

# A Study To Assess The Knowledge Regarding Cervical Cancer Among Homemaker Women In Selected Areas At Kollam.

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**Abstract :** The study aimed to assess the knowledge regarding cervical cancer among homemaker women in selected areas of Kollam and to determine the association between their knowledge scores and selected demographic variables. A total of 200 homemaker women aged above 25 to above 50 years were selected using a purposive sampling technique. The study followed a non-experimental descriptive research design with a quantitative approach. Reliability of the knowledge questionnaire was established using the test–retest method and Karl Pearson’s correlation coefficient.

Findings showed that 56.5% of the participants had poor knowledge, 43% had average knowledge, and only 0.5% had good knowledge regarding cervical cancer. Significant associations were found between knowledge scores and variables such as age, type of family, marital status, education, sanitation method, history and type of genital infection, previous knowledge, and source of information. No significant association was observed with area of residence, number of children, or menstrual days. The study concluded that the descriptive research design effectively assessed the knowledge levels of homemaker women on cervical cancer.

## INTRODUCTION

Cervical cancer or Carcinoma of cervix is the one of the most known cancers over global which lead a woman to death. In every year there are almost 266000 women die because of this. Majority of all cervical cancer-related deaths take place almost in developing countries. Knowledge on cervical cancer, risk factors, availability of resources for early diagnosis, and its prevention is quite very less among Indian women. The main causative agent for this is Human Papilloma Virus (HPV); a sexually transmitted pathogen which can be prevent with safe sexual intercourse practice and use of vaccines among others. The prevalence of cervical cancer may differ across the world, with more than 85% of deaths occurring in developing regions. The radical changes in epidemiological patterns of cervical cancer, over recent decades have been attributed to the effective use of the Papanicolaou (Pap) or Pap Smear test in improving detection of the Human Papilloma Virus (HPV) which help the women in identifying the early sign and symptoms. Women living with HIV are more prone to develop HPV infections at an earlier age and also, they are major risk to develop cervical cancer as the earliest. <sup>1</sup>

Many of these deaths can be prevent through universal access to comprehensive cervical cancer prevention, screening, and control programmes, which should have the capability to access all women with human papillomavirus (HPV) vaccination and all women who are at risk by providing health awareness programmes and also facilitate them for screening and treatment of pre-cancer symptoms.

Basic knowledge of women's pelvic anatomy and the natural history of cervical cancer is important factor in prevention of these cancers. Providing adequate information on cervical cancers and proper screening facilities by health-care providers effectively raise the understanding of cervical cancer prevention in women, families, and communities.

During community survey, it found that homemaker women are less exposed to health awareness programme and less knowledge about the risk factors, screening procedures and preventive measures regarding cervical cancer. This study is intended to assess the knowledge regarding cervical cancer among homemaker women.

## NEED OF THE STUDY.

Cervical cancer is one of the most common and preventable cancers among women, yet many homemaker women have limited awareness about its risk factors, symptoms, prevention, and screening methods. Lack of knowledge often leads to delayed diagnosis and increased mortality. Homemaker women, especially those in the 25–50 years age group, may not actively seek health information due to household responsibilities, socio-cultural barriers, or inadequate access to health education.

Assessing their knowledge is essential to identify existing gaps and to plan effective educational interventions. Understanding how demographic factors influence knowledge can help health professionals design targeted awareness programmes. Therefore, this study was needed to evaluate the level of knowledge regarding cervical cancer among homemaker women in Kollam and to highlight the importance of strengthening community-based health education and preventive services.

**3. Population:** Population for the present study was homemaker women who are in the age group of more than 25 to more than 50 years of age.

**Sample:** The sample size for the present study was 200 homemaker women between the age group of more than 25 to more than 50 years of age. The sample will be selected based on inclusion criteria.

### 3.2 Data and Sources of Data

The data were collected after obtaining formal written permission from the head of the institution. The data collection was done for a period of one month. The Data collection was done from 03/01/2025 to 03/02/2025.

