

# Perceived Barriers to Service Utilization of Cervical Cancer Screening 

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#### Abstract

The study's main goal is to identify the Perceived Barriers to Service Utilization of Cervical Cancer Screening. To attain its goals and objectives, the study used a quantitative design approach, and therefore, 437 women in Ghana's Ada East District were surveyed using a structured questionnaire. Participants' replies were coded for analysis. The study was able to ascertain the intention of the surveyed women in the Ada East District of Ghana to have a cervical cancer screening. The results of the analysis showed that the majority of the respondents ( $52.8 \%$ ) believed that screening is not important because there is no cure for cancer. Another $47.2 \%$ disagreed with the aim that cervical cancer screening prevents the condition. The majority of respondents (neutral $=31.6 \%$; disagree $=47.4 \%$ ) had no idea whether undergoing a cervical test would make them anxious, as opposed to $21.0 \%$ who said this. In $41.2 \%$ of the women who responded to the study, screening is done to determine whether or not a person will have cancer. However, the study recommends that District Health Directorate conduct regular outreach programs to educate women on cervical cancer, promote screening, and address the perceived barriers to service utilization identified in the research.


Keywords: Barriers, women, cervical cancer, cancer screening, Ghana

## 1. INTRODUCTION

The WHO estimates that the age-standardized cervical cancer incidence rate in Ghana is 29.3/100,000 per annum. This is four times the rate in advanced countries; with a mortality rate is 23.8/100,000, (Abotchie \& Shokar, 2009). It is also projected that by 2025 additional cases of cervical cancer could be over 5,000 in Ghana with at least 3,300 deaths every year (ld et al., 2020). (Fontham et al., 2020) report that among women-related cancers diagnosed in tertiary hospitals in Ghana, cervical cancer accounts for about 60\% of cases, while $70 \%$ of these cases are diagnosed at an advanced stage.

Unfortunately, the disease has erroneously become known as 'an old women's disease'. However, it is a myth that it only affects aged people. The mortality rate among women below the age of 65 is $25-30$ percent higher than previously thought (Reichheld et al., 2020). Recent studies have concluded that young to middle-aged women have a higher risk of developing cervical cancer ( 10 in 1,000 ). It is reported that one cervical cancer test is found to halve the risk of developing cervical cancer from 8.4 to 3.5 per 1,000 people (Ebu et al., 2014).

Several cases have been detected in the Ada East District of the Greater Accra Region, with an estimated prevalence of 7 per 1,000 cases in 2020. Yet, there is a low screening uptake. The Faith Kope District Hospital, which is the local testing center, records low patronage of screening services (DHD, 2020). Despite advancement in testing capacity (availability of Pap smear and VIA) and training of nurses and doctors at the facility to conduct CC screening, utilization remains unsatisfactory. In 2021, the District Health Report confirms that out of 13 suspected cases of cervical cancer referred for a Pap Smear, only 2 women reported for the test. Further to the problem, various non-governmental organizations organize free screening for cervical cancer in various communities; however, most have recorded low rates of patronage of cervical cancer screening services. Yet, as is the case in Ghana as a whole and Africa largely, most women with cervical cancer report to the hospital with an advanced form of the disease (Shrestha et al., 2018).

Across the literature, it has been established that inadequate knowledge about cervical cancer risk factors and screening amongst women, leads to low self-perception of the risk of the disease and low patronage of screening services (Id et al., 2020) (Calys-Tagoe et al., 2020) (Awareness of Cervical Cancer and Willingness to Screen among Young Female Adults in Madina Zongo, Accra, n.d.) A study on the health-seeking behavior of patients with cervical cancer in Ghana also revealed that women had a very low awareness of cervical cancer (Calys-Tagoe et al., 2020). According to this study, the barriers to seeking any type of treatment identified were a lack of awareness and access to proper health services. In a previous similar study conducted in Ghana, a significant direct relationship was also found between women's knowledge and attitude towards cervical cancer and its prevention, and subsequent utilization of Pap smear tests (Ampofo et al., 2020).

Despite the burden of cervical cancer in sub-Saharan African countries including Ghana, not many interventions have been instituted to mitigate the problem. No policies exist at the national level. Coupled with inadequate health literacy concerning the disease's pathology, treatment challenges, and barriers to seeking health care, it is essential to identify barriers to preventive screening, thereby reducing premature death among women.

