

MERIT RESEARCH JOURNALS

www.meritresearchjournals.org

Merit Research Journal of Medicine and Medical Sciences (ISSN: 2354-323X) Vol. 13(3) pp. 052-061, May, 2025 Available online http://www.meritresearchjournals.org/mms/index.htm Copyright © 2025 Author(s) retain the copyright of this article DOI: 10.5281/zenodo.15374817

Original Research Article

Knowledge and Acceptability of Cervical Cancer Screening among Female Health Education Students of Alvan Ikoku Federal University of Education Owerri

Chinyere R. Nwufor¹, Amarachi S. Azubuike^{2*}, Louis O. Ugwulor³, Theresa I. Wabara⁴, Abiodun A. Omeife-Greg⁵

Abstract

¹Department of Nursing Science, Gregory University Uturu

²Department of Physical and Health Education, Gregory University Uturu

³Department of Public Health, Gregory University Uturu

⁴Department of Guidance and Counseling, Gregory University Uturu

⁵Department of Psychology, Unuversity of Porthartcourt, Rivers State

*Corresponding Author's E-mail: azubuikeamarachi@gmail.com

This study investigated knowledge and acceptability of cervical cancer screening among female health education students of AlvanIkoku Federal College of Education, Owerri. The study was guided by 5 research questions. The study adopted a crosssectional descriptive design. The target population for the study will comprise of 603 of AlvanIkoku Federal College of Education Owerri. A systematic random sampling method will be used to select 274 students from all the four levels of health education students in AlvanIkoku Federal College of Education Owerri using Taro Yamane's formular (1997). The instrument used for data collection was a self-structured questionnaire. The instrument was validated by experts and the reliability of the instrument was conducted. Data from the study was analysed using descriptive statistics such as frequencies, percentages, mean and standard deviation. Findings from the study revealed that there is high level of knowledge of CC screening among female health education students of AlvanIkoku Federal College of Education, Owerri. The study further revealed that there is a high level of acceptability of CC screening among female health education students of AlvanIkoku Federal College of Owerri. More still, Healthcare providers, health classes/curriculum, online resources, family members, friends, television, radio programs, printed materials, community health events and social media campaigns are the sources of Information about CC Screening among female health education students of AlvanIkoku Federal College of Education, Owerri. Additionally, female health education students of AlvanIkoku Federal College of Education, Owerri are willing to Undergo CC Screening to a high extent. Finally, the study revealed that knowledge of cc and screening benefits, family and friend support, among others are the factors influencing the knowledge and acceptability of CC screening among female health education students of AlvanIkoku Federal College of Education, Owerri. Based on the findings, the study recommended among others Integrating CC screening education into the health education curriculum at AlvanIkoku Federal College of Education, Owerri, to increase knowledge and awareness among students.

Keywords: Acceptability, Cervical Cancer Screening, Health Education Curriculum, Knowledge

INTRODUCTION

Over the years, cervical cancer (CC) has been a significant cause of mortality among women worldwide,

often due to a lack of awareness about the importance of regular screening (World Health Organization, 2018). As

the fourth most common cancer among women (National Cancer Institute, 2020), CC poses a severe threat to women's health. Notably, Africa bears a considerable burden, as it accounts for 20% of new CC cases globally, with the disease being the leading cause of cancer deaths in women across sub-Saharan Africa (International Agency for Research on Cancer, 2019; United Nations Population Fund, 2017).

In Nigeria, the impact of CC is particularly alarming. The country has the second-highest incidence rate among women of reproductive age, and CC stands as the primary cause of gynecological malignancies and mortality among afflicted women (Nwokoro et al., 2018). Sadly, this trend is not unique to Nigeria, as over 250,000 women succumb to CC each year worldwide. Alarmingly, in 2018 alone, there were approximately 570,000 new CC cases reported, with a staggering 80% of these deaths occurring in developing and underdeveloped countries (World Health Organization, 2018).

To mitigate these distressing statistics, it is crucial to enhance global awareness about the importance of CC screening and prevention strategies (Centers for Disease Control and Prevention, 2021). By doing so, we can reduce the disease's incidence and mortality rates, ensuring better health outcomes for women across the world.

Early detection through screening plays a vital role in managing cervical cancer (CC), as it allows for timely intervention before the disease progresses into advanced stages. According to the World Health Organization (2018), early screening often identifies abnormalities that can be effectively treated, significantly improving survival rates. The National Cancer Institute (2020) further highlights the importance of early diagnosis, stating that CC can be cured if identified and treated during its initial stages. A study conducted in England by Landy et al. (2016) revealed that without screening, the CC mortality rate would be 5.3 times higher, whereas regular screening can result in a 65% reduction in mortality.

Several other studies also underscore the significance of CC screening in decreasing both the incidence and mortality rates of the disease. A comprehensive review by Kulasingam et al. (2020) indicates that screening can lower these rates by up to 90%. These findings emphasize the importance of implementing widespread screening programs and promoting public awareness about the benefits of early detection in the fight against CC.

Despite the well-documented benefits of cervical cancer (CC) screening, access to such services remains limited and unevenly distributed in Nigeria. According to the Nigerian National Cancer Control Plan (2018-2022), less than 9% of women who require screening services have access to them. This issue is further compounded by the country's weak healthcare infrastructure and lack of comprehensive cervical cancer control policies.

