival outcomes is awareness, screening programs, and providing the optimal treatment. Due to the lack of cervical cancer awareness, limited health-care facilities available in developing countries, such as India, most women report at advanced stage of diseases, which adversely affects the prognosis and thus focus to improve these, will be the key for better outcomes [9]. The study is intended to assess the knowledge of cancer cervix among the women residing in the urban areas of the Vadodara district.

## METHODOLOGY

**Study Design, Study Setting and Study Period:** A descriptive survey was conducted from March 2022 to August-2021 among the married women of the selected urban areas of the Vadodara district. Purposive sampling technique used to recruit the samples. Prior permissions and consent obtained from the women to conduct the study. Total 580 married women were agreed to participate in the study.

## Aim

The study is designed to assess the knowledge on cancer cervix among the married women.

### Hypothesis: H<sub>0</sub> (Null Hypothesis)

There will be No association between the knowledge score and socio-demographic variable.

## Data Collection Tools and Techniques

A self-structured, Pre-designed and Pre-tested self-administered questionnaire including Socio-demographic information, Knowledge questions, was administered among the respondents. Questionnaire was prepared in the English. Questions were clear, short, understandable and readable to married women. The questionnaires were tested for content validation by 7 nursing experts from academics. The content validity ratio is 0.98 indicating that the experts were in agreement with all the questions. In addition to that the questionnaire was pre tested initially on small number of randomly selected married women. This data were not included in the study. The cronbach's alpha=0.95 with p=0.032 (<0.05) indicating high reliability of the questionnaire.

## Variables

The independent variables included socio-demographic characteristics such as age, education and occupation, marital status etc. In detail, the scoring system classified respondent's answers into two categories (wrong answer=0, and complete answer=1). The married women with a score below 60% were considered to have poor knowledge. The overall score was classified as follows: low <60%; accepted/moderate knowledge level=60%-79%; and good knowledge >80%. Majority of the respondents themselves filled the questionnaire without any aided help except few whom the assistance given. Information was obtained on respondent's socio-demographic data, Knowledge on cancer cervix, causes, risk factors, screening practices and prevention aspects.

## Data Processing and Analysis

The obtained data was coded and entered into the Microsoft Excel 2010. Descriptive analysis of socio demographic characteristics and Knowledge of the respondents was done in the form of numbers, percentages, mean, Standard Deviation (SD), and represented in form of tables and graphs. Association of the socio demographic variables with knowledge score was analysed and compared with the one way ANOVA and Tukey Post Hoc test with the chi-square test. P<0.05 was considered statistically significant. The data collected was analysed with help of IBM SPSS 20.

## RESULTS

The **Table 1** shows that out of 580 respondents there were 422 in the age group of 30 to 40 years, 127 between 41 to 50 years, 25 in the age group 51 to 60 years and 6 more than 60 years. The **Table 2** shows that out of 580 respondents there were 465 Hindu, 109 Muslim and 6 Christian. The **Table 3** shows that out of 580 respondents there were 52 illiterate, 174 had completed primary education, 125 respondents have done secondary ed-

ucation, 75 have studied till higher secondary, 118 have done graduation while 36 respondents have completed post-graduation. The **Table 4** show that out of 580 respondents 99.1% were married once, 0.3% was married twice while 0.5% was widows. The **Table 5** show that out of 580 respondents 12 were doing farming, 52 were health workers/ASHA, 441 respondents were housewives, 55 were teachers and 20 were doing some other category of occupation. The **Table 6** shows that among the 580 respondents, the minimum score was 1 and maximum score obtained was 25 out of 30. The mean knowledge score was  $9.15 \pm 5.5$ . The **Table 7** show that the married women had 406(70%) inadequate knowledge, 87 (22%) had moderate knowledge and only 46 (8%) were having good knowledge regarding cancer cervix. The **Figure 1** shows that there is a significant difference in knowledge among the females according to their age group. The difference in knowledge score is significant between 30 to 40 years and 41 to 50 years where the knowledge of 41 years to 50 years female is higher. The knowledge score of females more than 60 years of age is highest. The knowledge of females aged 41 to 50 years was higher than those between the ages of 30 to 40 years and is statistically significant as the  $p < 0.05$ . The **Figure 2** shows that among the 465 Hindu females, the mean knowledge was  $9.2258 \pm 5.44$ . In Muslims the mean knowledge score was  $8.6881 \pm 5.80$ , while in Christians the mean knowledge score was  $11.6667 \pm 3.72$ . There was no statistical difference in the mean knowledge score of respondents according to religion as  $f = 1.057$  with  $p < 0.05 (0.348)$ .

