

# Assessment of Knowledge and Perceived Barriers to Prevention of Cervical Cancer among Women Attending Gynecology OPD at KLE's Dr Prabhakar Kore Hospital and Medical Research Center, Belgaum, Karnataka, with a View to Develop an Information Booklet

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## ABSTRACT

**Background:** Globally, cervical cancer is the second most common type of cancer among women leading to rise in death toll among women. Without urgent action, deaths due to cervical cancer are projected to rise by almost 25% over the next 10 years.

**Objectives:** To assess the knowledge and perceived barriers to prevention of cervical cancer among women attending gynecology outpatient department (OPD) and to find an association between knowledge and perceived barriers with sociodemographic variables.

**Methods:** This descriptive study at a tertiary care teaching hospital in India, enrolled 200 women attending gynecology OPD between 30 and 55 years. The research approach for the study was correlational and the subjects were selected by purposive sampling technique. The data on knowledge was collected using a structured knowledge questionnaire and perceived barriers by using 5 point Likert scale.

**Results:** The analysis demonstrated majority of women (65%) had an average knowledge regarding prevention of cervical cancer and their perceived barriers toward prevention of cervical cancer were neutral (70.5%). Chi-square test yielded p value < 0.05 suggesting a significant association between the sociodemographic variables with knowledge and perceived barriers.

**Interpretation and conclusion:** The study concluded that the level of knowledge among the women was average. The general attitude, even though is showing positivity, there are still women out there who have a more negative attitude toward cervical cancer and Pap smear screening and these women need to be targeted planning to start.

**Keywords:** Knowledge, Perceived barriers, Cervical cancer, Human papillomavirus, Cervical cancer screening.

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## INTRODUCTION

Cervical cancer is a malignant neoplasm of the uterine cervix or cervical area. It may present with vaginal bleeding but symptoms may be absent until the cancer is in its advanced stages. Treatment consists of surgery in early stages and chemotherapy and radiotherapy in advanced stages of the disease.<sup>1</sup>

Cervical cancer results mainly from infection with the human papillomavirus HPV, which affects both women and men. Usually women contract HPV in their teens and twenties. For most women the infection passes without causing harm. But for some, the disease progresses to cancer in 10 or 20 years. HPV ultimately develop cervical cancer if they have no access to treatment. Cervical cancer in the women is the second most common cancer worldwide, next only to breast cancer and in India too it is the most common women related cancer, followed by breast cancer. According to WHO estimates in India every year 132,082 women are diagnosed with cancer and 74,118 women die from this disease. India ranks 4th worldwide and nearly one-fifth of the cases affected globally, reside in India.<sup>2</sup>

Most women who die from cervical cancer, particularly in developing countries, are in the prime of their life. They may be raising children, caring for their family, and contributing to the social and economic life of their town or village. Their death is both a personal tragedy, and a sad and unnecessary loss to their family and their community. Unnecessary, because there is compelling evidence that cervical cancer is one of the most preventable and treatable forms of cancer, as long as it is detected early and managed effectively.<sup>3</sup>

Unfortunately, the majority of women in developing countries still do not have access to cervical cancer prevention programs. The consequence is that, often, cervical cancer is not detected until it is too late to be cured. An urgent effort is required if this situation is to be corrected. All women have a right to accessible, affordable and effective services for the prevention of cervical cancer. These services should be delivered as part of a comprehensive program to improve sexual and reproductive health. Moreover, a concerted and coordinated effort is required to increase community awareness about screening for the prevention and detection of cervical cancer.<sup>4</sup>

Thus, this study aims to assess knowledge and perceived barriers to prevention of cervical cancer among women attending gynecology outpatient department (OPD). Knowledge is assessed using a structured knowledge questionnaire and perceived barriers are assessed by using 5 point Likert scale. Having so many benefits attached to the use of screening techniques of cervical cancer, the researcher observed that there is an evident necessity to assess the knowledge and perceived barriers of women toward prevention of cervical

cancer among women attending gynecology OPD at KLES Dr Prabhakar Kore Hospital and MRC, Belgaum. The researcher observed that there is a need to improve knowledge of women regarding prevention of cervical cancer and motivate them to adopt screening techniques. The rational advocating such a tool is to create awareness regarding cervical cancer and educating the women regarding cost-effective screening techniques. Hence, the researcher feels that it is very essential to educate the women regarding cervical cancer and its prevention with early identification and prevention of complication, thereby playing an important role in reducing the mortality and morbidity.

