



## Original Article

## Knowledge and Attitude Towards Cervical Cancer and its Screening among Women Attending the Gynecology Out Patient Department

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## ARTICLE INFO

**Key Words:**

Knowledge, Attitude, Cervical Cancer Screening, Women

**How to Cite:**

Siddiqa, A. ., Iqbal, S. ., Hameed, W. ., Saba, A. ., Khalid, U. ., Younas, N., Bashir, F. ., Aslam, H. ., & Karam Din, S. . (2023). Knowledge and Attitude Towards Cervical Cancer and its Screening among Women Attending the Gynecology Out Patient Department : Cervical Cancer and its Screening. *Pakistan Journal of Health Sciences*, 4(06).

<https://doi.org/10.54393/pjhs.v4i06.791>

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Received Date: 21<sup>st</sup> May, 2023

Acceptance Date: 15<sup>th</sup> June, 2023

Published Date: 30<sup>th</sup> June, 2023

## ABSTRACT

A kind of cervix cancer called cervical cancer arises when the cells in the cervix divide too rapidly. The costs of cervical cancer are considerable for the woman, her family, and society as a whole. Women's attitudes and understanding on cervical cancer screening are the subject of this study. **Objective:** To determine the Knowledge and attitude towards cervical cancer and its screening among women attending the Gynecology Out Patient Department and to evaluate the factors associated with knowledge and attitude towards cervical cancer and its screening. **Methods:** This study was carried out using a cross-sectional design. 15 women visiting the Gynaecology OPD were recruited through convenient sampling technique. A structured questionnaire encompassing socio-demographic characteristics, knowledge, and attitudes was utilized to collect data, which was then analyzed using SPSS version-24. **Results:** According to the study's findings, 65 (43%) of the 122 participants were between the ages of 31 and 40, and 94 (74.7%) were housewives. About 106 (70.7%) of respondents had low understanding of cervical cancer screening, whereas 44 (29.3%) had strong knowledge. The results suggest that respondents' knowledge of cervical cancer screening was significantly related to their education, marital status, occupation, and place of residence. The respondents' attitudes regarding cervical cancer screening were also significantly related to their education, occupation, and place of residence. **Conclusions:** The study revealed that women visiting the Gynaecology department have insufficient knowledge and attitudes about cervical cancer and screening. There is a need to enhance women's understanding and attitudes towards cervical cancer screening in order to detect and treat the illness early.

## INTRODUCTION

In the present era, the prevalence of non-communicable diseases (NCDs) is at an all-time high. Among these NCDs, cancer is the second leading cause of mortality worldwide. The fourth most common kind of cancer in women worldwide is cervical carcinoma [1]. About 500,000 new cases of cervical cancer are found annually; 270,000 of these women pass away, with 85% of them dying in

underdeveloped countries [2]. Worldwide, 570,000 women were confirmed to have cervical cancer in 2018, and 311,000 of them women passed away from the disease. While 85% of all fatalities are reported in poor countries, South Asian countries account for one-third of the global illness burden. The situation is considerably worse in Pakistan, where 20 women are identified with cervical carcinoma every day

and it is one of the 10 nations with the worst rates of female death [3]. Because cervical cancer is not routinely screened for and prevented in Pakistan, the actual incidence and prevalence rates at this time are unknown [4]. The frequency of cervical cancer among Pakistani women was 0.009% in 2002 and 0.019% in 2008, according to WHO data [5]. The high incidence and mortality rates of cervical cancer in developing countries are caused by a number of factors, including a lack of effective referral networks, limited access to high-quality healthcare services, and a lack of awareness of the disease among the general public, medical professionals, and policymakers [6]. Cancer of cervix is a form of cervix malignancy developed when the cervix's cells proliferate uncontrollably; it is the world's top cause of disease and death in women and a significant public health issue. It normally takes many years for the initial human papillomavirus (HPV) infection to turn into a malignant illness since HPV is a slow-growing malignancy [7]. Early cervical cancer may be asymptomatic, but women might still have foul-smelling vaginal discharge and unusual bleeding like postmenopausal, post-coital, or intermenstrual hemorrhage. High parity, early marriage, many relationships, smoking, low socioeconomic position, poor personal cleanliness, and long-term estrogen exposure from oral contraceptives are risk factors for cervical cancer [8]. Early detection of cervical cancer may be advised if you experience lower abdominal pain, post-coital bleeding, foul vaginal discharge, intermenstrual vaginal bleeding, post-menopausal vaginal hemorrhage, or any of these symptoms [9]. Cervical cancer can be detected in its early stages with the Pap smear test. A crucial secondary prevention technique for cervical cancer, population-based screening using Pap smears, resulting in a high cure percentage for cervical cancer patients [10]. Cervical cancer screening reduces risk and provides preventative benefits. As a result, early detection is critical for reducing cancer prevalence. In underdeveloped countries, 0.4% to 14% of rural residents and 2% to 20.2% of urban residents undergo screenings, respectively [2]. Cervical cancer imposes a heavy cost on the patient, her family, and the society [11]. When caught at a very early stage by an efficient screening program, it is preventive or curable. A crucial measure in lowering maternal fatalities is early cervical cancer screening. Cervical cancer and related prevention techniques should be understood by women. Therefore, there was an urgent need to assess women's attitudes and understanding regarding cervical cancer screening methods. Thus, early cervical cancer detection is possible.