**Table 1:** Distribution of Respondents according to Age group.

Age Group	Frequency	Percentage
30 to 40 years	422	72.4
41 to 50 years	127	21.8
51 to 60 years	25	4.3
>60 years	6	1.5
Total	580	100

**Table 2:** Distribution of respondents according to Religion.

Religion	Frequency	Percentage
Hindu	465	80.3
Muslim	109	18.7
Christian	6	1
Total	580	100

**Table 3:** Distribution of Respondents according to Education status.

Education Status	Frequency	Percentage
Illiterate	52	8.9
Primary	174	29.8
Secondary	125	21.4
Higher Secondary	75	12.9
Graduation	118	20.8
Post-Graduation	36	6.2
Total	580	100

**Table 4:** Distribution of Respondents according to Marital status.

Marital Status	Frequency	Percentage
Married Once	575	99.1
Married Twice	2	0.3

Widow	3	0.5
Total	580	100

**Table 5:** Distribution of Respondents according to Occupation.

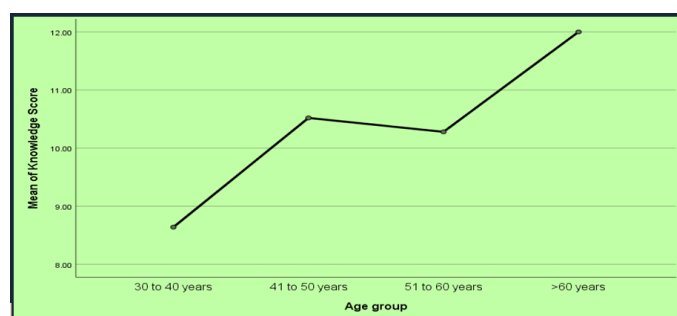
Occupation	Frequency	Percentage
Farming	12	2.1
Health worker	52	8.9
Housewife	441	76.2
Teacher	55	9.4
Others	20	3.4
Total	580	100

**Table 6:** Descriptive Statistics of Knowledge of Respondents on Cervical Cancer.

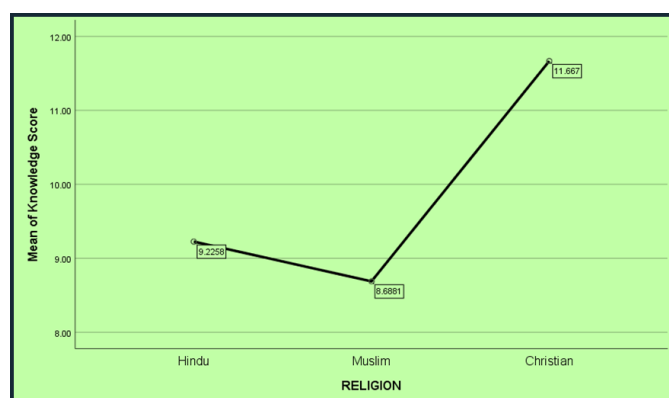
N	Minimum	Maximum	Mean	SD
580	1	24	9.15	5.5

**Table 7:** Knowledge score of the Respondents.

Poor	Adequate/Moderate	Good
Knowledge	Knowledge	Knowledge
406 (70%)	87 (22%)	46 (8%)

