

**KNOWLEDGE OF CERVICAL CANCER AMONG FEMALE STUDENTS IN
THE FACULTY OF EDUCATION, UNIVERSITY OF BENIN**

BY

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BENIN CITY.**

DECEMBER, 2024

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**A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF HEALTH,
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UNIVERSITY OF BENIN, BENIN CITY, IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE AWARD OF BACHELOR OF SCIENCE B.Sc (Ed)
DEGREE IN HEALTH EDUCATION, UNIVERSITY OF BENIN.**

DECEMBER, 2024

CERTIFICATION

We the undersign certified that this project work was carried out by **FAVOUR ELOHO AREH** with matriculation number **EDU2005986** in the department of health, safety and environmental education for a partial fulfilment of the requirement of the award of Bachelor of science BSc Ed Health Education University of Benin.

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DEDICATION

This research work is dedicated to GOD ALMIGHTY. For his unfailing love towards the researcher and for enabling the researcher to complete her bachelor's degree program.

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The researcher expresses her heartfelt appreciation to God Almighty for his unfailing love towards her during the entire research work and for the completion of her study.

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ABSTRACT

This study seeks to examine the knowledge of cervical cancer among female students in the faculty of education, University of Benin. Five research questions were raised to guide this study. The descriptive research design was adopted for this study and random sampling technique was used to select 148 (one hundred and forty-eight) female students in the faculty of education, University of Benin. Data was collected from the 148 respondents using a closed ended questionnaire with twenty (20) items. The data collected was analyzed and interpreted using simple frequencies, percentage.

Based on the data collected and analyzed, it was revealed that the respondents had inadequate knowledge about the causes and symptoms of cervical cancer, high level of knowledge about the preventive methods of cervical cancer and a low knowledge about the screening methods of cervical cancer.

It was recommended that Intervention programs aimed at improving knowledge and attitudes towards cervical cancer screening among female students should be provided to improve knowledge about cervical cancer across the country. It was recommended that there should be sensitization of health care providers on issues related to cervical cancer screening and encourage them to have conversations with female students and provide information to help them to screen

CHAPTER ONE

INTRODUCTION

Background to the study

At a mean age of 54, cervical cancer is a malignant illness of the cervix that often develops in the fifth or sixth decade of life. The Papanicolaou test can identify the disease's premalignant stage, which affects younger women, and it can be treated to stop cancer from growing. It is pitiful to see those underdeveloped nations with few resources, such as Nigeria, have the largest disease burden more than 80%–90% of cases according to an "epidemiological Xray" of cervical cancer incidence (Agboyeji, Ijaiya and Jimoh, 2004). According to Premium Times 2014, 26 Nigerian women die daily from cervical cancer and Nigeria ranks 10th in cervical cancer death globally. The alarmingly high death rate indicated earlier should not be met with great dismay, nevertheless, as a detailed examination of the preventive measures in place in Nigeria reveals a lack of facilities and screening programs.

Globally, cervical cancer is the fourth most common cancer in women, with 604 000 new cases in 2020. About 90% of the 342 000 deaths caused by cervical cancer occurred in low- and middle-income countries. The highest rates of cervical cancer incidence and mortality are in sub-Saharan Africa (SSA), Central America and South-East Asia. Regional differences in the cervical cancer burden are related to inequalities in access to vaccination, screening and treatment services, risk factors including HIV prevalence, and social and

economic determinants such as sex, gender biases and poverty. According to W.H.O, women living with HIV are 6 times more likely to develop cervical cancer compared to the general population, and an estimated 5% of all cervical cancer cases are attributable to HIV. The contribution of HIV to cervical cancer disproportionately affects younger women, and as a result, 20% of children who lose their mother to cancer do so due to cervical cancer. With the majority of deaths occurring in the prime of life, this preventable disease ranks second in low- and middle-income countries among cancer deaths among women (WHO 2013). Even though there are many techniques and technologies available to prevent cervical cancer, the girls and women who need them the most are still largely unable to obtain this intervention. The Human Papilloma Virus (HPV) has been shown to cause cervical cancer; however, the vaccine is not generally accessible, and screening rates are still low in many nations. Access to care is further hampered by widespread stigma and a lack of knowledge about the illness (WHO 2013).

According to Kumar et al. (2007), cervical cancer is a malignant neoplasm of the uterus in which the cervix develops aberrant cells that grow out of control to become tumors. It is frequently linked to mortality and morbidity when it is advanced, and the prognosis is dire. Accordingly, reducing the death and morbidity associated with cervical cancer requires early detection and treatment of precancerous cervical cancer stages (Kumar, et al., 2007).