## 2. METHOD

## Study Design

A descriptive cross-sectional study design was used. The study was quantitative. This is one of the suitable designs for determining the prevalence studies such as this proposed by (Dawson and Trapp 2004). This design is cheap and takes a short time. With cross-sectional study design, there is a measurement between variables both dependent and independent at a fixed point in time. In this design, there is an appropriate description for relationships among phenomena at a fixed point in time (Owusu Adjah \& Agbemafle, 2016)

## Study Site

The study was conducted in the Ada East District of Ghana. Communities within the district were used. The Ada East district is one of the twenty-nine Metropolitan, Municipal \& Districts in the Greater Accra Region. It is one of the rural districts in the Region. The entire district is situated in the Accra plains and the land is relatively flat. It has common boundaries with Ada West District on the west, North Tongu on the north and South Tongu on the East, and the Atlantic Ocean to the south. The district has a surface area of approximately $332 \mathrm{~km}^{2}$.

The district has 28 health facilities made up of a hospital, three health Centres, one private clinic, and twenty-three CHPS facilities distributed among the twenty-seven electoral areas. There are also about one hundred and sixteen communities. Ada sub-district has forty - seven communities, Kasseh Sub-district has forty-seven communities and

Pediatorkope sub has twenty-two Island communities. The district has not yet been caught up by the rapid urbanization of the peripheral areas surrounding the city of Accra though it has a very good transport system and roads to Accra.

## Study Population

The target population for this study was women in the Ada East District

## Sample size

In social surveys, resources, time, and finance are important in determining the coverage of samples. According to the Ghana Statistical Service, the total population of women in the district at least 25 years, as of May 2022 is $12,637$. Because the population of interest is finite, the initial minimum sample size of participants was calculated using the Yamane formula given as follows:

Using Yamane's formula, the sample size (n) was calculated out of the sample frame (N), using a confidence level of $95 \%$ and a margin of error (a) of 0.05 .
$\mathrm{n}=\frac{\mathrm{N}}{1+\mathrm{N}(\alpha)^{2}}$
Where $\mathrm{n}=$ sample size
$\mathrm{N}=$ Sample frame
$\alpha=$ margin of error
The sample frame ( N ) shows the list of the respondents selected for the study.
$\mathrm{n}=\frac{12,637}{1+112,637(0.05)^{2}}$
$n=\frac{12,637}{1+12,637(0.0025)}$
$\mathrm{n}=\frac{12,637}{1+31.592}$
$\mathrm{n}=\frac{12,637}{32.592}=394$
Adjusting for a $10 \%$ non-response rate gives, $0.1 \times 394=39$
Therefore, the desired sample size for the study was $394+39=433$
Therefore, a sample size of 433 respondents was used for this study.

## Sampling technique

Sample according to Ary et al. (2014) is a proportion of the population. It is part of the population selected for the survey. The sample is also a subset of the population (Bryman, 2012). The sample must be representative enough to be able to generalize the findings in the sample to the population. It is worth noting that the sample was identified because it is sometimes impractical to collect data from the whole population especially when the population is large.

A multi-stage sampling method was used for this study. Firstly, out of 3 sub-municipals in the District: Ada-Foah, Kasseh, and Pediatorkope sub-district, 2 were selected purposively. Ada-Foah and Kasseh sub-districts were selected due to their proximity to the cervical cancer-screening center, as Pediatorkope is a remote island, which is by default limited by distance to the district hospital. In the second stage, 10 communities within each of the selected sub-districts were selected in the next sampling stage using the simple random technique. The proportional allocation of participants for each sub-district was determined using the formula
$\mathrm{n}=\frac{\mathrm{nj} \times \mathrm{nf}}{\mathrm{N}}$
where, $\mathrm{nf}=$ final sample size
$\mathrm{nj}=$ total number of houses in each district
$\mathrm{N}=$ total number of houses

Having determined the allocated number of households to be sampled per sub-district, a systematic sampling technique was used to select households within each sub-district. Systematic sampling is an extended implementation of probability sampling in which each member of the group is selected at regular periods to form a sample. The formula $\frac{\mathrm{N}}{\mathrm{n}}$ was used to obtain the sampling interval (k) where,
$N=$ the total number of households
$\mathrm{n}=$ the estimated sample size.
A list of all households in the selected communities was made. The total population (N) was divided by the sample size ( $n$ ) to get the sampling interval $k$. The first household was randomly selected by balloting. After that, every $\mathrm{k}^{\text {th }}$ household was visited, and women who meet the inclusion criteria in that household were recruited into the study. This was followed until the sample size was achieved.