### 3.3 Theoretical framework

The present study is based on the **Health Belief Model (HBM)**, which is widely used to explain health-related behaviors and the factors influencing individuals' decisions regarding disease prevention and early detection. According to HBM, a woman's likelihood of adopting preventive behaviors depends on her perceptions of susceptibility to the disease, the seriousness of its consequences, and the benefits versus barriers related to screening or preventive actions.

## RESEARCH METHODOLOGY

The methodology section outline the plan and method that how the study is conducted. This includes Universe of the study, sample of the study, Data and Sources of Data, study's variables and analytical framework. The details are as follows;

### 3.1 Population and Sample

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### 3.2 Data and Sources of Data

Data collection refers to the identification of the subjects, systematic gathering of information relevant to the research purpose or the specific objectives, questions or assumption of the study. The data were collected after obtaining formal written permission from the head of the institution. The data collection was done for a period of one month.

The Data collection was done from 03/01/2025 to 03/02/2025. The purpose of the study was explained to the participants and written Informed consent was taken from the participants prior to the study. Samples were selected on the basis of inclusion and exclusion criteria. Demographic proforma was administered to collect baseline data and knowledge questionnaires to collect information regarding cervical cancer. Needed instructions were provided to them.

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In this study, homemaker women's **knowledge regarding cervical cancer** forms the foundation for their perceptions. Adequate knowledge may increase their perceived susceptibility to cervical cancer and awareness of its severity, thereby motivating them to engage in preventive actions such as regular screening. Similarly, previous knowledge or health messages act as **cues to action**, encouraging early detection. Demographic variables such as age, marital status, education level, sanitation practices, reproductive history, and past genital infections influence their perceptions and understanding. Thus, the Health Belief Model provides a meaningful framework for assessing knowledge levels and understanding factors associated with cervical cancer awareness among homemaker women.

### 3.4 Statistical tools and econometric models

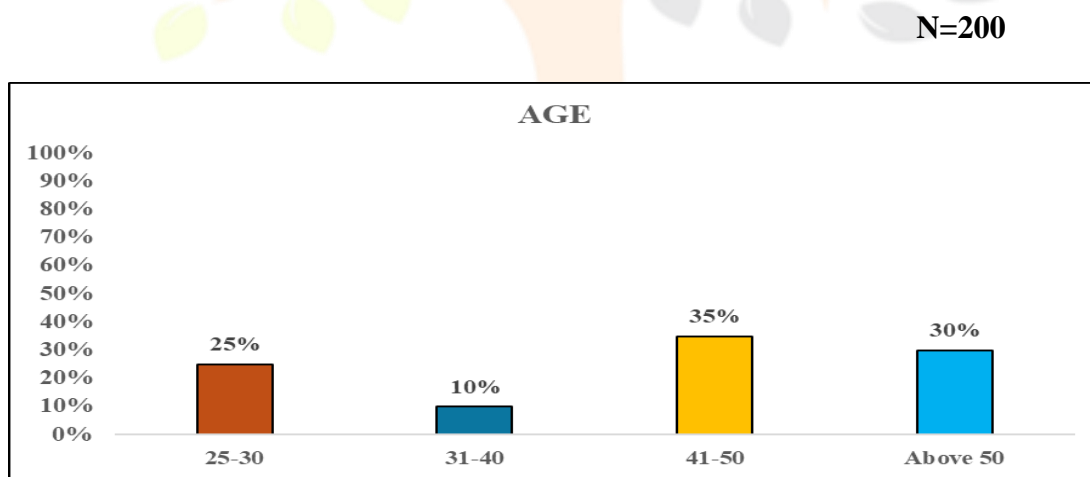
The data obtained were entered into a master sheet and analysed by descriptive and inferential statistics. The data is to present in figures and tables.

- Demographic data were analysed using frequency and percentage.
- Association between knowledge scores with selected demographic variables were analyzed using chi-square test.