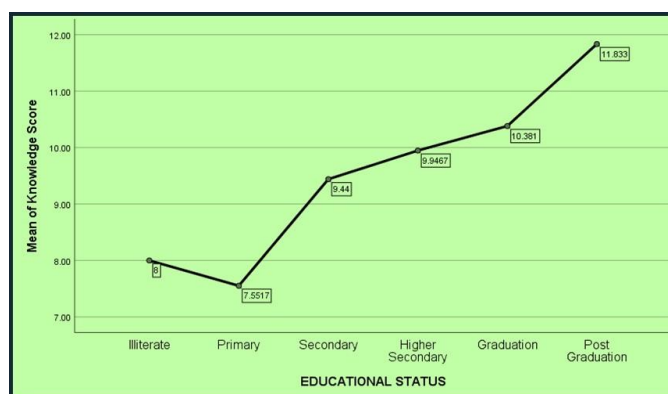


**Figure 1:** Shows the Descriptive Statistics of Knowledge Score according to Age Group.



**Figure 2:** Shows the Descriptive Statistics of Knowledge Score according to Religion.

The **Figure 3** shows that there is a significant difference in knowledge among the females according to their education status. The difference in knowledge score is significant between illiterate and post graduate where the knowledge of post graduate is higher. The score of all females above the primary level of education was higher and statistically significant ( $p < 0.05$ ). The knowledge of post graduate females was higher than illiterate and primary educated females as the  $p < 0.05$  (**Tables 8-10**).



**Figure 3:** Shows the Descriptive Statistics of Knowledge Score according to Education Status.

**Table 8:** Shows the Descriptive Statistics & One Way ANOVA of Knowledge Score according to Age Group.

Age Group	N	Mean	Std. Deviation	95% Confidence Interval for Mean	
				Lower Bound	Upper Bound
30 to 40 years	422	8.6398	5.44575	8.1187	9.1609
41 to 50 years	127	10.5197	5.42459	9.5671	11.4723
51 to 60 years	25	10.28	5.74833	7.9072	12.6528
>60 years	6	12	4.21307	8.7615	15.2385
Total	580	9.1715	5.49615	8.7245	9.6186
F Value (p value)		5.103 (0.002)			

**Table 9:** Tukey Post Hoc Comparison of Knowledge score according to Age group.

(I) Age group	(J) Age group	Mean Difference (I-J)	Std. Error	P value	95% Confidence Interval	
					Lower Bound	Upper Bound
30 to 40 years	41 to 50 years	-1.87987*	0.55048	0.004	-3.2982	-0.4616
	51 to 60 years	-1.64019	1.11954	0.459	-4.5247	1.2443
	>60 years	-3.36019	1.83221	0.258	-8.0809	1.3605
41 to 50 years	30 to 40 years	1.87987*	0.55048	0.004	0.4616	3.2982
	51 to 60 years	0.23969	1.19005	0.997	-2.8265	3.3058
	>60 years	-1.48031	1.87612	0.859	-6.3141	3.3535
51 to 60 years	30 to 40 years	1.64019	1.11954	0.459	-1.2443	4.5247
	41 to 50 years	-0.23969	1.19005	0.997	-3.3058	2.8265
	>60 years	-1.72	2.11428	0.848	-7.1675	3.7275
>60 years	30 to 40 years	3.36019	1.83221	0.258	-1.3605	8.0809
	41 to 50 years	1.48031	1.87612	0.859	-3.3535	6.3141
	51 to 60 years	1.72	2.11428	0.848	-3.7275	7.1675

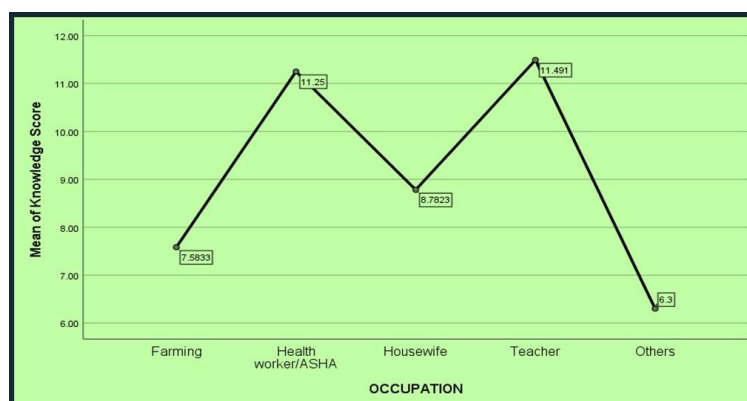
\* The mean difference is significant at the 0.05 level.