**METHODS**

The study was conducted at a tertiary care, KLEs Dr Prabhakar Kore Hospital and MRC, Belgaum. Along with the descriptive survey approach, correlational study design was applied in the current study. The sample size of 200 was considered adequate based on the calculations using 80% of the total population for a descriptive study. The tool used for gathering relevant data was structured knowledge questionnaire to assess knowledge and 5 point Likert scale to assess the perceived barriers to prevention of cervical cancer. The data were collected from 8th February till 15th March 2011 after taking administrative permission. Before the questionnaire was given to the respondents, the researcher gave a short explanation to the respondents as to what the research is about and obtained their informed consent. The researcher stayed with the respondents while they answered the questionnaires to clarify and answer questions about the tool. The answers were kept confidential and the researcher did not link the answered questionnaires to the respondents because the researcher does not require the names of the respondents. The questionnaires were collected by the researcher right after the respondents finish answering the questionnaires.

**RESULTS**

Majority of women 73 (36.5%) belonged to the age group 30 to 35 years (Fig. 1) and 177 (88.5%) Hindu by religion. Most of the women 63 (31.5%) had an education up to primary level

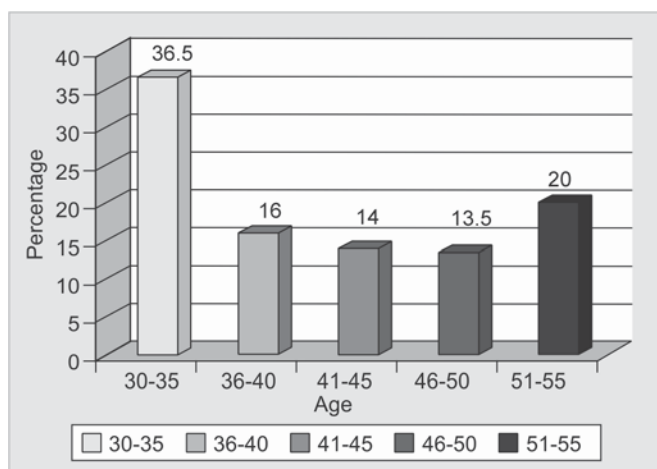


Fig. 1: Age in years

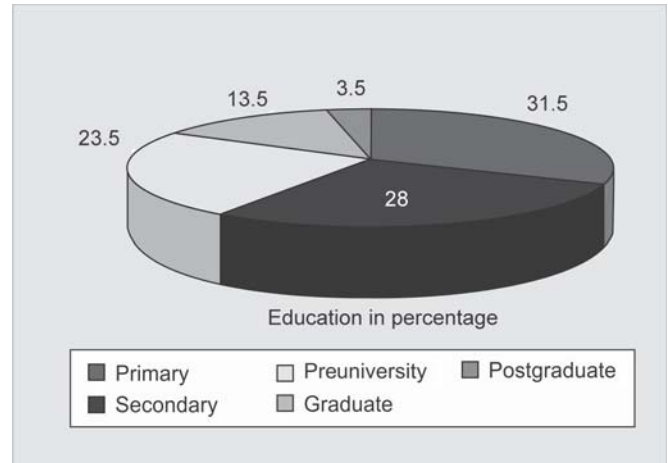


Fig. 2: Educational status

(Fig. 2) and 144 (72%) were housewives. Seventy-seven (38.5%) of women had a monthly family income of ₹ 4,000 and above and 103 (51.5%) lived in rural area. Majority of the women, 90 (45%), consumed mixed diet. Eighty-five (42.5%) of the women consumed vegetarian diet. Most of the women, 178 (89%), were married and 141 (70.5%) had more than 2 children.