## IV. RESULTS AND DISCUSSION

### 4.1 Results of Descriptive Statics of Study Variables

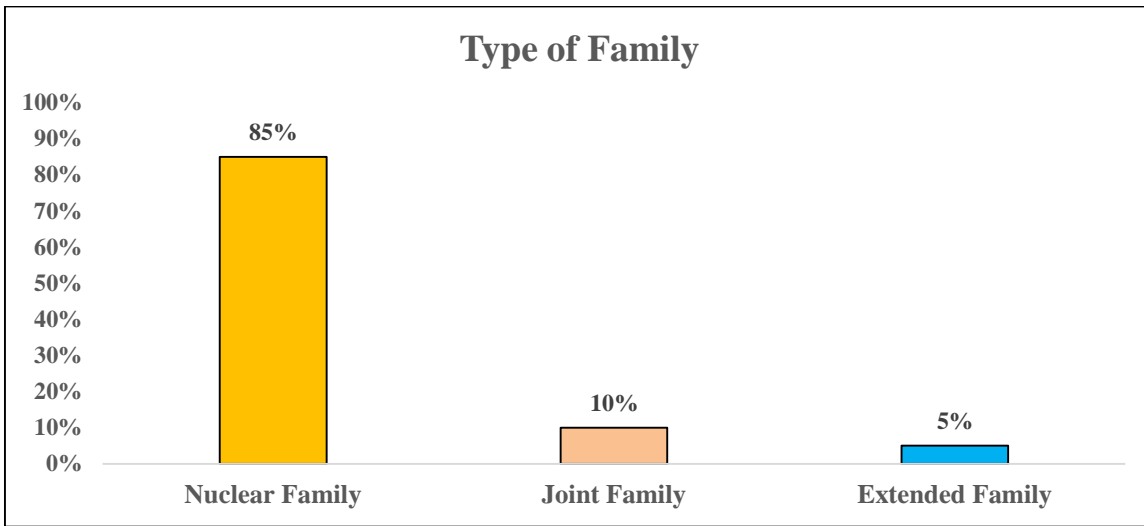
Table 4.1: Descriptive Statics



**Figure 2 : Percentage wise distribution of sample according to family type**

The data in the figure 1 shows that majority of 35% of the sample belongs to the age group of 41-50 years, 30% of the sample belongs to the age group of above 50 years, 25% of the sample belongs to the age group of 25-30 years, 10% of the sample belongs to 31-40 years.