**Table 10:** Shows the Descriptive Statistics & One Way ANOVA of Knowledge Score according to Religion.

Religion	N	Mean	Std. Deviation	95% Confidence Interval for Mean	
				Lower Bound	Upper Bound
Hindu	465	9.2258	5.44195	8.7299	9.7217
Muslim	109	8.6881	5.80979	7.585	9.7911
Christian	6	11.6667	3.7238	7.7588	15.5746
Total	580	9.15	5.50082	8.7014	9.5986
F Value (p value)		1.057 (0.348)			

The **Figure 4** shows that there is a significant difference in knowledge among the females according to their Occupation as the  $p < 0.05$ . The tukey post hoc test shows that the difference in knowledge score is significant between ASHA worker and

housewife where in ASHA worker have a higher knowledge. The knowledge score of teacher is also higher than ASHA worker and is statistically significant as the  $p < 0.05$  (**Tables 11-13**).



**Figure 4:** Shows the Descriptive Statistics of Knowledge Score according to Occupation.

**Table 11:** Shows the Descriptive Statistics & One Way ANOVA of Knowledge Score according to Education.

Education status	N	Mean	Std. Deviation	95% Confidence Interval for Mean	
				Lower Bound	Upper Bound
Illiterate	52	8	6.25284	6.2592	9.7408
Primary	174	7.5517	5.61739	6.7112	8.3923
Secondary	125	9.44	6.25841	8.3321	10.5479
Higher Secondary	75	9.9467	4.57636	8.8937	10.9996
Graduation	118	10.3814	4.22835	9.6105	11.1522
Post- Graduation	36	11.8333	3.99643	10.4811	13.1855
Total	580	9.15	5.50082	8.7014	9.5986
F Value (p value) 7.019 (0.000)					

**Table 12:** Tukey Post Hoc Comparison of Knowledge score according to Education.

(i) Educational status	(j) Educational status	Mean Difference (I-J)	Std. Error	P value	95% Confidence Interval	
					Lower Bound	Upper Bound
Illiterate	Primary	0.44828	0.84762	0.995	-1.9754	2.8719
	Secondary	-1.44	0.88502	0.581	-3.9706	1.0906
	Higher Secondary	-1.94667	0.96782	0.337	-4.714	0.8207
	Graduation	-2.38136	0.8927	0.083	-4.9339	0.1712
	Post-Graduation	-3.83333*	1.16282	0.013	-7.158	-0.5084
Primary	Illiterate	-0.44828	0.84762	0.995	-2.8719	1.9754
	Secondary	-1.88828*	0.62882	0.033	-3.6863	-0.0902
	Higher Secondary	-2.39494*	0.74083	0.016	-4.5132	-0.2766
	Graduation	-2.82963*	0.63959	0	-4.6584	-1.0008
	Post-Graduation	-4.28161*	0.98199	0	-7.0895	-1.4737
Secondary	Illiterate	1.44	0.88502	0.581	-1.0906	3.9706
	Primary	1.88828*	0.62882	0.033	0.0902	3.6863
	Higher Secondary	-0.50667	0.78334	0.987	-2.7465	1.7332
	Graduation	-0.94136	0.68838	0.747	-2.9097	1.027
	Post-Graduation	-2.39333	1.01445	0.173	-5.294	0.5074

	Illiterate	1.94667	0.96782	0.337	-0.8207	4.714
	Primary	2.39494*	0.74083	0.016	0.2766	4.5132
Higher Secondary	Secondary	0.50667	0.78334	0.987	-1.7332	2.7465
	Graduation	-0.43469	0.79201	0.994	-2.6993	1.83
	Post-Graduation	-1.88667	1.08743	0.509	-4.996	1.2227
	Illiterate	2.38136	0.8927	0.083	-0.1712	4.9339
	Primary	2.82963*	0.63959	0	1.0008	4.6584
Graduation	Secondary	0.94136	0.68838	0.747	-1.027	2.9097
	Higher Secondary	0.43469	0.79201	0.994	-1.83	2.6993
	Post-Graduation	-1.45198	1.02116	0.714	-4.3718	1.4679
	Illiterate	3.83333*	1.16282	0.013	0.5084	7.158
	Primary	4.28161*	0.98199	0	1.4737	7.0895
Post-Graduation	Secondary	2.39333	1.01445	0.173	-0.5074	5.294
	Higher Secondary	1.88667	1.08743	0.509	-1.2227	4.996
	Graduation	1.45198	1.02116	0.714	-1.4679	4.3718

\* The mean difference is significant at the 0.05 level.