## Study variables

A study defines two variables: the dependent variable and the independent variables. In this study, the independent variables include social demographic factors, perceptions or perceived barriers, and health system-related factors such as testing experience, and cost of screening. The dependent variable is the uptake of cervical cancer screening services

## Data collection instrument

The study considered only the primary source of data. An adapted semi-structured, questionnaire was employed to collect data from the participants. Section A of the data collection tool collected data such as age, occupation, educational background, religion, marital status and number of children, family history of cancer. Section B measured participants' knowledge of cervical cancer by asking for definitions, causes, clinical manifestations, danger signs, treatment, screening benefits, complications, and prevention of cervical cancer. Each correct answer was given a score of 1 , while a wrong answer was given a score of 0 . The total knowledge score was then calculated and graded on a scale based on standards carried out in previous research, as follows: Good ( $\geq 7$ ), medium (4-6), and poor ( $\leq 3$ ). Section C measures the participants' beliefs and perceptions about CC and screening using items based on constructs adapted from the Health Belief Model (HBM), as illustrated in the Theoretical Framework. These included four subscales of HBM: perceived threat (a woman's perception about the chances of getting cervical cancer and beliefs concerning the severity of cervical cancer screening), perceived benefits, perceived barriers (psychosocial barriers, socioeconomic barriers, and healthcare system barriers), and the cue for action. For each item, the respondents were asked to answer "Yes", "No" or "I don't know".

## Data Collection Procedure

The researcher recruited two data collectors to assist in the data collection process. They were trained for one day on the data collection process, how to avoid/ prevent errors, to keep the privacy and confidentiality of respondents, and other ethical issues.

## Data Analysis

The data analysis procedure includes a method of organizing, summarizing, and conveniently presenting the data. After the data collection, data was reviewed for completeness, accuracy, and consistency. The data collected was organized, coded, and entered using Excel. Data analysis was done with Statistical Package for Social Sciences (IBM SPSS) software version 21.0. Data entry, data transformation, and exploratory data analysis were carried out. The data analysis employed both descriptive and inferential statistics. The descriptive statistics included frequency counts, percentages, and other parameters to answer the research questions.

The analysis was divided into 3 categories descriptive, bivariate, and multivariate analysis. The bivariate analysis (chisquare) was used to determine the association between independent variables and cervical cancer screening uptake. Then, simple, and multiple logistic regressions were used to determine the predicting factors associated with cervical cancer screening among respondents. The level of significance was set at a p-value of less than 0.05 .

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## Ethical Considerations

Ethical clearance was sought from the Ghana Health Service Ethics Committee before the commencement of the study (GHS-ERC: 044/11/22). Permission was sought from community leaders. Written consent was obtained from each participant before being included in the study. All information collected from the survey was kept confidential and safe. The anonymity and confidentiality of the study subjects were ensured by assigned numerical codes instead of names without any personal identifiers in the data collection, analysis, and findings. Participants were informed that participation is voluntary and based on their willingness and they have the right to withdraw from the study at any point.

## Quality Control

The questionnaire was pre-tested among women in the Pediatorkope, a non-participating sub-district to determine the clarity of the questions and ensure the quality of data. The pre-testing was done to confirm if it is suitable for the intended purpose. It enabled the researcher to redesign and modify the questionnaire for effective data collection and processing. It helped to ensure that the questions asked were easy to understand and not ambiguous.