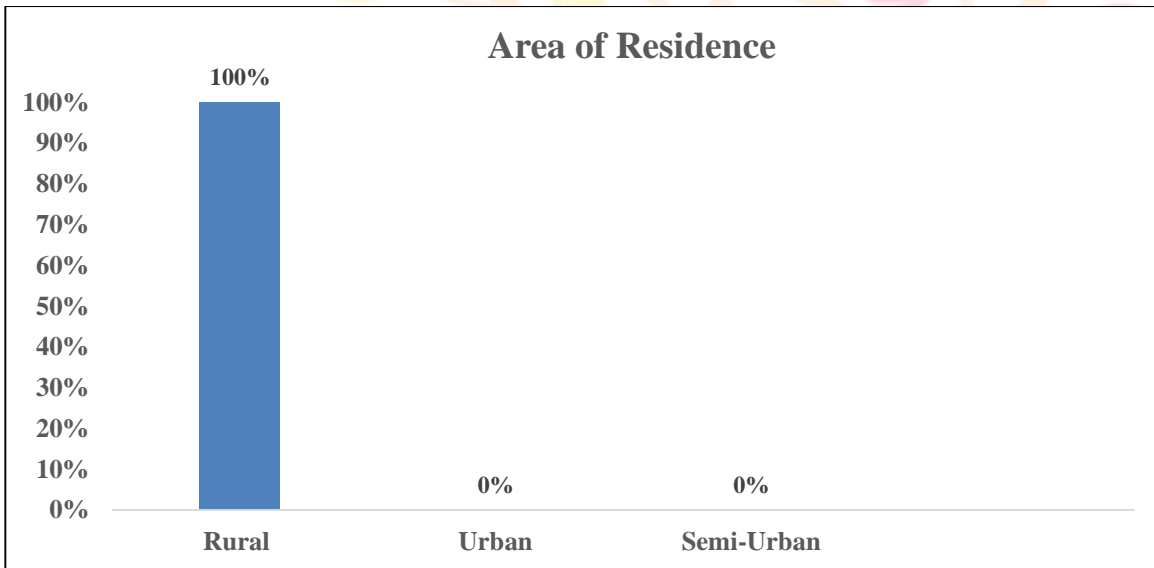
N =200



**Figure 3 : Percentage wise distribution of sample according to area of residence**

The data in the figure 2 shows that majority of 85% belongs to nuclear family, 10% belongs to joint family and 5% belongs to extended family.

**N =200**

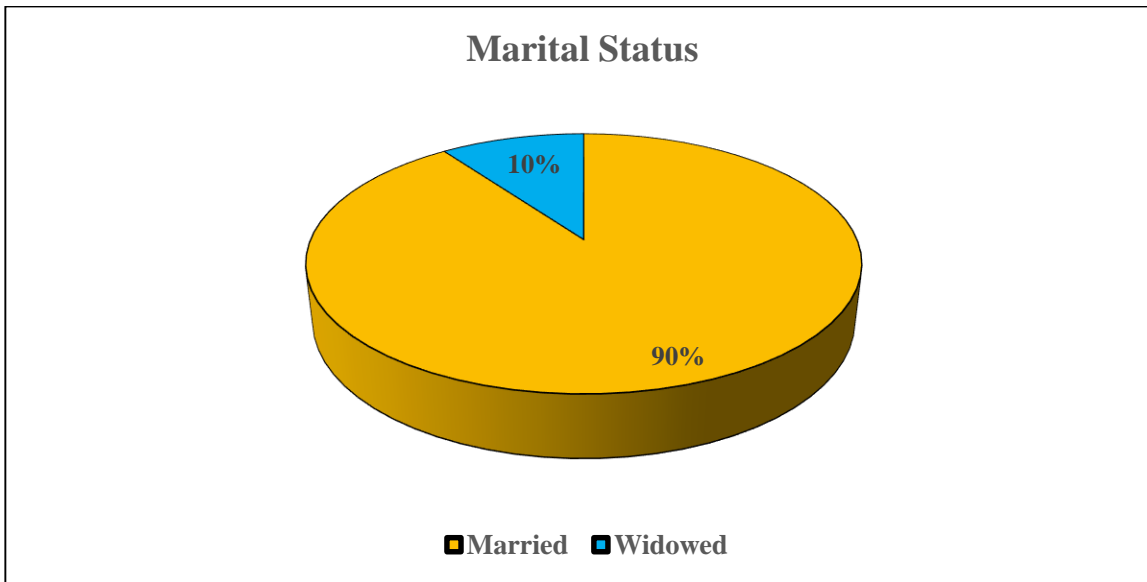


**Figure 3 : Percentage wise distribution of sample according to area of residence**

The data in the figure 3 shows that majority of 100% belongs to rural area.