## METHODS

Cross-sectional research was conducted in the outpatient Gynaecology division of Jinnah Hospital Lahore from January 2022 to April 2022. The population of study included all women aged 18 to 50, women who visited prenatal care, postnatal care, family planning, and women who were in labor, suffering from mental illness, or suffering from a serious illness. 150 was the estimated sample size. The participants were gathered using a practical sampling technique. A systematic questionnaire comprising three sections socio-demographic factors, awareness of cervical cancer and screening, and attitude towards cervical cancer screening was used to acquire data for this study. Knowledge questionnaire comprises of twenty multiple-choice questions [12]. Each right response was given a score of one, while each wrong response was given a score of zero. The total score ranged from 0-20. Using modified blooms cut off criteria, the respondents who scored between 16-20 categorized as having Good Knowledge with 80-100% correct responses, and poor knowledge below 79% (0-15 scores) correct responses. Ten statements make up the attitude questionnaire, and they are graded as follows: strongly disagree = 0, disagree = 1, agree = 2, and highly agree = 3. The total score ranged from 0-30. Based on blooms cut off point, respondents who scored 25-30 considered having positive attitude with 80-100% correct responses, and negative attitude with score 0-24 with <80% correct responses. The data were analyzed using SPSS version 24.0. Frequencies and percentages of descriptive statistics were computed. The Chi-square test was performed to investigate the relationship between the independent variable and knowledge and attitude.

## RESULTS

The survey was completed by 150 women, and 99.9% of them responded. General awareness of cervical cancer screening was held by 29.3% of the population, while favorable attitudes towards it were held by 36%. The study's participant women's demographic details are shown in Table 1. Out of 150, 65(43%) participants were aged from 31- 40 year, 50(34%) were having age 41 year of above, and 35(23%) were 20-30 year. Most 103(68.7%) were married and only 47(31.3%) were single. Approximately 55(44.3%) had no formal education, more than one third 36(29.5%) had primary education, 21(17.2%) had secondary education, and 11(9%) had diploma or degree. The majority of respondents, 94 (74.7%), were housewives, and 56 (25.3%) were employed. The majority of respondents (94.7%) were housewives, while 56 (25.3%) were working women. More than half of the 93(58.7) respondents resided in cities, while 57(41.3%) lived in rural areas.

**Table 1:** Sociodemographic factor

Variables	Category	Frequency (%)
Age in Years	20-30	35(23)
	31-40	65(43)
	≥41	50(34)
Marital Status	Single	47(31.3)
	Married	103(68.7)
Education	No formal education	54(44.3)
	Primary school	36(29.5)
	Secondary School	21(17.2)
	Diploma or Degree	11(9)
Occupation	House wife	94(74.7)
	Working women	5(25.3)
Residence	Rural	57(41.3)
	Urban	93(58.7)

The general knowledge of responders about cervical cancer screening is seen in Table 2. 44 respondents (29.3%) had strong knowledge about cervical cancer screening, compared to about 106 (70.7%) who had little knowledge.

**Table 2:** Knowledge of participants towards cervical cancer screening

Variables	Frequency (%)
Poor Knowledge	106(70.7)
Good Knowledge	44(29.3)

The general attitudes of respondents towards cervical cancer screening are shown in Table 3. 54 percent (36%) of participants had positive attitude and 96 percent (64 percent) had negative attitude towards cervical cancer screening.

**Table 3:** Attitude of participants towards cervical cancer screening

Variables	Frequency (%)
Positive Attitude	54(36)
Negative Attitude	96(64)

The correlation between the respondents' demographic characteristics and their knowledge about cervical cancer screening is shown in Table 4. The results showed that respondents' knowledge of cervical cancer screening has significant correlation with their level of education, marital status, line of work, and geographic area.

**Table 3:** Attitude of participants towards cervical cancer screening

Variables	Knowledge of Cervical Cancer Screening		p-value
	Poor Knowledge	Good Knowledge	
<b>Age in Years</b>			
20-30	48 (45.3%)	14 (31.8%)	0.087
31-40	32 (30.1%)	14 (31.8%)	
≥41	26 (24.5%)	26 (54.5%)	
<b>Education</b>			
No formal education	49 (45.7%)	4 (9.1%)	0.001
Primary school	22 (20.7%)	8 (18.2%)	
Secondary School	14 (13.2%)	10 (22.1%)	
Diploma or Degree	11 (10.3%)	22 (50%)	

<b>Marital Status</b>			
Single	38 (35.8%)	26 (59.1%)	0.000
Married	68 (64.1%)	18 (40.9%)	
<b>Occupation</b>			
House wife	98 (92.4%)	10 (22.7%)	0.05
Working women	8 (7.5%)	34 (77.2%)	
<b>Residence</b>			
Rural	74 (69.8%)	14 (31.8%)	0.002
Urban	32 (30.1%)	30 (68.1%)	

The association between respondents' demographic characteristics and their views towards cervical cancer screening is depicted in Table 5. The findings revealed that respondents' attitudes towards cervical cancer screening were highly influenced by their education, occupation, and place of residence.