In addition to these systemic challenges, several

studies have identified various socio-cultural and personal factors contributing to the low uptake of CC screening services in Nigeria. These include a lack of awareness about CC and its implications (Adegoke et al., 2017; Falegan et al., 2021), the tendency to underestimate the severity of CC (Onuigbo et al., 2019), poverty (Izegaegbe et al., 2020), a shortage of female healthcare providers (Onuigbo et al., 2019), anxiety related to positive screening results (Nweze et al., 2020), and restrictive socio-cultural norms (Adekanle et al., 2021). Addressing these barriers is essential to improving CC screening rates and reducing the disease's burden on Nigerian women.

Cervical cancer (CC) is a significant health concern that affects women across various age groups. While women between the ages of 30 and 45 are more susceptible to the disease, it can also affect teenagers as young as 18 years old (Nwagha et al., 2018). Though CC is more commonly diagnosed in women over 40, younger women should also be aware of the risks and take preventive measures (Nwagha et al., 2018). The likelihood of developing CC depends on various factors such as sexual history, immune system strength, overall health, and lifestyle (Centers for Disease Control and Prevention, 2021).

Certain behaviors increase the risk of contracting the Human Papilloma Virus (HPV), the primary cause of CC. These include early sexual debut (before age 18), having multiple sexual partners, or being in relationships with partners who have had multiple sexual partners (Abiodun et al., 2016). Early screening for HPV and preventive measures, such as vaccination, can significantly reduce the risk of developing CC in women of all ages (World Health Organization, 2018).

Further highlighting the importance of early screening, studies have shown that a staggering 50% to 90% of women who pass away from or are diagnosed with cervical cancer (CC) have not undergone screening for the disease (Nwagha et al., 2018). This highlights the critical need for increased awareness and access to screening services, particularly in regions with high CC incidence rates.

The most prevalent risk factor for CC is the Human Papillomavirus (HPV), which is believed to produce proteins that induce the proliferation of cells in the cervical lining, ultimately leading to cancer (World Health Organization, 2018). Although HPV is widespread, organized and high-quality cytology-based screening programs have significantly decreased the burden and risk of CC in various developed countries (International Agency for Research on Cancer, 2019). However, these programs have often been inadequate or non-existent in developing countries such as Nigeria (Nigerian National Cancer Control Plan, 2018-2022), emphasizing the urgent need to prioritize CC screening and prevention strategies on a global scale.

Despite the crucial role of awareness and knowledge

in promoting cervical cancer (CC) screening, recent studies indicate a significant knowledge gap among women in many regions (Abiodun et al., 2016). In particular, there is a lack of current data on the awareness and knowledge of CC and CC screening (CCS) in certain areas, such as the Nigerian state where Babcock University is located. Given that young women, including university students, are at a high risk of contracting the Human Papillomavirus (HPV) infection (Owens et al., 2018), understanding their knowledge and attitudes towards CC screening is essential. This understanding can inform the development of targeted interventions that address identified gaps in knowledge and awareness, ultimately increasing screening uptake and reducing CC incidence.

Cervical cancer is a significant global health concern, affecting thousands of women each year. It is a preventable disease, primarily caused by persistent infection with high-risk types of human papillomavirus (HPV). Early detection and treatment of precancerous lesions through cervical cancer screening can effectively reduce the incidence and mortality associated with this disease.

Despite the availability of effective screening methods, such as Pap tests, HPV tests, and visual inspection with acetic acid (VIA), the uptake of cervical cancer screening remains suboptimal in many populations. In Nigeria, cervical cancer is the second most common cancer among women, with a high mortality rate due to low awareness, limited access to screening services, and inadequate infrastructure for early detection and treatment.

The problem to be addressed by this study is the lack of knowledge and acceptability of cervical cancer screening among female health education students at Alvanlkoku Federal College of Education, Owerri. As future health educators, these students may play a pivotal role in promoting preventive health practices. However, their potential impact is undermined by insufficient understanding of cervical cancer screening and its importance in reducing the burden of the disease.

This study aims to explore the level of knowledge and acceptability of cervical cancer screening among female health education students in Owerri, identify factors influencing their knowledge and acceptability, and provide evidence-based recommendations for improving awareness and uptake of cervical cancer screening among this crucial population. By addressing these issues, the study seeks to contribute to the development of effective strategies for reducing the burden of cervical cancer in Nigeria through enhanced knowledge and acceptability of cervical cancer screening among future health educators.

Objectives of the Study

The major objective of the study is to examine knowledge

and acceptability of cervical cancer screening among female health education students of Alvanlkoku Federal College of Education, Owerri. The specific objectives are to:

- 1. Assess the level of knowledge on CC screening among female health education students of Alvanlkoku Federal College of Education, Owerri.
- 2. Evaluate the acceptability of CC screening among female health education students of Alvanlkoku Federal College of Education, Owerri.
- 3. Investigate factors influencing the knowledge and acceptability of CC screening among female health education students of Alvanlkoku Federal College of Education, Owerri.

Research Questions

The following research questions are posed to guide this study:

- 1. What is the level of knowledge on CC screening among female health education students of Alvanlkoku Federal College of Education, Owerri.
- 2. What is the extent of acceptability of CC screening among female health education students of Alvanlkoku Federal College of Education, Owerri.
- 3. what are the sources of Information about CC Screening among female health education students of Alvan Ikoku Federal College of Education, Owerri.
- 4. To what extent are female health education students of Alvanlkoku Federal College of Education, Owerri Willing to undergo CC Screening?
- 5. What are the factors influencing the knowledge and acceptability of CC screening among female health education students of Alvan Ikoku Federal College of Education, Owerri.