**N =200**

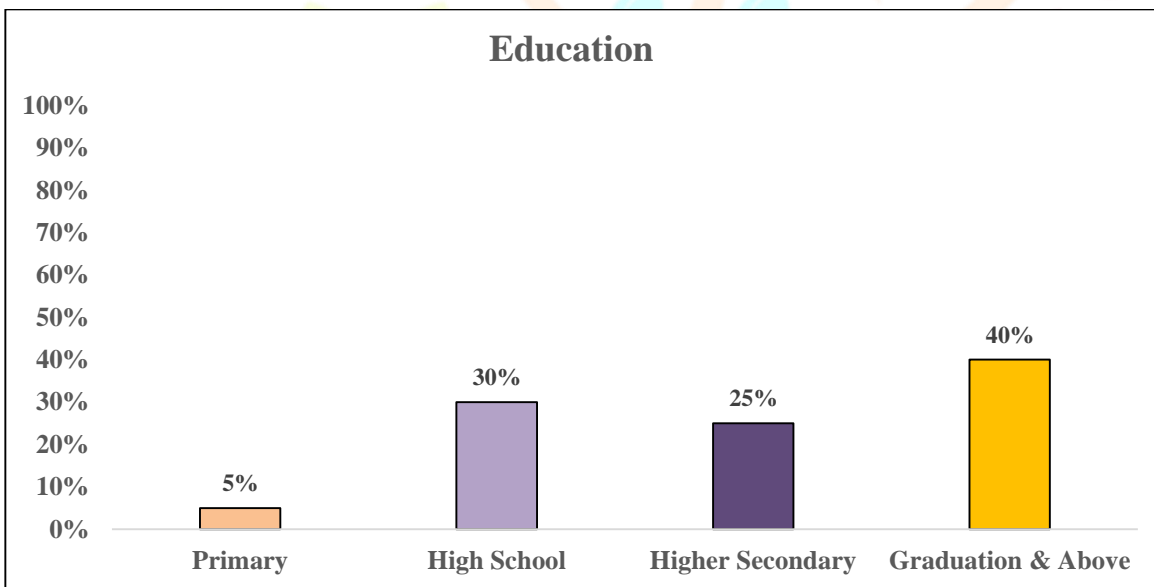
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**Figure 4 : Percentage wise distribution of sample according to marital status**

The data in the figure shows that 90% of the sample belongs to married and 10% of the sample belongs to widowed.

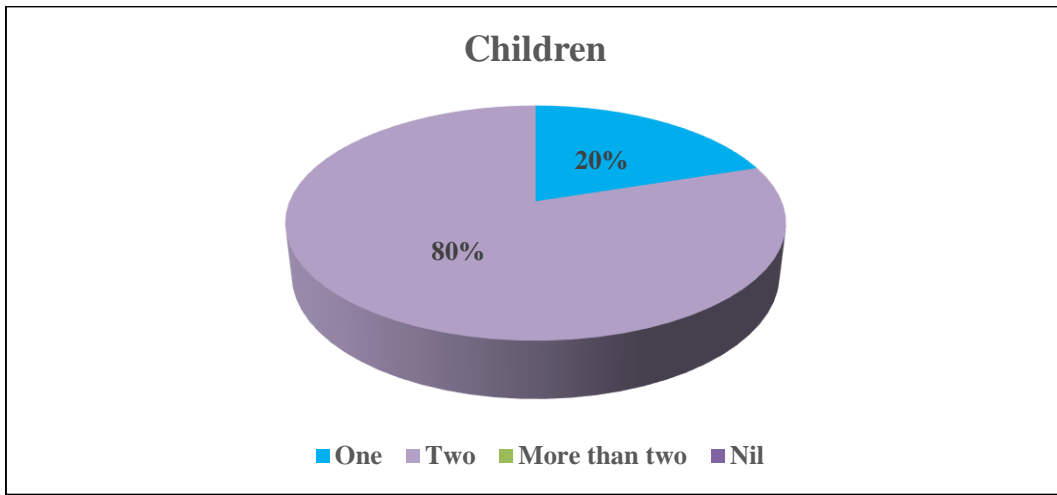
**N =200**



**Figure 5: Percentage wise distribution of sample according to level of education**

The data in the figure 5 shows that majority 40% of the sample belongs to graduation and above, 30% of the sample belongs to high school education, 25% of the sample belongs to higher secondary education and 5% of the sample belongs to primary education