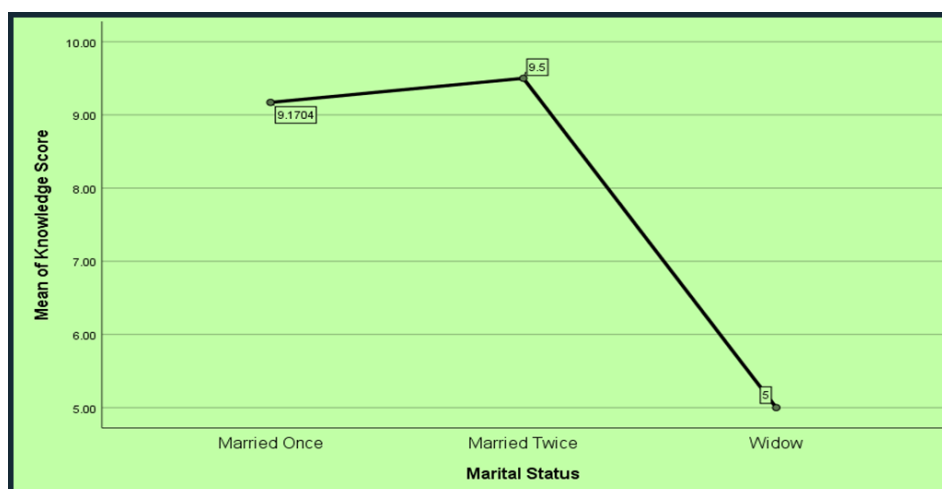
**Table 13:** Shows the Descriptive Statistics & One Way ANOVA of Knowledge Score according to Occupation.

Occupation	N	Mean	Std. Deviation	95% Confidence Interval for Mean	
				Lower Bound	Upper Bound
Farming	12	7.5803	7.58537	2.7638	12.4028
Health worker	52	11.25	5.76628	9.6447	12.8553
Housewife	441	8.7823	5.41108	8.2759	9.2887
Teacher	55	11.491	4.03169	10.401	12.5808
Others	20	6.3	5.84087	3.5664	9.0336
Total	580	9.15	5.50082	8.7014	9.5986

F Value (p value) 6.718 (0.000)

The **Figure 5** shows that among the 575 females married once, the mean knowledge was  $9.1704 \pm 5.49$ . Among the 2 females who have been married twice, the mean knowledge score was  $9.5 \pm 10.6$ . The knowledge score was  $5.00 \pm 4.00$ . There was no

statistical difference in the mean knowledge score of respondents according to marital status as  $f=0.861$  with  $p>0.05$  (0.423) (**Tables 14 and 15**).



**Figure 5:** Shows the Descriptive Statistics of Knowledge Score according to Marital Status.

**Table 14:** Tukey Post Hoc Comparison of Knowledge score according to Education.

(I) Occupation	(j) Occupation	Mean Difference e (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Farming	Health worker	-3.66667	1.72787	0.212	-8.3949	1.0616
	Housewife	-1.19898	1.57853	0.942	-5.5186	3.1206
	Teacher	-3.90758	1.71901	0.155	-8.6116	0.7964
	Others	1.28333	1.97008	0.966	-4.1077	6.6744
Health worker/ ASHA	Farming	3.66667	1.72787	0.212	-1.0616	8.3949
	Housewife	2.46769*	0.79107	0.016	0.303	4.6324
	Teacher	-0.24091	1.04357	0.999	-3.0966	2.6148
	Others	4.95000*	1.41959	0.005	1.0654	8.8346
Housewife	Farming	1.19898	1.57853	0.942	-3.1206	5.5186
	Health worker	-2.46769*	0.79107	0.016	-4.6324	-0.303
	Teacher	-2.70860*	0.77153	0.004	-4.8199	-0.5973
	Others	2.48231	1.23347	0.261	-0.893	5.8577
Teacher	Farming	3.90758	1.71901	0.155	-0.7964	8.6116
	Health worker	0.24091	1.04357	0.999	-2.6148	3.0966
	Housewife	2.70860*	0.77153	0.004	0.5973	4.8199
	Others	5.19091*	1.4088	0.002	1.3358	9.046
Others	Farming	-1.28333	1.97008	0.966	-6.6744	4.1077
	Health worker	-4.95000*	1.41959	0.005	-8.8346	-1.0654
	Housewife	-2.48231	1.23347	0.261	-5.8577	0.893
	Teacher	-5.19091*	1.4088	0.002	-9.046	-1.3358

\*. The mean difference is significant at the 0.05 level.