METHODS

A cross-sectional descriptive design was used to assess the knowledge and acceptability of cervical cancer screening among female health education students at Alvanlkoku Federal University of Education, Owerri. The area of study is Alvanlkoku Federal University of Education, Owerri. Owerri is located in the Southeastern part of Nigeria, in Imo State. Alvanlkoku Federal University of Education (AIFUE) is a prestigious institution nestled in the heart of Owerri, Imo State, Nigeria. The target population for the study will comprise of 603 of Alvanlkoku Federal University of Education students. A systematic random sampling method was used to select 137 students from all the four levels of health education students in Alvanlkoku Federal University of Education Owerri. The sample size will also be determined using Taro Yamane's formular (1997). Sample size is equal to 274. Quota sampling method will

| S/N | Responses | SA | Α | D | D | Mean ± |
|--------------|---|--------|--------|--------|--------|------------|
| O /11 | | N (%) | N (%) | N (%) | N (%) | S.D |
| 1 | I know what cervical cancer is. | 259 | 5 | 5 | 5 | 3.89± |
| | | (94.5) | (1.8) | (1.8) | (1.8) | . 494 |
| 2 | Cervical cancer can be prevented through screening. | 259 | 5 | 5 | 5 | 3.89± |
| | | (94.5) | (1.8) | (1.8) | (1.8) | .494 |
| 3 | Human Papillomavirus (HPV) is a major risk factor for | 210 | 54 | 5 | 5 | 3.71 ± |
| | cervical cancer. | (76.6) | (19.7) | (1.8) | (1.8) | .594 |
| 4 | I know the symptoms of cervical cancer. | 199 | 65 | 5 | 5 | $3.67 \pm$ |
| | | (72.6) | (23.7) | (1.8) | (1.8) | .607 |
| 5 | Pap smear is a screening test for cervical | 189 | 62 | 10 | 13 | 3.56 ± |
| | cancer. | (69.0) | (22.6) | (3.6) | (4.7) | .779 |
| 6 | HPV vaccine can prevent cervical cancer. | 184 | 69 | 5 | 16 | 3.54 ± |
| | * | (67.2) | (25.2) | (1.8) | (5.8) | .779 |
| 7 | Cervical cancer screening is recommended | 184 | 63 | 22 | 5 | 3.55± |
| | for all women aged 21-65. | (67.2) | (23.0) | (8.0) | (1.8) | .720 |
| 8 | I understand the importance of regular | 176 | 88 | 5 | 5 | 3.59 ± |
| | cervical cancer screening. | (64.2) | (32.1) | (1.8) | (1.8) | .624 |
| 9 | Cervical cancer can be treated if detected | 120 | 132 | 6 | 16 | 3.30 ± |
| | early. | (43.8) | (48.2) | (2.2) | (5.8) | .779 |
| 10 | I know how often I should get screened for cervical | 97 | 91 | 56 | 30 | 2.93 ± |
| | cancer. | 35.4 | (33.2) | (20.4) | (10.9) | .998 |
| 11 | Smoking increases the risk of cervical | 86 | 114 | 69 | 5 | 3.03 ± |
| | cancer. | (31.4) | (41.6) | (25.2) | (1.8) | .800 |
| 12 | I know where to get screened for cervical cancer. | 53 | 160 | 50 | 11 | 2.93 |
| | | (19.3) | (58.4) | (18.2) | (4.0) | ±.731 |
| 13 | Cervical cancer screening is important | 62 | 31 | 169 | 62 | 3.03 |
| | | | | | | |

(4.4)

274 **160**

(56.93)

(11.3)

72

(26.35)

Table 1. Mean Scores and Standard deviation of students on theirLevel of knowledge on CC screening.

be used to select 68 students each from Year one and Year two and then 67 students from year three and year four among the health education students. Quota sampling is a non-probability sampling method that relies on the non – random selection of predetermined number or proportion of units.

for women's health.

No. of Respondents

Cluster responses

The instrument used for data collection was a wellquestionnaire. This was structured constructed considering the objectives of the study. It will consist of Section A and section B. Section A will comprise of demographic data of the respondents while section B will comprise of questions based on the research objectives which will determine the knowledge and acceptability of cervical cancer screening among female health education students of Alvanlkoku Federal University of Education, Owerri.he self-structure questionnaire will be given to the two experts and necessary corrections will be made to ensure face validity of the instrument. Data were analyzed using descriptive statistics and presented in tables and charts.

RESULTS

Research Question 1: What is the Level of knowledge

on CC screening among female health education students of Alvanlkoku Federal College of Education, Owerri?

(61.7)

32

(11.55)

22.6

10

(3.71)

 $\pm .718$

3.43

.719

Table 1 sought to provide an answer to research question 1. Data from the table revealed that the cluster mean of items 1 – 13 was 3.43. This is above the benchmark score of 2.50 of a 4 point rating scale. This implies that there is a high level of knowledge of CC screening among female health education students of Alvanlkoku Federal College of Education, Owerri. The Table also revealed that the cluster standard deviation of items 1 – 13 was .719. This also shows that the respondents were not far from the mean and the opinion of one another in their responses on level of knowledge on CC screening among female health education students of Alvanlkoku Federal College of Education, Owerri adding further validity to the mean.