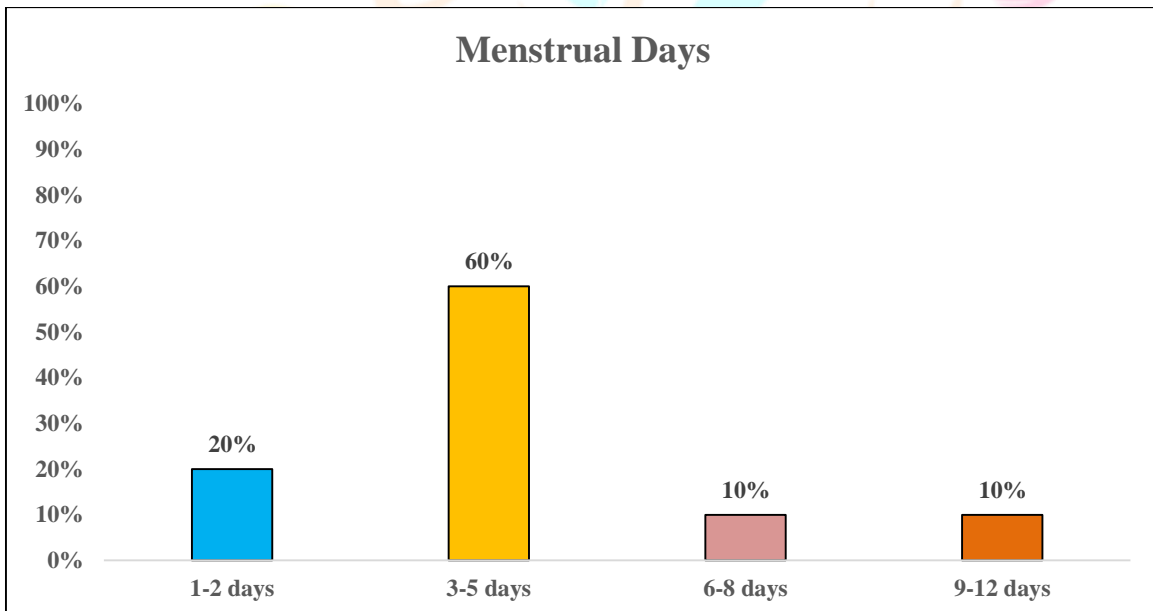
**N =200**



**Figure 6: Percentage wise distribution of sample according to the number of children**

The data in the figure 6 shows that majority of 80% of the sample belongs to two children, and 20% of the sample belongs to one child.

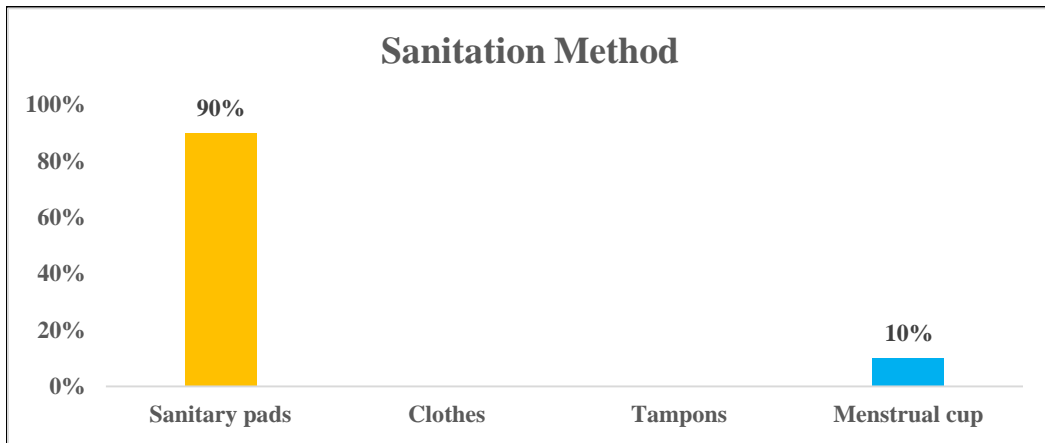
**N =200**



**Figure 7: Percentage wise distribution of the sample according to menstrual days**

The data in the figure 7 shows that majority 60% of the sample belongs to 3-5 days, 20% of the sample belongs to 1-2 days, 10% of the sample belongs to 6-8 days and 10% of the sample belongs to 9-12 days.