**Table 15:** Shows the Descriptive Statistics & One Way ANOVA of Knowledge Score according to Marital Status.

Marital status	N	Mean	Std. Deviation	95% Confidence Interval for Mean	
				Lower Bound	Upper Bound
Married Once	575	9.1704	5.49363	8.7205	9.6204
Married Twice	2	9.5	10.6066	-85.7965	104.7965
Widow	3	5	4	-4.9366	14.9366
Total	580	9.15	5.50082	8.7014	9.5986

F Value (p value) 0.861 (0.423)

## DISCUSSION

Out of 580 respondents there were 422 in the age group of 30 years to 40 years, 127 between 41 years to 50 years, 25 in the age group 51 years to 60 years and 6 more than 60 years. Out of 580 respondents there were 468 Hindu, 109 Muslims and 6 Christians. There were 52 illiterates, 174 had completed primary education, 125 respondents have done secondary education, 75 have studied till higher secondary, 121 have done graduation while 36 respondents have completed post-graduation. 99.1% were married once, 0.3% were married twice while 0.5% were widows. Out of 580 respondents 12 were doing farming, 52 were health workers/ASHA, 444 respondents were housewives, 55 were teachers and 20 were doing some other category of occupation. Among the 580 respondents, the minimum score was 1 and maximum score obtained was 25 out of 30. The married women had 406 (70%) inadequate knowledge, 87 (22%) had moderate knowledge and only 46 (8%) were having good knowledge regarding cancer cervix. The mean knowledge score related to cervical cancer was  $9.15 \pm 5.5$ . The difference in knowledge score is significant between 30 to 40 years and 41

years to 50 years where the knowledge of 41 years to 50 years female is higher. The knowledge score of females more than 60 years of age is highest. The knowledge of females aged 41 years to 50 years was higher than those between the age of 30 years to 40 years and is statistically significant as the  $p < 0.05$ . There was no statistical difference in the mean knowledge score of respondents according to religion as  $F = 1.057$  with  $p > 0.05 (0.348)$ . There is a significant difference in knowledge among the females according to their education status. The difference in knowledge score is significant between illiterate and post graduate where the knowledge of post graduate is higher. There is a significant difference in knowledge among the females according to their Occupation as the  $p < 0.05$ . There was no statistical difference in the mean knowledge score of respondents according to marital status as  $f = 0.861$  with  $p > 0.05 (0.423)$ . The hypothesis that there is no difference in the knowledge level of respondents according to demographic variables is partly rejected except with respect to religion and marital status.

The present study has also shown a very low level of knowledge among the females related to cancer cervix. The difference

in knowledge score is significant between illiterate and post graduate where the knowledge of post graduate is higher. The knowledge difference was significant with respect to occupation. Even though, the difference between various demographic variables was present but the overall knowledge score indicated a very low knowledge among the rural females of Vadodara. A contrasting finding was seen in study conducted by Narayana G, Suchitra MJ, Sunanda G, Ramaiah JD, Kumar BP, Veerabhadrapa KV which revealed that 38% of surveyed women had good awareness regarding cervical cancer [10].