Research Question 2: What is the extent of acceptability of CC screening among female health education students of Alvanlkoku Federal College of Education, Owerri.

Table 2 sought to provide an answer to research question 2. Data from the table revealed that the cluster mean of items 1 – 13 was 3.29. This is above the

| S/N | Responses | SA N (%) | A N (%) | D N (%) | D N (%) | Mean ± S.D |
|-----|---|---------------|---------------|-------------|-------------|-----------------------|
| 1 | I consider CC screening essential for women's health. | 84 | 123 | 30 | 37 | 2.93±. |
| • | r conclusion are concerning accommunity we make the area. | (30.7) | (44.9) | (10.9) | (13.5) | .977 |
| 2 | I would undergo CC screening regularly. | 132 | 71 | 35 | 36 | 3.09 ±. |
| | | (48.2) | (25.9) | (12.8) | (13.1) | 1.063 |
| 3 | CC screening is important for early cancer detection. | 132 | 102 | 26 | 14 | 3.28 ± |
| | · · | (48.2) | (37.2) | (9.5) | (5.1) | .838 |
| 4 | I feel comfortable discussing CC screening with my | 107 | 151 | 10 | 6 | 3.31 ± |
| | healthcare provider. | (39.1) | (55.1) | (3.6) | (2.2) | .648 |
| 5 | I would recommend CC screening to friends and family. | 124 | 104 | 32 | 14 | $3.23\pm$ |
| | | (45.3) | (38.0) | (11.7) | (5.1) | .850 |
| 6 | I believe CC screening reduces cancer risk. | 134 | 131 | 4 | 5 | 3.44± |
| | | (48.9) | (47.8) | (1.4) | (1.8) | .621 |
| 7 | I have no concerns about CC screening. | 101 | 136 | 25 | 12 | 3.19 ± |
| | | (36.9) | (49.6) | (9.1) | (4.4) | .775 |
| 8 | I trust healthcare providers to perform CC screening. | 60 | 192 | 16 | 6 | 3.12 ± |
| | | (21.9) | (70.1) | (5.8) | (2.2) | .594 |
| 9 | I would undergo CC screening even if not required. | 96 | 163 | 8 | 7 | $3.27 \pm$ |
| | | (35.0) | (59.5) | (2.9) | (2.6) | . 641 |
| 10 | I accept that CC screening is important for reproductive | 130 | 72 | 48 | 24 | $3.12 \pm$ |
| | health. | (47.4) | (26.3) | (17.5) | (8.8) | .994 |
| 11 | I have no negative concerns about CC screening. | 150 | 114 | 5 | 5 | $3.49 \pm$ |
| | | (54.7) | (41.6) | (1.8) | (1.8) | .630 |
| 12 | I understand the benefits of CC screening. | 206 | 60 | 5 | 3 | 3.71 ± |
| | | (75.2) | (21.9) | (1.8) | (1.1) | .555 |
| 13 | CC screening is a responsible health behavior. | 175 | 83 | 12 | 4 | 3.57 ± |
| | | (63.9) | (30.3) | (4.4) | (1.5) | .650 |
| | No. of Respondents | 274 | | | | |
| | Cluster responses | 125 (45.8) | 116 (42.2) | 20 (7.2) | 13 (4.9) | 3.29 <u>+</u> .766 |

benchmark score of 2.50 of a 4 point rating scale. This implies that there is a high level of acceptability of CC screening among female health education students of Alvanlkoku Federal College of Education, Owerri. The

Table also revealed that the cluster standard deviation of items 1-13 was .766. This also shows that the respondents were not far from the mean and the opinion of one another in their responses on the extent of acceptability of CC screening among female health education students of Alvanlkoku Federal College of Education, Owerri adding further validity to the mean.

Research Question 3: what are the sources of Information about CC Screening among female health education students of Alvan Ikoku Federal College of Education, Owerri.

Table 3 sought to provide answers to research question 3. Data from the table revealed that the cluster mean of items 1-8 was 3.11. This is above the benchmark score of 2.50 of a 4 point rating scale. This implies that healthcare providers, health education classes/curriculum, online resources, family members, friends, television, radio programs, printed materials, community health events and social media campaigns

are the sources of Information about CC Screening among female health education students of Alvan Ikoku Federal College of Education, Owerri. The Table also revealed that the cluster standard deviation of items 1-8 was .715. This also shows that the respondents were not far from the mean and the opinion of one another in their responses on are the sources of Information about CC Screening among female health education students of Alvanlkoku Federal College of Education, Owerri adding further validity to the mean.

Research Question 4: To what extent are female health education students of Alvanlkoku Federal College of Education, Owerri Willing to Undergo CC Screening?