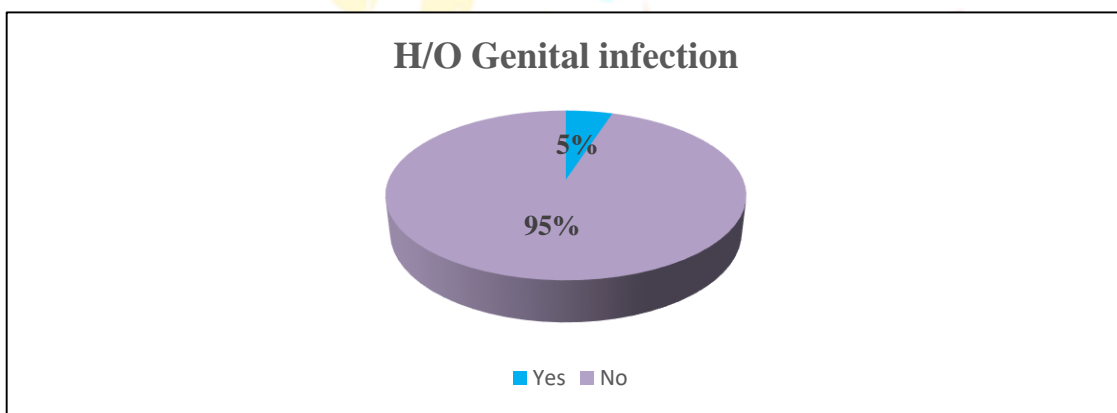
**N =200**



**Figure 8: Percentage wise distribution of the sample according to sanitation method**

The data in the figure 8 shows that 90% of the sample belongs to sanitary pads and 10% of the sample belongs to menstrual cup

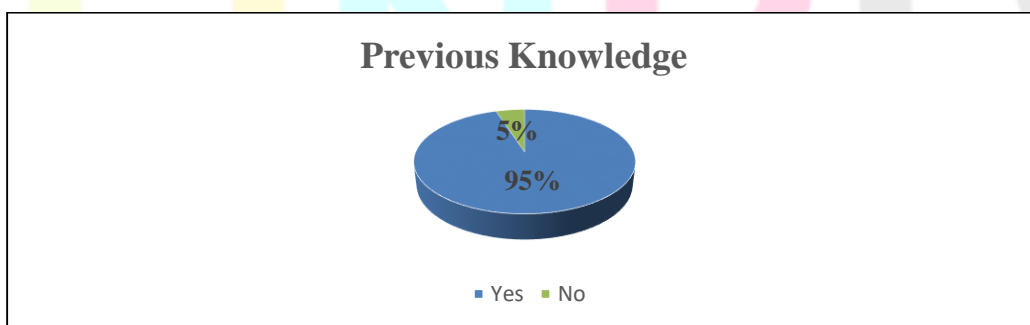
**N =200**



**Figure 9: Percentage wise distribution of sample according to genital infection**

The data in the figure 9 shows that majority of 95% of the sample belongs to YES category had a history of genital infection and 5% of the sample belongs to NO category, means no history of genital infection.

**N =200**



**Figure 10: Percentage wise distribution of sample according to previous knowledge**

The data in the figure 10 shows that 95% of the sample belongs to YES category, had previous knowledge and 5% of the sample belongs to NO category, means no previous knowledge.

**Table 1: Frequency and Percentage distribution on knowledge regarding cervical cancer among homemaker women.**

Score	Score Range	Frequency	Percentage
0-10	Poor Knowledge	113	56.5%
11-24	Average Knowledge	86	43%
25-30	Good Knowledge	1	0.5%

The data presented in the table 1 shows that 56.5% of homemaker women had poor knowledge, 43% had average knowledge and 0.5% had good knowledge.