Cervical cancer can be diagnosed and treated early. The tests to detect cervical cancer include the Papanicolaou test (Pap smear), visual inspection with acetic acid (VIA) and visual inspection with Lugol's iodine (VILI) which are currently available in most

government hospital. Cervical cancer screening using these test have been used for early detection of cervical cancer in women, thus preventing development of cervical cancers and as a result saving a lot of women from unnecessary mortality and morbidity resulting from cervical cancers. However, although there is enough evidence that cervical cancer today is almost totally preventable to a large extent through screening and treatment of precancerous cervical cancer, the cervix is unfortunately not readily utilized by general population in most developing countries, Kenya being one of them.

According to studies conducted in the United States and Sweden, routine cervical cancer screening greatly lowers the prevalence of the disease and, consequently, its associated mortality and morbidity when combined with a follow-up program for anomalies (saslow, Boates & Burke, 2008; Bergestrom et al., 1999). The American Cancer Society states that for the first three years following a sexually active woman's age of 21, cervical cancer screening should be performed annually (Saslow, Boetes, & Burke, 2008). Findings from studies have suggested that unscreened women were at high risk of cervical cancer which had necessitated researchers to continue to investigate different reasons for non-screening among women (Ponten et al., 1995; Oscarsson, 2008). The American Cancer Society recommends that all women should begin cervical screening at age 21 years; a 3-year interval can be considered in the age group 21 to 29 years while women who have had the HPV vaccine should follow the screening recommendations for their age group (American Cancer Society, 2012).

Several reasons for low rates of Pap testing have been observed including low education, lower cognitive scores, low acculturation, and other demographic, social and psychological factors (Wolff et al., 2003; Wu et al., 2001; Coronado et al., 2004). A previous study from Zaria noted that only 270 patients were screened as part of routine screening in 5 years (Oguntayo and Samaila, 2010). Several studies have shown the importance of health care professionals as predictors of the use of cervical cancer screening. Women's knowledge is also implicated in screening uptake. Women with low levels of knowledge about cervical cancer and its prevention are unlikely to access screening services (Abotchie and Shokar, 2009; Liao et al., 2006; Hummeida et al., 2009).

Statement of the problem

The research will aim to evaluate the level of knowledge on cervical cancer among female students of the Faculty of Education, University of Benin, as well as their awareness of the causes and risk factors associated with cervical cancer. Notably, despite the high incidence of new cases and fatalities linked to cervical cancer, the rate of cervical cancer screening remains low, at a mere 6%. This disparity raises concerns about the lack of emphasis on screening efforts and prompts the question of why screening rates are so inadequate in addressing this critical health issue.

Significance of the study

This study would be of immense importance to the health sector as it is envisaged that the findings from this study will be used by the health care team to increase strategies on increasing knowledge of cervical cancer to women. Research outcomes may influence

University policies regarding health education, screenings and support services, fostering a healthier campus environment.

It has also been found appropriate to carry out this study because the results will be used to influence women's behavior and practice towards cervical cancer in a positive way. Furthermore, the study results will form a basis for further research on cervical cancer.

Research Questions

The following research questions are raised to guide the study:

1. What is the knowledge of cervical cancer among female students in the faculty of education, University of Benin?
2. What is the knowledge of the causes of cervical cancer among female students in the faculty of education, University of Benin?
3. What is the knowledge of cervical cancer symptoms among female students in the faculty of education, University of Benin?
4. What is the knowledge of the preventive methods of cervical cancer among female students in the faculty of education, University of Benin?
5. What is the knowledge of the screening methods of cervical cancer among female students in the faculty of education, University of Benin?

Purpose of the Study

The purpose of the study is to examine the knowledge of cervical cancer among female students in the faculty of education, University of Benin. Specifically, this study seeks to;

- Examine the knowledge of cervical cancer among female students in the faculty of education, University of Benin.
- Examine the knowledge of the causes of cervical cancer among female students in the faculty of education, University of Benin.
- Examine the knowledge about cervical cancer symptoms among female students in the faculty of education, University of Benin.
- Examine the knowledge of prevention methods of cervical cancer among female students in the faculty of education, University of Benin.
- Examine the knowledge about screening methods of cervical cancer among female students in the faculty of education, University of Benin.

Significance of the Study

This study is carried out to examine the knowledge of cervical cancer among female students in the faculty of education, University of Benin. Therefore this study will be of great importance to students particularly the female students in the faculty of education, lecturers and the school management as well as policy makers, planners and all stakeholders in the school community and the environment as well. It will reveal the level of knowledge of cervical cancer among female students thereby revealing the need to provide knowledge or improve the knowledge existing among the students. Also, this study will be essential for students as it will provide essential knowledge for the students regarding the cervical cancer, it's causes, prevention, screening methods and the preventive practices.