Table 4 sought to provide answer to research question 4. Data from the table revealed that the cluster mean of items 1-7 was 3.45. This is above the bench mark score of 2.50 of a 4 point rating scale. This implies that female health education students of Alvanlkoku Federal College of Education, Owerri are willing to Undergo CC Screening to a high extent. The Table also revealed that the cluster standard deviation of items 1-7 was .700. This also shows that the respondents were not far from the mean and the opinion of one another in their responses on the

| S/N | Responses | SA | Α | D | D | Mean ± S.D |
|-----|--|--------|--------|--------|-------|-----------------|
| | | N (%) | N (%) | N (%) | N (%) | |
| 1 | Healthcare providers (e.g., doctors, | 173 | 38 | 37 | 26 | $3.31 \pm$ |
| | students) | (63.1) | (13.9) | (13.5) | (9.5) | 1.028 |
| 2 | Health education classes/curriculum | 149 | 117 | 8 | 0 | 3.51 ± |
| | | (54.4) | (42.7) | (2.9) | (0.0) | .556 |
| 3 | Online resources (e.g., websites, | 51 | 203 | 16 | 4 | 3.10 ± |
| | social media) | (18.6) | (74.1) | (5.8) | (1.5) | .542 |
| 4 | Family members/friends | 63 | 177 | 17 | 17 | 2.04 705 |
| | | (23.0) | (64.6) | (6.2) | (6.2) | $3.04 \pm .735$ |
| 5 | Television/radio programs | 110 | 105 | 54 | 5 | 3.17 ± |
| | , - | (40.1) | (38.3) | (19.7) | (1.8) | .804 |
| 6 | Printed Materials (Posters, brochures, | 49 | 177 | 43 | 5 | 2.99 + |
| | flyers, Newspapers, magazines, bill | - | | (15.7) | (1.8) | 2.99 ± .640 |
| | bords, etc.) | (17.9) | (64.6) | | | .040 |
| 7 | Community health events | 39 | 177 | 53 | 5 | 2.91 ± |
| | | (14.2) | (64.6) | (19.3) | (1.8) | .634 |
| 8 | Social media campaigns | 61 | 116 | 92 | 5 | 0.05 700 |
| | | (22.3) | (42.3) | (33.6) | (1.8) | $2.85 \pm .782$ |
| | No. of Respondents | | | | | |
| | Oliveten needed | 87 | 139 | 40 | 8 | 3.11 |
| | Cluster responses | (31.7) | (50.6) | (16.3) | (3.1) | (.715) |

Table.4. Mean Scores and Standard deviation of students on their Willingness to Undergo CC Screening

| S/N | Responses | SA N (%) | A N (%) | D N (%) | D N (%) | Mean ± S.D |
|-----|--|---------------|---------------|--------------|--------------|---------------|
| 1 | I am willing to undergo CC screening to prevent cervical cancer. | 50 (18.2) | 139 (50.7) | 42 (15.3) | 43 (15.7) | 2.74 ± .941 |
| 2 | I intend to undergo CC screening regularly. | 135 (49.3) | 90 (32.8) | 31 (11.3) | 18 (6.6) | 3.25 ± .900 |
| 3 | I believe CC screening is necessary for my health. | 258 (94.2) | 5 (1.8) | 5 (1.8) | 5 (1.8) | 3.89 ± .495 |
| 4 | I would undergo CC screening even if it's not required. | 199 (72.6) | 65 (23.7) | 5 (1.8) | 5 (1.8) | 3.67 ± .607 |
| 5 | I am comfortable with the idea of CC screening. | 139 (50.7) | 125 (45.6) | 5 (1.8) | 5 (1.8) | 3.45 ± .629 |
| 6 | I am willing to overcome any barriers to undergo CC screening. | 221 (80.7) | 43 (15.7) | 5 (1.8) | 5 (1.8) | 3.75 ± .578 |
| 7 | I am willing to pay for CC screening if necessary. | 139 (50.7) | 111 (41.1) | 15 (5.5) | 10 (3.6) | 3.38 ± .752 |
| | No. of Respondents | | | | | |
| | Cluster responses | 163 (59.5) | 83 (30.2) | 15 (5.6) | 13 (4.7) | 3.45± .700 |

extent female health education students of Alvan Ikoku Federal College of Education, Owerri are willing to Undergo CC Screening. This also added further validity to the mean.

Research Question 5: What are the factors influencing the knowledge and acceptability of CC screening among female health education students of Alvan Ikoku Federal College of Education, Owerri?

Table 5 sought to provide an answer to research question 5. Data from the table revealed that the cluster

mean of items 1 – 12 was 3.38. This is above the benchmark score of 2.50 of a 4 point rating scale. This implies that knowledge of cc and screening benefits, family and friend support, cultural and societal norms, access to cc screening services on campus, anxiety and fear of cc screening, availability and accessibility of cc screening services, affordability of cc screening, non exposure to cc screening education, availability of resources and materials, lack of understanding of the purpose and benefits of cc screening, availability, affordability, and accessibility of cc services on campus, concerns about pain, stigma, or diagnosis are the factors

Table 5. Mean Scores and Standard deviation of students on factors influencing the knowledge and acceptability of CC screening