## 3. RESULTS

## Table 1 Socio-Demographic Characteristics

| Demographic Characteristics | Frequency (N) | Percentage (\%) |
| :--- | :---: | :---: |
| Marital Status |  |  |
| Single | 98 | 22.4 |
| Married | 235 | 53.8 |
| Cohabiting | 63 | 14.4 |
| Divorced | 41 | 9.4 |
| Number of Children |  |  |
| 0 | 97 | 22.2 |
| 1 | 98 | 22.4 |
| 2 | 140 | 32.0 |
| 3 | 57 | 13.0 |
| $4+$ | 45 | 10.3 |
| Religion |  |  |
| Muslim | 73 | 16.7 |
| Christian | 310 | 70.9 |
| Traditionalist | 54 | 12.4 |
| Education |  |  |
| Basic education | 67 | 15.3 |
| Diploma certificate | 72 | 16.5 |
| Master's degree | 28 | 6.4 |
| No education | 49 | 11.2 |
| Senior high level | 107 | 24.5 |
| Undergraduate degree | 114 | 26.1 |
| Employment Status |  |  |
| Yes | 277 | 63.4 |
| No | 160 | 36.6 |
| Monthly income |  |  |
| Not disclosed | 43 | 9.8 |
| 1001 - 2000 | 67 | 15.3 |
| $2000+$ | 46 | 10.5 |
|  |  |  |

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| $500-1000$ | 198 | 45.3 |  |
| :--- | :---: | :---: | :---: |
| Up to 500 cedis | 83 | 19.0 |  |
| Diagnosed with any type of cancer? |  |  |  |
| Yes | 35 | 8.0 |  |
| No | 402 | 92.0 |  |
| Do you have a chronic illness? | 37 |  |  |
| Yes | 400 | 8.5 |  |
| No |  |  |  |

Source: Field Study, 2023
According to the table, $98(22.4 \%)$ of the survey respondents were single, leaving $235(53.8 \%)$ of them married, 63 (14.4\%) cohabiting, and 41 (9.4\%) divorced.

Table 2: Responses of the surveyed women about the benefit of CC Screening

| Statements | Frequency <br> (N) | Percentage <br> (N) |
| :--- | :---: | :---: |
| Pap tests can find cervical changes before they become cancer |  |  |
| Strongly Disagree | 39 | 8.9 |
| Disagree | 115 | 26.3 |
| Neutral | 161 | 36.8 |
| Agree | 63 | 14.4 |
| Strongly Agree | 59 | 13.5 |
| If cervical changes are found early, they are easily curable |  |  |
| Strongly Disagree | 24 | 5.5 |
| Disagree | 94 | 21.5 |
| Neutral | 146 | 33.4 |
| Agree | 98 | 22.4 |
| Strongly Agree | 75 | 17.2 |
| A woman needs to have a Pap test so she will know if she is healthy |  |  |
| Strongly Disagree | 22 | 5.0 |
| Disagree | 96 | 22.0 |
| Neutral | 140 | 32.0 |
| Agree | 100 | 22.9 |
| Strongly Agree | 79 | 18.1 |

Table 2 illustrates the distribution of the responses of the surveyed women about the benefit of Screening for cervical cancer. $35.2 \%$ disagreed that pap tests cannot find cervical changes before it becomes cancer while $27.9 \%$ agreed with the question. While $33.4 \%$ neither disagreed nor agreed to whether cervical is found early, $27.0 \%$ stated cervical cancer could not be easily cured if it was diagnosed early while $39.6 \%$ stated otherwise. $42.0 \%$ of the surveyed women stated that it is important for women to have a pap test to be aware if she is healthy as compared to $58.0 \%$ stated otherwise.

Table 3: Perceived Barriers to Cervical Cancer and Screening

|  | Frequency <br> $(\mathrm{N})$ | Percentage <br> (N) |
| :--- | :---: | :---: |
| Getting a cervical test would only make me worry |  |  |