1. Descriptive statistics, i.e. mean, median, standard deviation and range computed for the knowledge scores revealed that there was deficit knowledge and increased perceived barriers regarding prevention of cervical cancer as indicated by the scores.
2. Chi-square test was used to test the independence of selected variables in relation to the knowledge scores and perceived barriers (p-value < 0.05). The variable age was found to have association with the knowledge scores and the variables educational status, income and habitat were found to have association with perceived barriers.

**DISCUSSION**

The study was conducted to assess the knowledge and perceived barriers among women to prevention of cervical cancer. A total of 200 subjects were studied. The findings of the study was discussed under the following headings.

**Sample Characteristics**

The data presented in Table 1 indicates that a majority of women, 73 (36.5%), belonged to the age group of 30 to 35 years. Maximum number of women, 63 (31.5%), had primary education. Greater percentage of women, 144 (72%), were housewives.

Knowledge and perceived barriers of women to prevention of cervical cancer.

**Knowledge Score**

The findings of knowledge score (Table 2) reveals that greater number of women 131 (65%) had an average knowledge score regarding prevention of cervical cancer in more than half of the participants. Judging by the results of the level of

**Table 1:** Frequency and percentage distribution of subjects according to sociodemographic variables

S.no	Demographic variables	Frequency (f)	(%)
1.	Age in years		
	30-35	73	36.5
	36-40	32	16
	41-45	28	14
	46-50	27	13.5
2.	Education		
	Primary	63	31.5
	Secondary	56	28
	Preuniversity	47	23.5
	Graduate	27	13.5
3.	Postgraduate	7	3.5
	Occupation		
	Housewife	144	72
	Laborer	28	14
	Self-employed	18	9
Professional	10	5	

**Table 2:** Frequency and percentage distribution of knowledge scores of women regarding prevention of cervical cancer (n = 200)

Scores	Frequency (f)	(%)
Good 23-32	34	17.5
Average 17-22	131	65
Poor 1-16	35	17.5

knowledge of the participants, more awareness programs should be directed to the target group of women to provide them with information they need to know about cervical cancer so that they understand the purpose of the screening tests and come forward for testing and follow-up. It can also be noted that even though the level of knowledge is average, majority of the women with this average knowledge have had a screening test.

Statistical analysis using Chi-square to find association between knowledge of women with selected socio-demographic variables revealed that the variables religion, educational status, occupation, family income, habitat, diet, marital status and parity in relation with knowledge scores of women are independent of each other. The variable age with computed  $\lambda^2 = 17.587$  at degree of freedom (df) 8 shows an association with knowledge scores at 0.05 level of significance. The results of the study was similar by the findings of a study by Susana MN<sup>5</sup> where majority (67%) of women had poor knowledge and a minimum of them 2(1%) had good level of knowledge. This is consistent with reports from other countries, where lack of knowledge and factors related to low socioeconomic status and education level were major barriers of screening.

### Attitude Score

As a secondary objective the researcher assessed the perceived barriers of women regarding prevention of cervical cancer and the findings of the study (Table 3) revealed, that the attitude scores of majority of women, 141(70.5%), had neutral attitude to prevention of cervical cancer, 31(15.5%) of women had

**Table 3:** Frequency and percentage distribution of perceived barriers of women toward prevention of cervical cancer (n = 200)

Scores	Frequency (f)	(%)
Positive 73-90	28	14
Neutral 47-72	141	70.5
Negative 1-46	31	15.5

negative attitude, whereas minimum of the women, 28(14%) had positive attitude. The results of the study was similar by the findings of a study by Leyva M et al<sup>6</sup>, where majority (65.2%) of women had a neutral attitude toward cervical cancer screening, (29.5%) had a positive attitude and a minority of them (6.4%) had a negative attitude toward cervical cancer screening.

### CONCLUSION

The findings of the study suggest that the level of knowledge among the women was average. The general attitude, even though is showing positivity, there are still women out there who have a more negative attitude toward cervical cancer and Pap smear screening and these women need to be targeted planning to start.

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