| S/N | Responses | SA | Α | D | D | Mean ± S.D |
|-----|--|--------|--------|--------|--------|--------------------|
| | · | N (%) | N (%) | N (%) | N (%) | |
| 1 | Knowledge of CC and screening benefits | 100 | 126 | 17 | 31 | 2.00 026 |
| | | (36.5) | (46.0) | (6.2) | (11.3) | $3.08 \pm .936$ |
| 2 | Family and friend support | 106 | 130 | 31 | 7 | 0.00 745 |
| | | (38.7) | (47.4) | (11.3) | (2.6) | $3.22 \pm .745$ |
| 3 | Cultural and societal norms | 51 | 128 | 90 | 5 | 0.00 747 |
| | | (18.6) | (46.7) | (32.8) | (1.8) | $2.82 \pm .747$ |
| 4 | Access to CC screening services on campus | 63 | 176 | 18 | 17 | 3.04 ± .738 |
| | | (23.0) | (64.2) | (6.6) | (6.2) | 3.04 ± .730 |
| 5 | Anxiety and fear of CC screening | 107 | 105 | 57 | 5 | 3.15 ± .808 |
| | | (39.1) | (38.3) | (20.8) | (1.8) | 3.13 ± .000 |
| 6 | Availability and accessibility of CC screening | 195 | 65 | 5 | 9 | 262 605 |
| | services | (70.2) | (23.7) | (1.8) | (3.3) | $3.63 \pm .685$ |
| 7 | Affordability of CC screening | 193 | 65 | 9 | 7 | 262 675 |
| | | (70.4) | (23.7) | (3.3) | (2.6) | $3.62 \pm .675$ |
| 8 | Non exposure to CC screening education | 190 | 75 | 6 | 3 | 3.65 ± .582 |
| | | (69.3) | (27.4) | (2.2) | (1.1) | 3.05 ± .562 |
| 9 | Availability of resources and materials | 100 | 167 | 4 | 3 | 3.33 ± .563 |
| | | (36.5) | (60.9) | (1.5) | (1.1) | 3.33 ± .563 |
| 10 | Lack of understanding of the purpose and | 249 | 6 | 10 | 9 | 3.81 ± .654 |
| | benefits of CC screening. | (90.9) | (2.2) | (3.6) | (3.3) | 3.01 ± .034 |
| 11 | Availability, affordability, and accessibility of CC | 190 | 70 | 8 | 6 | 3.62 ± .653 |
| | services on campus. | (69.3) | (25.5) | (2.9) | (2.2) | 3.02 <u>T</u> .033 |
| 12 | Concerns about pain, stigma, or diagnosis. | 222 | 17 | 17 | 18 | 3.62 ± .870 |
| | | (81.0) | (6.2) | (6.2) | (6.6) | 3.02 ± .070 |
| | No. of Respondents | 274 | | | | |
| | Cluster responses | 147 | 94 | 23 | 10 | 3.38± |
| | | (53.6) | (34.4) | (8.3) | (3.7) | .721 |

influencing the knowledge and acceptability of CC screening among female health education students of Alvanlkoku Federal College of Education, Owerri. The Table also revealed that the cluster standard deviation of items 1 – 12 was .721. This also shows that the respondents were not far from the mean and the opinion of one another in their responses on are the factors influencing the knowledge and acceptability of CC screening among female health education students of Alvanlkoku Federal College of Education, Owerri adding further validity to the mean.

DISCUSSION OF FINDINGS

Data from the study revealed that there is a high level of knowledge of CC screening among female health education students of Alvanlkoku Federal College of Education, Owerri. The study aligns with the findings of Sarfo, Peasah, Acheampong, and Asamoah (2019) on the knowledge, attitude and practice of CCS among female university students at Presbyterian university college, Ghana. The results revealed that students in a higher level of education performed CCE. The results revealed 35% of respondents had ever heard of CCS. However, the study contradicts the findings of Sarfo,

Peasah, Acheampong, and Asamoah (2019) on the knowledge, attitude and practice of CCS among female university students at Presbyterian university college, Ghana which revealed that Even though the majority of respondents claimed they had heard of CCS, only 5% understand and accept it as something that is important for every woman.

Findings from the study revealed that to a high extent, there is a high level of acceptability of CC screening among female health education students of Alvanlkoku Federal College of Education, Owerri. This validates the findings of Parajul and Mandal (2012) in Koirala institute of Health Sciences, Dharan, Nepal, on knowledge of CCS among medical, dental and nursing students and factors which influence towards the CC screening. Mean knowledge about the CC screening, as indicated by the results were 63.67 +16.22, 71+18.16 and 76.07+18.60 Dental, nursing and medical students respectively. Similarly mean practices regarding CC screening were found to be 34.67+15.41, 47.88 + 14.08 and 46.78+14.77 among dental, nursing and medical respectively. Knowledge was less among dental students whereas it was found quite higher in medical and nursing students. CC screening was found to be low in dental, high in nursing, and higher in medical students. Overall level of knowledge was found to be mordantly adequate

among all disciplines, however practices among them were found to be inadequate.

Findings also revealed that healthcare providers, health education classes/curriculum, online resources, family members, friends, television, radio programs, printed materials, community health events and social media campaigns are the sources of Information about CC Screening among female health education students of Alvanlkoku Federal College of Education, Owerri. This corresponds with the findings of Bassey, Irurhe, Olowoyeye, Adeyomoye, and Onajole (2019) on their study to assess the level of knowledge, attitude and practice of cervical cancer among nursing students of Lagos University Teaching Hospital the study revealed that majority, 58.6% obtain their information from television/radio.

Further findings revealed that female health education students of Alvanlkoku Federal College of Education, Owerri are willing to Undergo CC Screening to a high extent. This contradicts the findings of Juanita, Jittanoon, and Boonyasopun (2013) on the level of CCS practice among female nursing students in Aceh, Indonesia and the degree of self-efficacy in those who did practice it. Results revealed that only 39.5% of the students practiced CCS with more than half of the students saying they did not practice CCS (60.5%). The main factors that influenced the students' performing CCS were not having a family history of cancer, single and no history of breast illness. Among the thirty students who practiced CCS. The study further contradicts the findings of Yousuf (2018), on knowledge attitudes and behaviors of nursing and midwifery students regarding cervical cancer on 244 female students of nursing and midwifery in Aydin school of health at Adnan Menderes University in Aydin, Turkey: Results showed that more than half of the study participants stated they had sufficient information about CCS from varied sources primarily from school curricula. The students were knowledgeable about who should perform CCS and its recommended frequency; however, their practice of CCS low. First year students had negative attitudes about CCS but became more positive as they progressed in their education. Half of the study sample stated they are ready to conduct a CCS at recommended times and intervals but only one fifth have actually carried out the screening.