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| Strongly Disagree | 41 | 9.4 |
| :---: | :---: | :---: |
| Disagree | 166 | 38.0 |
| Neutral | 138 | 31.6 |
| Agree | 53 | 12.1 |
| Strongly Agree | 39 | 8.9 |
| If I am destined to get cancer, I will |  |  |
| Strongly Disagree | 49 | 11.2 |
| Disagree | 136 | 31.1 |
| Neutral | 131 | 30.0 |
| Agree | 79 | 18.1 |
| Strongly Agree | 42 | 9.6 |
| The purpose of screening is to diagnose if I have cancer or not |  |  |
| Strongly Disagree | 15 | 3.4 |
| Disagree | 87 | 19.9 |
| Neutral | 155 | 35.5 |
| Agree | 101 | 23.1 |
| Strongly Agree | 79 | 18.1 |
| Screening is not necessary since there is no cure for cancer |  |  |
| Strongly Disagree | 46 | 10.5 |
| Disagree | 185 | 42.3 |
| Neutral | 127 | 29.1 |
| Agree | 49 | 11.2 |
| Strongly Agree | 30 | 6.9 |
| The Pap test is painful |  |  |
| Strongly Disagree | 28 | 6.4 |
| Disagree | 100 | 22.9 |
| Neutral | 212 | 48.5 |
| Agree | 50 | 11.4 |
| Strongly Agree | 47 | 10.8 |
| It is too expensive to have a pap test |  |  |
| Strongly Disagree | 19 | 4.3 |
| Disagree | 123 | 28.1 |
| Neutral | 172 | 39.4 |
| Agree | 73 | 16.7 |
| Strongly Agree | 50 | 11.4 |
| It is embarrassing to have a pap test |  |  |
| Strongly Disagree | 39 | 8.9 |
| Disagree | 160 | 36.6 |
| Neutral | 148 | 33.9 |
| Agree | 53 | 12.1 |
| Strongly Agree | 37 | 8.5 |
| If a woman is a virgin, a pap test will take away her virginity |  |  |
| Strongly Disagree | 27 | 6.2 |
| Disagree | 151 | 34.6 |
| Neutral | 186 | 42.6 |
| Agree | 47 | 10.8 |
| Strongly Agree | 26 | 5.9 |
| I don't know where I could go if I wanted a pap test |  |  |


| Strongly Disagree | 41 | 9.4 |
| :--- | :---: | :---: |
| Disagree | 138 | 31.6 |
| Neutral | 140 | 32.0 |
| Agree | 69 | 15.8 |
| Strongly Agree | 49 | 11.2 |

Most of the surveyed participants ( $52.8 \%$ ) stated that screening is not necessary since there is no cure for cancer as compared to $47.2 \%$ who stated otherwise. Most of the surveyed participants had no idea whether getting a cervical test would only make them worry as compared to $21.0 \%$ who indicated that getting a cervical test would only make them worry. The majority of the surveyed women ( $41.2 \%$ ) agreed that the purpose of screening is to diagnose whether cancer exists in one's body or not. Only $22.2 \%$ of the surveyed women agreed that a pap test is painful. Nearly $40.8 \%$ of the respondents stated that, the pap test does not take away the virginity of a woman when taken as compared to $16.7 \%$ attest that it does; $41.0 \%$ of the women stated that they know where to get the pap test done.

Table 4: Perceived susceptibility

|  | Frequency <br> $(\mathbf{N})$ | Percentage <br> $(\mathbf{N})$ |
| :--- | :---: | :---: |
| Cervical cancer only happens to women over 25 years of age |  |  |
| Strongly Disagree | 28 | 6.4 |
| Disagree | 128 | 29.3 |
| Neutral | 143 | 32.7 |
| Agree | 87 | 19.9 |
| Strongly Agree | 51 | 11.7 |
| Young women are at risk for cervical cancer |  |  |
| Strongly Disagree | 19 | 4.3 |
| Disagree | 100 | 22.9 |
| Neutral | 149 | 34.1 |
| Agree | 99 | 22.7 |
| Strongly Agree | 70 | 16.0 |
| I am at risk for cervical cancer |  |  |
| Strongly Disagree | 47 | 10.8 |
| Disagree | 111 | 25.4 |
| Neutral | 154 | 35.2 |
| Agree | 68 | 15.6 |
| Strongly Agree | 57 | 13.0 |

It turns out that, $32.7 \%$ of the respondents neither agreed nor disagreed that cervical cancer only happens to women over 25 years of age as compared to $35.7 \%$ who disagreed and $31.6 \%$ who agreed. Respondents ( $38.7 \%$ ) agreed that young women are at risk for cervical cancer as compared to $34.1 \%$ who had no idea and $27.2 \%$ who disagreed. $28.6 \%$ of the women stated that they are at risk for cervical cancer and $36.2 \%$ stated that they were not at risk of cervical cancer. This is an indicator that most people think cervical cancer can only happen to people from 25 of age and above. This has contributed to the less utilization of facilities at Ada due to this perception.