**Table 2: Association between knowledge regarding cervical cancer among homemaker women and selected demographic variables.**

N =200

Variables	Knowledge			df	Chi Square value	Table value	Significance
	Poor	Average	Good				
<b>1. Age in Years</b>							
20-30	41	45	0	3	10.2455	7.815	S
31-40	44	17	0				
41-50	15	16	1				
Above 50	13	8	0				
<b>2. Type of Family</b>							
Nuclear Family	78	70	1	2	7.4856	5.991	S
Joint Family	24	15	0				
Extended Family	11	1	0				
<b>3. Area of Residence</b>							
Rural	62	64	1	2	2.5848	5.991	NS
Urban	30	21	0				
Semi-Urban	14	8	0				
<b>4. Marital Status</b>							
Married	84	84	1	2	20.5639	5.991	S
Widowed	20	1	0				
Divorced	9	1	0				
<b>5. Type of Education</b>							
Primary	10	0	0	2	25.6662	5.991	S
High School	22	9	0				
Higher Secondary	41	16	0				
Graduation & above	40	61	1				

6. Number of Children							
One	35	22	0	3	5.6453	7.815	NS
Two	55	39	1				
More than two	8	3	0				
Nil	15	22	0				
7. Average Menstrual Days							
1-2 days	10	4	0	3	5.3758	7.815	NS
3-5 days	64	60	1				
6-8 days	33	19	0				
9-12 days	7	2	0				
8. Menstrual Sanitation Methods							
Sanitary Pads	68	76	1	3	24.5824	7.815	S
Clothes	16	2	0				
Tampons	18	1	0				
Menstrual Cup	11	7	0				
9. History of Genital Infection							
Yes	36	10	1	1	10.095	3.841	S
No	77	76	0				
Type of Infections							
Bacterial Vaginosis	15	2	0	2	9.2898	5.991	S
Trichomoniasis	10	0	0				
Yeast Infection	5	1	1				
UTI	6	7	0				
10. Previous Knowledge							
Yes	45	56	1	1	5.8652	3.841	S
No	60	38	0				
Source Of Information							
Health Professionals	20	17	0	4	9.5956	9.488	S
Social media	13	23	1				
Newspaper	4	3	0				
Health Magazine	1	9	0				
Friends	7	4	0				

**S- Significant**

**NS- Nonsignificant**

The data presented in table 2 shows the association was computed by using Chi-square test. It was inferred that the present study showed significant association between knowledge and demographic variables like age, type of family, marital status, education, sanitation method, history of genital infection and type of infection, previous knowledge and source of knowledge. Regarding age, the calculated value 10.24 is greater than table value 7.81 at 0.05 level of significance. Regarding type of family, the calculated value 7.48 is greater than 5.99 at 0.05 level of significance. Regarding marital status, the calculated value 20.56 is greater than table value 5.99 at 0.05 level of significance. Regarding education, the calculated value 25.66 is greater than table value 5.99 at 0.05 level of significance. Regarding sanitation method, the calculated value 24.58 is greater

than table value 7.815 at 0.05 level of significance. Regarding history of genital infection, the calculated value 10.09 is greater than table value 3.84 at 0.05 level of significance. Regarding type of infection, the calculated value 9.28 is greater than table value 5.99 at 0.05 level of significance. Regarding previous knowledge, the calculated value 5.86 is greater than table value 3.84 at 0.05 level of significance. Regarding source of knowledge, the calculated value 9.59 is greater than table value 9.48 at 0.05 level of significance.

There was no statistically significant association between knowledge and demographic variables such as area of residence, number of children and menstrual days. Regarding area of residence, the calculated value 2.58 is lesser than table value 5.99 at 0.05 level of significance. Regarding number of children, the calculated value 5.64 is lesser than 7.81 at 0.05 level of significance. Regarding menstrual days, the calculated value 5.37 is lesser than table value 7.81 at 0.05 level of significance.

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