**Table 5:** Association between participant attitudes towards cervical cancer screening and demographic factors

Variables	Attitude Towards Cervical Cancer Screening		p-value
	Poor Knowledge	Good Knowledge	
<b>Age in Years</b>			
20-30	58 (55.3%)	14 (31.8%)	0.24
31-40	22 (30.1%)	16 (36.4%)	
≥41	16 (24.5%)	24 (54.5%)	
<b>Education</b>			
No formal education	59 (55.7%)	14 (19.1%)	0.001
Primary school	12 (20.7%)	8 (17.2%)	
Secondary School	14 (13.2%)	10 (22.1%)	
Diploma or Degree	10 (10.3%)	22 (40%)	
<b>Marital Status</b>			
Single	26 (35.8%)	32 (56.1%)	0.09
Married	70 (64.1%)	22 (42.9%)	
<b>Occupation</b>			
House wife	80 (90.4%)	20 (26.7%)	0.000
Working women	16 (18.5%)	34 (79.2%)	
<b>Residence</b>			
Rural	61 (64.8%)	14 (36.8%)	0.001
Urban	35 (38.1%)	2 (62.1%)	

## DISCUSSION

This study aimed to assess nurses' attitudes and knowledge on cervical cancer screening. One of the most curable forms of cancer in women is cervical cancer [13]. Despite this, HPV continues to be the third biggest cause of mortality for women globally, particularly in nations with limited access to healthcare, like Pakistan [14]. As a result, women are unable to conduct effective cervical cancer screening and preventative measures, adding to the high mortality rates linked with the disease [15]. This study looks at the knowledge and attitudes of women who visit the Gynaecology Outpatient Department about cervical cancer and screening. In term of demographic characteristics of participants, majority of participant were aged 31-40 year (43%), which made approximately three-fourth of total population. These results are in line with those of a Nigerian study in which 69.6% of

participants were between the ages of 26 and 45 [16]. Current study showed that married women made 68.7% of total participants, while in contrast a study conducted in India in 2015 revealed that married women only 26.8% of total participants [15]. In term of education, about half (44.3%) of participants had no formal education. These findings are in line with a study conducted in Saudi Arabia among women, in which 47.5% participants had primary level education [14]. According to the current study, women have little knowledge of cervical cancer and cervical cancer screening. In this survey, the vast majority of participants (70.7%) admitted that there is a general lack of knowledge about cervical cancer and screening. Because most women in Pakistan are housewives and lack formal education, this is the case. As a result, the majority of women never engaged in any health education campaigns. These findings were consistent with those of an Indian study, in which 64% of respondents had little understanding of cervical cancer and screening [16]. Similarly, a Nigerian survey found that 43.5 percent of respondents were unaware about cervical cancer screening [17]. Likewise, an Ethiopian study showed similar findings [18]. The recent study found that just 29.3% of women had awareness about cervical cancer and its screening. An Indian study discovered a similar lack of knowledge regarding cervical cancer and screening [19]. Similarly, Ali et al., discovered that just 23.3% of Karachi, Pakistan, respondents were aware of cervical cancer screening [20]. Minhas et al., reported comparable results in a study conducted at Lady Willingdon Hospital in Lahore, Punjab, where 28% of participants had a high level of awareness of cervical cancer and 3% were aware of cervical cancer screening [21]. In terms of attitudes, 64% of individuals had negative attitude towards cervical cancer screening. In contrast, a study showed that 89% participants had good attitude towards cervical cancer screening and a small number of women had negative attitude towards cervical cancer screening [15]. As a result, women show less interest in screening. The current study also found no link between participant age and knowledge or attitude towards cervical cancer screening. Olubodun et al., discovered similar results in a study conducted in Uganda in 2021 [22]. They discovered no link between participant knowledge and age. A Tanzanian study, on the other hand, discovered that younger nurses were more likely than senior nurses to have relevant knowledge [9]. The qualifications of the participants had significant association towards attitude regarding cervical cancer screening. In contrast, a Ugandan study concluded that participants' level of education had no association with attitude towards cervical cancer screening [22]. However, a study found a significant association between health

professional and knowledge of cervical cancer [10].

## CONCLUSIONS

The results of study concluded that women visited the Gynaecology Department had inadequate attitudes and knowledge about cervical cancer and screening. It has been noted that there is no relationship between the participants' age and their knowledge. Although education and participants' knowledge were strongly related. Additionally, there is a strong correlation between schooling and participants' attitudes.

## Authors Contribution

Conceptualization: AS

Methodology: NY, SI, AS, UK

Formal analysis: WH

Writing-review and editing: SKD, HA, FB

All authors have read and agreed to the published version of the manuscript.

## Conflicts of Interest

The authors declare no conflict of interest.

## Source of Funding

The authors received no financial support for the research, authorship and/or publication of this article.

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