Table 5: Overall Knowledge of Respondents on Cervical Cancer

| Grade | Frequency (N) | Percentage (\%) |
| :--- | :---: | :---: |
| Inadequate knowledge | 366 | 83.75 |


| Adequate Knowledge | 71 | 16.25 |
| :--- | :---: | :---: |
| Total | 437 | 100.00 |
| Average Score | 3.67 |  |

The average response score was 3.67 , with $16.25 \%$ of the surveyed women having appropriate knowledge of cervical cancer compared to $83.75 \%$ of the respondents who had insufficient information. This is the ideal reason the people have not been utilizing the Ada facility.

Table 6: Test for Difference in Perception

|  | Mean |  |  |
| :--- | :---: | :---: | :---: |
|  | Yes | No | P-value |
| Perceived benefits | 10.7107 | 9.0158 | $0.000^{*}$ |
| Perceived Barriers | 30.5702 | 24.1013 | $0.000^{*}$ |
| Perceived Susceptibility | 10.2893 | 8.769 | $0.000^{*}$ |
| Perceived Severity | 11.7273 | 9.2468 | $0.000^{*}$ |
| Knowledge Score | 3.9339 | 3.4589 | $0.037^{*}$ |

*Significant at 0.05
Table 6 depicts that there is no significant difference ( $\mathrm{p}<0.05$ ) in the perceptions of surveyed women about the benefits of the Pap test. Both women (i.e., those who intend to be screened and those who do not) agreed that the Pap test has many benefits. The table also shows that there exists no significant difference ( $p<0.05$ ) in perceptions of factors that prevent surveyed women from being screened for cervical cancer. In addition, respondents were different in the severity of cervical cancer ( $p<0.05$ ). Similarly, there is no difference in the level of knowledge of cervical cancer among respondents.

Table 7: Intention for a pap test Yes

| Intention for a pap test Yes |  | Sig. | Odd Ratio | 95\% C. I of Odd ratio |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Perceived Barriers | 0.00 | 1.332 | 1.223 | 1.451 |
|  | Perceived Severity | 0.082 | 1.146 | 0.983 | 1.336 |
| Educational Status | Without education or Basic Education | 0.807 | 0.891 | 0.352 | 2.252 |
|  | Senior High Education | 0.00 | 4.382 | 2.009 | 9.556 |
|  | Tertiary Education |  |  | . |  |
| Employment status | Employed | 0.003 | 0.347 | 0.171 | 0.703 |
|  | Unemployed | . | . | . |  |

The adjusted odds ratio for perceived difficulty in screening for cervical cancer is 1.332. This indicates that for every scale point increase in the perceived barrier measure, a woman is considerably more likely to accept cervical screening ( p 0.05 ) compared to women who are not willing to be checked. According to a study that links the perceived severity
of cervical screening to an odd ratio of 1.146 , the willingness to undergo a cervical screening test rises significantly ( P 0.082 ) as compared to those who are reluctant to do so. When compared to those who did not want to be screened, those with only a basic education increased their intention to be screened by 0.891 , while those with only a senior high school education increased their intention to be screened by 2.009 .

Table 8: Demographic Factors and Knowledge of cervical cancer

| Variable | Categories | Knowledge |  |  | P-value |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Poor | Medium | Good |  |
| Religion | Muslim | 26(35.6) | 40(54.8) | 7(9.6) | 0.001 |
|  | Christian | 162(52.3) | 101(32.6) | 47(15.2) |  |
|  | Traditionalist | 25(46.3) | 27(50.0) | 2(3.7) |  |
| Education | Basic education | 19(28.4) | 43(64.2) | 5(7.5) | 0.00 |
|  | Diploma certificate | 26(36.1) | $31(43.1)$ | 15(20.8) |  |
|  | Master's degree | 10(35.7) | 12(42.9) | 6(21.4) |  |
|  | No education | 22(44.9) | 25(51.0) | 2(4.1) |  |
|  | Senior high level | 53(49.5) | 45(42.1) | 9(8.4) |  |
|  | Undergraduate degree | 83(72.8) | 12(10.5) | 19(16.7) |  |
| Employed | Yes | 126(45.5) | 105(37.9) | 46(16.6) | 0.006 |
|  | No | 87(54.4) | 63(39.4) | 10(6.3) |  |
| Chronic illness | Yes | 9(26.5) | 21(61.8) | 4(11.8) | 0.009 |
|  | No | 202(51.4) | 141(35.9) | 50(12.7) |  |