Also, findings from this study will provide insights for the school management on the importance of providing health education for the female students on cervical cancer and will therefore enable the school management, policy makers and the State government come up with adequate measures towards providing essential and proper knowledge regarding cervical cancer. Also this study will be a basis for further studies for researchers who will want to carry out research in the same line of the study.

Scope and Delimitation of the study

The scope of the study is focused on the knowledge of cervical cancer among female students in the faculty of education, University of Benin. The study is delimited to female students in the faculty of education, University of Benin.

Definition of terms

Cervix: The cervix is the lower, narrow part of the uterus that connects to the vagina. It plays a crucial role in the female reproductive system, allowing the passage of menstrual flow from the uterus and serving as the entrance for sperm during intercourse. During childbirth, the cervix dilates to allow the baby to pass through.

Cervical cancer: Cervical cancer is a type of cancer that starts in the cells lining the cervix, which is the lower part of the uterus connecting to the vagina. It is often caused by the human papillomavirus (HPV) and can be detected early through screenings like Pap smears. Regular screenings and HPV vaccination are important for prevention.

Human Papillomavirus (HPV): Human Papillomavirus (HPV) is a group of related viruses that can infect the genital area, as well as the mouth and throat. It is the most common sexually transmitted infection (STI). HPV can cause various health problems, including genital warts and cancers of the cervix, vulva, vagina, penis, anus, and oropharynx. Vaccines are available to protect against some of the most common and high-risk types of HPV. Regular screenings can help detect and treat HPV-related conditions.

Papanicolaou test: The Papanicolaou test commonly known as a PAP smear, is a screening procedure for cervical cancer. It involves collecting cells from the cervix to examine for abnormalities or precancerous changes. Regular Pap smears are essential for early detection and prevention of cervical cancer.

Vaccination: Vaccination is a preventive medical intervention that involves administering a vaccine to stimulate the immune system and create an immune response, providing protection against specific infectious diseases.

Screening: Cancer screening involves testing individuals who show no symptoms of cancer to detect the disease at an early stage. It aims to identify cancers before they cause noticeable symptoms, enabling earlier treatment and improving the chances of successful outcomes. Common screening methods include mammograms for breast cancer, colonoscopies for colorectal cancer, and Pap smears for cervical cancer. Screening recommendations vary based on factors like age, gender, and family history.

Knowledge: Knowledge is information and understanding acquired through experience, learning, or reasoning. It encompasses facts, skills, concepts, and the awareness of how to apply them in various situations.

Diagnosis: Diagnosis is the process of identifying a medical condition or disease by analyzing symptoms, medical history, and often conducting tests or examinations. It helps healthcare professionals determine the underlying cause of a patient's health issues.

Malignant neoplasm: Malignant neoplasm, commonly known as cancer, refers to a group of diseases characterized by uncontrolled cell growth and the ability to invade surrounding tissues. Unlike benign tumors, malignant tumors have the potential to spread to other parts of the body, leading to serious health issues.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter will be discussed under the following subheadings:

- Concept of cervical cancer
- Causes of cervical cancer
- Prevention of cervical cancer
- HPV vaccination and other prevention steps
- Cervical screening and treatment of precancers
- Early detection, diagnosis, and treatment of cervical cancer
- Knowledge and awareness of cervical cancer
- Factors influencing knowledge and awareness of cervical cancer
- WHO Response
- Summary of Literature Review

Concept of Cervical Cancer

Cervical cancer is the most common malignancies among females worldwide especially in women of 20–39 years of age. Its contribution to cancer burden is significant across all cultures and economies. Cervical cancer also accounts for over 270,000 deaths worldwide, an overwhelming majority of which occur in the less developed regions (Imam, 2008). Globally there are over 500,000 new cases of cervical cancer annually and in excess of 270,000 deaths, accounting for 9% of female cancer deaths. 85% of cases occur in

developing countries and in Africa (Campbell, 2008). Cervical cancer remained the second leading cause of cancer deaths after breast cancer and the fifth most deadly cancer in women, accounting for approximately 10% of cancer deaths (Okonofua, 2007). The developing countries have carried a disproportionate share of the burden and 80% of the 250,000 cervical cancer deaths in 2005 occurred there (WHO, 2007; Uysal & Birsal, 2019). Cervical cancer is the malignant cancer of cervix uteri or cervical area. This happens when normal cells in the cervix change into cancer cells (Arbyn, 2015).