The low knowledge in females is not surprising as the previous studies conducted by Mutyaba T, Mmiro FA, Weiderpass E showed the low level of knowledge and awareness related to cervical cancer among the nursing females [11]. These figures are just an indication of the discriminant attitude of females towards their own health issues also showcasing the low level of health care seeking behavior of females irrespective of occupation and profession. Mengesha A, Messele A and Beletew B. majority in their study in Ethiopia also found that >80% of the females lack knowledge that HPV is a causative agent of cervical cancer which is extremely worrying as the most important way to prevent cervical cancer is blocking HPV infection [12]. Al-Meer FM, Aseel MT, Al-Khalaf J, Al-Kuwari MG, Ismail MF also had a similar finding where majority, 63.2% having an unfavourable attitude regarding prevention and screening test of cervical cancer [13]. The contrasting finding was seen in other studies conducted in Nepal and Iraq which showed that there was good level of knowledge and positive attitude towards cervical cancer [14,15]. Studies in Nigeria and Ghana have also documented similar findings of low knowledge of risk factors of cervical cancer [16,17]. Similar low level of knowledge and awareness on risk factors of cervical cancer and its screening methods have also been reported by the numerous hospital based or community based studies in India [18,19]. The findings of low level of knowledge related to cervical cancer simply highlights the need of the public health authorities to put in sustainable effort where in the population of especially low and middle income countries to provide a reliable information source on the various risk factors causing cervical cancer. The lack of awareness and positive attitude towards cervical cancer screening methods also keep the efforts at bay. The various screening methods seem to be privacy evading for the women which makes them shy away from following the cervical cancer screening. A review study conducted by Sankaranarayanan R, Bhatla N, Gravitt PE, Basu P, Esmy PO, Ashrafunnessa KS, et al., observed that cervical cancer is a neglected disease among women [20]. This findings are in consistent with the study conducted in the Gondar town, North West Ethiopia, in the year 2020, suggested that the overall knowledge of women towards cervical cancer was inadequate. A study conducted in Kampong Speu (2018) revealed that, 74% of participants had ever heard about cervical cancer, and 34% of women had ever heard about the screening test, hence, the level of knowledge about cervical cancer screening was low among women but the attitude to participate in the screening test was favourable. Similarly, Nguyen Toan Tran et al (2011) had conducted a similar study in the Korea and findings suggested that there was no statistically significant difference between rural and urban women in their knowledge of cervical cancer and the main reasons for not screening were lack of awareness of cytology screening (48%). This result is in consis-

tent with the survey study conducted by the Kadian L. (2021), in India found that knowledge about symptoms and risk factors was very low in both rural and urban areas.

The author recommended the need to implement systematic health education to the women irrespective of their residence of Vadodara. 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. A study conducted by the Shreshtha j, (2013) in Nepal mentioned that respondents who had primary level education had better KAP scores compared to those with secondary and higher level of education, contrary to place of the residence, where respondents who were from urban had better KAP score compared to the from Rural place, which is differ from the current study findings and recommended that as the difference as per the educational level was not found to be statistically significant there is a need to increase intensive cervical cancer awareness campaigns on screening for cervical cancer and developing screening programmes at national level. A study conducted on the school teachers at Chandigarh in (2021) by Aprajita Singla mentioned that awareness of Cervical Cancer's risk factors, signs and symptoms is low in even educated class like school teachers of a modern progressive city like Chandigarh. Findings suggest that there is need for more educational programs to aware the women.

## CONCLUSION

The low level of knowledge was seen in the respondents. The overall knowledge score was  $9.15 \pm 5.5$  which is very low on the score of 30. The study finding revealed that the women had 406 (70%) inadequate knowledge, 87 (22%) had moderate knowledge and only 46 (8%) were having good knowledge regarding cancer cervix. The knowledge level was seen to be statistically significant with respect to education level, occupation. Although this difference was statistically significant, the level of knowledge was still not as high.

## RECOMMENDATION

The health of females has always been an issue of concern worldwide. In countries like India, which have been battling the deteriorating health of the females since ages need to focus on the emerging cause of death among the females, Cervical Cancer awareness campaigns are to be organised and imparted among the women irrespective of their residential areas to aid the healthy life.

## PARTICULARS OF AUTHORS

1. Ph.D. Nursing Scholar, Medical Surgical Nursing, Sumandeep Vidhyapeeth Deemed to be University, Piparia, Vadodara, Gujarat, India
2. Professor, Dept. of Surgery, SBKSMIRC, Sumandeep Vidhyapeeth Deemed to be University, Piparia, Vadodara, Gujarat, India.

## AUTHOR DECLARATION

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## CONFLICT OF INTEREST

There are no conflicts of interest

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