The Muslims have the largest rate of inadequate understanding of cervical cancer (35.6\%), the Muslims have the highest average knowledge ( $54.8 \%$ ), and the Christians have the highest percentage of individuals with adequate knowledge $(15.2 \%)$. The link between knowledge of cervical cancer and religion is substantial, as shown by the P value of 0.00 . Graduate students ( $21.4 \%$ ) and undergrads ( $16.7 \%$ ) have the highest percentages of respondents with strong cervical knowledge. In a similar vein, individuals with college degrees make up the largest percentage of people with weak knowledge ( $72.8 \%$ ). These disparities in educational status are a factor influencing the idea of being screened at the facility in the locality. Additionally, when compared to those who are not employed, those who are employed had the largest percentage of good knowledge (6.3\%) which is also another factor adding to not utilizing the facility owing to their income. Therefore, the demographic factors of the respondents to the survey-religion, employment position, chronic illness, and education-affect their awareness of cervical health as well as the utilization of the facility.

## 4. DISCUSSION

## Perceived Barriers to Service Utilization of Cervical Cancer Screening

The results of the analysis showed that the majority of the respondents ( $52.8 \%$ ) believed that screening is not important because there is no cure for cancer. Another $47.2 \%$ disagreed with the assession that cervical cancer screening prevents the condition. The majority of respondents (neutral $=31.6 \%$; disagree $=47.4 \%$ ) had no idea whether undergoing a cervical test would make them anxious, as opposed to $21.0 \%$ who said this. In $41.2 \%$ of the women who responded to the study, screening is done to determine whether or not a person will have cancer. The percentage of women who agreed that a pap test is painful was only $22.2 \%$.

On the issue of the category of women that get cervical cancer, $32.7 \%$ of the respondents neither agreed with nor opposed the statement that cervical cancer affects only women over the age of $25.35 .7 \%$ disagreed and $31.6 \%$ agreed. Young women are at a higher risk of getting cervical cancer. From the results, $38.7 \%$ of the respondents agreed that younger women have a higher risk for cervical cancer, compared with $34.1 \%$ who were unsure and $27.2 \%$ who disagreed. $36.2 \%$ of the women said they are not at risk for cervical cancer, compared to $28.6 \%$ of the women who said they are at risk. This is consistent with the findings of Niguisse et al. (2019). The study also found that perceived vulnerability to cervical cancer affected the use of cervical cancer screening. When compared to women who had low perceived susceptibilities, those who had high perceived susceptibilities were more likely to undergo screening. This might be a result of the knowledge these women have about the illness and their susceptibility. As a result, they go through screening to safeguard themselves. Several factors have been identified to contribute to the development of cervical cancer. These include genetic inheritance, having a partner who had several sexual partners, and women who have multiple sexual partners (Chan et al., 2019). However, none of the respondents was aware that cervical cancer could be brought on by HPV infection. Researchers from a different study on mainland Chinese women's knowledge and perceptions of the risk of cervical cancer on screening practices discovered that participants believed their risk of developing the disease to be low, which they attributed to a lack of factual knowledge about the condition and its risk factors (Tsegay et al., 2020).