More findings revealed that knowledge of cc and screening benefits, family and friend support, cultural and societal norms, access to cc screening services on campus, anxiety and fear of cc screening, availability and accessibility of cc screening services, affordability of cc screening, non-exposure to cc screening education, availability of resources and materials, lack of understanding of the purpose and benefits of cc screening, availability, affordability, and accessibility of cc services on campus, concerns about pain, stigma, or diagnosis are the factors influencing the knowledge and acceptability of CC screening among female health

education students of Alvanlkoku Federal College of Education, Owerri. This aligns with the findings of Juanita, Jittanoon, and Boonyasopun (2013) on the level of CCS practice among female nursing students in Aceh, Indonesia and the degree of self-efficacy in those who did practice it which revealed that the main factors that influenced the students' performing CCS were not having a family history of cancer, single and no history of breast illness.

CONCLUSION

The following conclusions are drawn from the findings of the study. There is a high level of knowledge of CC screening among female health education students of Alvanlkoku Federal College of Education, Owerri. Similarly, there is high level of acceptability of CC screening among female health education students of Alvanlkoku Federal College of Education, Owerri. Healthcare providers. health education classes/ curriculum, online resources, family members, friends, television, radio programs, printed materials, community health events and social media campaigns are the sources of Information about CC Screening among female health education students of Alvanlkoku Federal College of Education, Owerri. Additionally, female health education students of Alvanlkoku Federal College of Education, Owerri are willing to Undergo CC Screening to a high extent of knowledge of cc and screening benefits. family and friend support, cultural and societal norms, access to cc screening services on campus, anxiety and fear of cc screening, availability and accessibility of cc screening services, affordability of cc screening, nonexposure to cc screening education, availability of resources and materials, lack of understanding of the purpose and benefits of cc screening, availability, affordability, and accessibility of cc services on campus, concerns about pain, stigma, or diagnosis are the factors influencing the knowledge and acceptability of CC screening among female health education students of Alvanlkoku Federal College of Education, Owerri.

Public Health Implication

The high level of knowledge about cervical cancer screening among female health education students at Alvanlkoku Federal College of Education, Owerri, has profound implications. It enables students to disseminate knowledge to peers, family, and community, promoting early detection and prevention. As future health educators, they can integrate CC screening into their teaching practices, contributing to improved health outcomes. healthcare providers can collaborate with these students on community outreach, research, and peer education initiatives. This knowledge can also foster

a culture of health awareness and advocacy, ultimately reducing cervical cancer incidence and mortality. By leveraging this knowledge, healthcare providers can develop effective programs, address barriers to screening, and promote positive health behaviors, leading to a healthier community.

The high acceptability of cervical cancer (CC) screening among female health education students at Alvanlkoku Federal College of Education, Owerri, has significant implications. It suggests increased uptake of CC screening, future health advocacy, and reduced cervical cancer incidence. Healthcare providers can develop targeted interventions, community outreach programs, and education/training initiatives. The findings also inform curriculum integration, research opportunities, and health education model development. As students influence community awareness and social norms, demand for CC screening services may increase. Leveraging this acceptability can ultimately improve outcomes, inform policy decisions, contribute to cervical cancer prevention and early detection.

The identification of diverse information sources about cervical cancer (CC) screening among female health education students at Alvanlkoku Federal College of Owerri, has significant Education, implications. Healthcare providers, health education classes, online resources, family, friends, media (TV, radio, social media), printed materials, and community health events all contribute to awareness. This highlights the importance of a multi-channel approach to health education and promotion. To leverage comprehensive programs should be developed, engaging healthcare providers, family, friends, and media. Policymakers should support awareness initiatives, and researchers should investigate effective information dissemination strategies. By utilizing these sources, awareness and early detection of CC can be improved, ultimately reducing cervical cancer incidence and mortality.

The high willingness of female health education students at Alvanlkoku Federal College of Education. Owerri, to undergo cervical cancer (CC) screening has significant implications. Students can encourage and facilitate screening, provide education, address concerns, collaborate with healthcare providers. willingness also suggests potential for increased screening rates, early detection, and prevention. To capitalize on this, campus-based screening programs, health education strategies, and student-led initiatives can be developed. Students can also advocate for policies supporting CC screening and allocate resources. By leveraging this willingness, students and healthcare providers can promote community education, early detection, and prevention, ultimately reducing cervical cancer incidence and mortality among students and the broader community.

The nursing implications of factors influencing cervical cancer (CC) screening knowledge and acceptability among female health education students at Alvanlkoku Federal College of Education, Owerri, highlight the need for targeted interventions. Students should develop education programs addressing knowledge gaps, provide accessible and affordable screening services on campus, and offer emotional support and counseling to alleviate anxiety and fear. Collaboration with community leaders can help address cultural and societal norms, while advocacy for policy changes can increase accessibility and affordability. Additionally, students should facilitate access to screening services, engage family and friends in awareness campaigns, and provide clear explanations of CC screening purpose and benefits. By addressing these factors, students can increase CC screening knowledge, acceptability, and uptake, ultimately reducing cervical cancer incidence and mortality among students and the broader community.