## Socio-demographic characteristics, level of knowledge, and utilization of cervical cancer screening services

The findings of this study show that for every scale point increase in the perceived barrier measure, a woman is considerably more likely to accept cervical screening compared to those who are not willing to get checked (p 0.05 ). When compared to people who are reluctant to get screened, there is a substantial increase in desire (P 0.082) to get a cervical screening. Those with only a basic education increased their intention to be screened by 0.891 , while those with only a senior high school education increased their intention to be screened by 2.009, per the analysis, when compared to those who did not want to be screened. The proportions of respondents with strong cervical knowledge are highest among graduate students ( $21.4 \%$ ) and undergraduates (16.7\%). In a similar line, people with college degrees account for the highest proportion of those with limited expertise (72.8\%). These educational status differences are statistically significant at the level of 0.05 . This supports the conclusions of Dike \& O's (2017) study that educational attainment is a socio-demographic factor, and other research has shown that women with high screening rates generally have advanced degrees. Increased levels of education have been shown to significantly influence the uptake of cervical cancer screening, with more educated women being more likely than less educated women to be aware of cervical cancer and screening (Dike \& O, 2017). Other studies have discovered that some women do not use the services despite having a high level of education and a clear grasp of screening. This shows that other factors that are unrelated to knowledge should be investigated, which was the goal of this study (Thapa et al., 2018).

The demographic characteristics of the survey participants-religion, employment status, chronic illness, and education-were also found to have an impact on the survey respondents' awareness of cervical health. Muslims had the highest average knowledge ( $54.8 \%$ ), the highest proportion of inadequate comprehension ( $35.6 \%$ ), and the highest percentage of those with adequate understanding (15.2\%). The P-value of 0.00 indicates a strong correlation between
religious affiliation and knowledge about cervical cancer. Additionally, individuals who are employed had the highest percentage of good knowledge (6.3\%) as compared to those who are not employed. Compared to respondents without chronic diseases ( $26.5 \%$ ), respondents without chronic illnesses had a larger rate of inadequate cervical knowledge (51.4\%).

## 5. CONCLUSIONS

Perceived barriers to service utilization of cervical cancer screening can significantly influence women's access to this crucial preventive healthcare service. These barriers can vary across different populations and contexts, but they often include factors such as lack of awareness, cultural beliefs and norms, financial constraints, and logistical challenges. One of the primary barriers is a lack of awareness or knowledge about the importance of cervical cancer screening. Many women may not be fully aware of the purpose and benefits of regular screenings or may have misconceptions about the procedure. This lack of awareness can prevent them from seeking out screening services in the first place.

Cultural beliefs and norms can also play a significant role in deterring women from utilizing cervical cancer screening services. Cultural factors, such as modesty or the perception that discussing reproductive health is taboo can create barriers to accessing screening. Women may feel uncomfortable discussing or undergoing cervical cancer screenings due to societal or cultural stigmas surrounding female reproductive health. Financial constraints can be a major hurdle for women seeking cervical cancer screening. Costly screening tests, follow-up procedures, or transportation expenses to reach healthcare facilities can pose significant financial burdens, particularly for women with limited financial resources or a lack of health insurance coverage. The inability to afford these services may result in delayed or missed screenings. Logistical challenges, such as limited healthcare infrastructure, long waiting times, or inconvenient clinic hours, can also hinder service utilization. Women may find it difficult to access screening services due to a lack of nearby healthcare facilities or limited availability of appointments. Additionally, demanding work schedules or family responsibilities may make it challenging for women to find time for screenings.

To address these barriers and promote service utilization, it is crucial to implement comprehensive strategies. These strategies may include raising awareness about the importance of cervical cancer screening through community outreach and educational campaigns, providing culturally sensitive and linguistically appropriate information, reducing financial barriers through subsidized or free screening programs, improving healthcare infrastructure and accessibility, and offering flexible clinic hours to accommodate women's schedules. By addressing these perceived barriers, healthcare systems can strive to increase the utilization of cervical cancer screening services, leading to early detection, timely treatment, and improved outcomes for women at risk of this preventable disease.

## 6. RECOMMENDATION

Based on the findings of the study, the following recommendations are being made:

1. Collaborate with community leaders, healthcare facilities, and other stakeholders to increase cervical cancer awareness and screening rates in the district.
2. Conduct regular outreach programs to educate women on cervical cancer, promote screening, and address the perceived barriers to service utilization identified in the research.
3. Strengthen the capacity of healthcare facilities in the district to provide quality screening services and followup care for women.

## Conflict of Interest

The author(s) declare that they have no conflict of interest.

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## Data Availability

Data used for this research is available upon request from the corresponding author.

## Notes

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