RECOMMENDATIONS

Based on the findings of the study the following are recommended:

- 1. Integrate CC screening education into the health education curriculum at Alvanlkoku Federal College of Education, Owerri, to increase knowledge and awareness among students.
- 2. Establish accessible and affordable CC screening services on campus, leveraging partnerships with healthcare providers and community organizations to ensure timely and convenient screening.
- 3. Utilize diverse information channels (healthcare providers, family, friends, media, social media, printed materials, community events) to promote CC screening awareness and education among students.
- 4. Implement strategies to address anxiety, fear, cultural and societal norms, and affordability concerns that hinder CC screening uptake among students, including counseling, peer support, and community outreach.
- 5. Empower health education students to become CC screening advocates through student-led initiatives, peer education, and community outreach programs, fostering a culture of health promotion and prevention.

REFERENCES

Abiodun OO, Olatunji AO, Onalaja AO, Adeyemi AB (2016). Knowledge, attitude and practice of cervical cancer screening among female health workers in a tertiary hospital in Nigeria. *International Journal of Women's Health and Reproduction Sciences*, 4(3), 263-269. https://doi.org/10.18203/2320-1770.ijwhr 20160948

Adegoke AA, Adesunkanmi AR, Dairo MD, Olaniyan FO, Fakolade FA (2017). Knowledge and practice of cervical cancer screening among female health workers in a tertiary health institution in

- Lagos, Nigeria. *Int. J. Women's Health*, 9, 585-590. https://doi.org/10.2147/IJWH.S146794
- Adekanle DA, Musa AI, Makinde AO (2021). Barriers to cervical cancer screening among women in rural communities of Ogun State, Nigeria: A qualitative study. *Pan Af. Med. J.* 38(13). https://doi.org/10.11604/pamj.2021.38.13.3192
- Carcinogenic Risks to Humans: Volume 100E: Personal Habits and Indoor Combustions. Retrieved from https://publications .iarc.fr /571
- Center for Disease Control and Prevention. (2021). HIV and Cervical Cancer. https://www.cdc.gov/hiv/pdf/risk/hiv-cervical-cancer.pdf
- Falegan OO, Olugbenga-Bello AI, Adebamowo CA, Onasoga OA, Ogunwande MO, Adeboye O, Sulaimon N (2021). Knowledge, attitude and practice of cervical cancer screening among female traders in Ogbomoso North Local Government, Nigeria. Nig. J. Clin. Prac., 25(2), 222-229. Retrieved from https://njcponline.com/text.asp?2021/25/2/222/323641https://gco.iarc.fr/
- Institute for Research on Cancer. (2017). IARC Monographs on the Evaluation of
- International Agency for Research on Cancer. (2019). Cervical cancer statistics in Africa.
- Izegaegbe AC, Anyanti JI, Ana UU (2020). Knowledge, attitude and practice of cervical cancer screening among female market women in a semi-urban community in Southeast Nigeria. Nig. J. Med. 29(3), 147-153. https://doi.org/10.4103/njm.njm_35_20
- Kulasingam SL, Hughes JP, Kumanan M, Wacholder S, Lin CC, Li CI (2020). A systematic review of cervical cancer screening policies and implementation strategies in countries in the Asia-Pacific region. BMJ Open, 10(10), e039002. https://doi.org/10.1136/bmjopen-2020-039002

- Landy R, Ahmed A, Darabrazi M, Nasim M, Cutts FT, Arbyn M (2016). Impact of cervical cancer screening on mortality and cervical cancer incidence over 30 years in England. *Int. J. Cancer*, 138(5), 1143-1150. https://doi.org/10.1002/ijc.29955
- National Cancer Institute. (2020). Cervical cancer screening. https://www.cancer.gov/
- National Comprehensive Cancer Network. (2021). *Cervical cancer*. https://www.nccn.org/patients/guidelines/content/PDF/cervical-patient.pdf
- Nwagha UI, Oche OO, Jiya M, Al-Hassan IZ, Onoja F, Oriji G, Shaibu S (2018). Epidemiology of pre-invasive cervical cancer among HIV-positive women attending HIV Clinics in North-central, Nigeria. *Pan Afr. Med. J.* 30, 200. https://doi.org/ 10.11 604/pamj.2018.30.200.12878
- Nweze C, Ezeaka VC, Aghaji O, Enabudoso EU, Ofochebe UI, Nwobodo E, Anusionwu CC (2020). Knowledge of cervical cancer screening and its association with screening uptake among women in Southeast Nigeria: A cross-sectional study. *BMJ Open*, 10(10), e039777. https://doi.org/10.1136/bmjopen-2020-039777
- Onuigbo GN, Ibekwe OO, Gopalan H, Eze GA, Ekure N, Ogundipe JB, Omotara BA (2019). Socioeconomic inequalities and barriers in cervical cancer screening among women in Owerri, Southeast Nigeria. J. Pub. Health in Afr. 10(1), 1284. https://doi.org/10.4081/jphia.2019.1284
- United Nations Population Fund. (2017). Cervical cancer in Africa. https://www.unfpa.org/
- World Health Organization. (2018). Cervical cancer factsheet. https://www.who.int/
- World Health Organization. (2021). *Cervical cancer*. https://www.who.int/news-room/fact-sheets/detail/cervical-cancer.