Human Papilloma Virus (HPV) infection is a necessary factor in the development of nearly all cases of cervical cancer. Sexually transmitted human papilloma virus infection leads to the development of cervical intraepithelial neoplasia and cervical cancer (Colgan, 2006). HPV is spread through sexual contact and although most women's bodies can fight the infection, sometimes the virus leads to the development of cervical cancer. HPV types 16 and 18 cause 70% of cervical cancer cases, whereas types 6 and 11 cause 90% of genital warts cases. During persistent HPV infection, precancerous changes may be detected in the cervix, that is, readily detectable changes occur in the cells lining the surface of the cervix, therefore early detection and treatment of these changes is an effective strategy for the prevention of cervical cancer and forms the basis of cervical screening programmes (Stephen, 2006). Women with many sexual partners, and those whose partners have had many sexual consorts, or have been previously exposed to the virus, are most at risk of developing the disease (WHO, 2007).

In developed countries of Europe and America that have organized national cervical screening programs, early detection and treatment of precancerous cervical lesions have resulted in a dramatic reduction in the incidence of and mortality from cervical cancer (WHO, 2007). Pap smear screening can identify potentially precancerous changes. Treatment of high grade changes can prevent the development of cancer. Cervical cancer is a major risk in women today especially at the age of 20years and above. Awareness of screening programme, preventive vaccination and diet are preventive measures that reduce the incidence of cervical cancer. In developed countries, the widespread use of cervical screening programmes has reduced the incidence of invasive cervical cancer by 50% or more (Population Reference Bureau, 2005).

Cervical cancer is the most common genital tract malignancy of women living in poor rural communities of developing countries (Ferlay, 2006). Such populations lack cervical screening facilities and other basic infrastructural and human resources essential for effective primary healthcare delivery. Symptoms of cervical cancer include; vaginal discharge containing blood, abnormal vaginal bleeding, pelvic pain, blood in urine, bowel symptoms, blood in stool, painful sex, unusual vaginal bleeding, unusual vaginal discharge, contact bleeding, vaginal mass, moderate pain during sexual intercourse, loss of appetite, weight loss, fatigue. Others are loss of appetite, weight loss, fatigue, pelvic pain, back pain, leg pain, swollen leg, heavy bleeding from the vagina and leaking of urine or faeces from the vagina in advanced cases (Duncan, 2015). Cervical cancer incidence and mortality rates have declined substantially in Western countries following the introduction of screening

programmes. The ideal ages of women for screening are 30– 40 years owing to high risk of precancerous lesions due to being sexually active; and a precancerous lesion is detectable for 10 years or more before a cancer develops (Olamijulo, 2015). Although it has been already proven that the efficiency of regular pap tests reduced the mortality rate of cervical cancer, its application in the developing countries is less compared with the developed countries.

The lack of knowledge concerning cervical cancer may be related to this fact (Yaren, 2008). In developed countries, the widespread use of cervical screening programmes has reduced the incidence of invasive cervical cancer by 50% or more. Cervical cancer is one of the most preventable of all cancers through primary and secondary prevention, prophylactic Human Papilloma virus (HPV) vaccination and cervical screening (Ezem, 2016) Cancer of the cervix remains the most common malignant neoplasm of the female genitalia and the second most common cancer in women (World Health Organization / Institute Catald' Oncology - WHO/ICO, 2010). It's the common cause of death among middle aged women, with an estimated 529,409 new cases and 274,883 deaths in 2008 (WHO/ICO,2010). The hardest - hit regions are countries such as Central and Southern America, the Caribbean, Sub Saharan Africa and part of the Oceania and Asia with the highest incidence over 30/100,000 women (Alliance of Cervical Cancer Prevention- ACCP,2005). An estimated 1.4 million women worldwide are living with cervical cancer and 2 to 5 times more up to 7 million worldwide may have precancerous conditions that need to be identified and treated(ACCP,2005). In the United Kingdom (UK), cervical cancer is the second most

common cancer among females under 35 years of age accounting for 702 new cases in 2007. According to the UK' statistics report for 2010, 2,828 new cases were diagnosed in 2017.

Furthermore, WHO 2018 asserted that cervical cancer remains a major public health problem. The report further indicates that approximately 500 women develop cervical cancer and 274 deaths occur each year from cervical cancer in developing countries (WHO, 2018). More than 80% of the world's new cases and deaths due to cervical cancer occur in the developing world and less than 5% women in these settings are never screened for cervical cancer even once in their life time (Sanghvi, Lacoste, McCormick, 2015). Possible reasons for a low participation in cervical cancer screening include; ignorance of the existence of such test, ignorance of importance of screening or lack of risk awareness and the risk factors to the development of cervical cancer, absence of symptoms and lack of awareness of centers where such services are obtainable, and lack of motivation to get screened (Aniebue & Aniebue 2010).

Cervical cancer originates in the cervix, which is the lower, narrow end of the uterus that connects to the vaginal. The cervix is composed of two main parts: the ectocervix [the outer parts and the endocervix [the inner part]. Cervical cancer, primarily caused by persistent infection with high-risk strains of the human papillomavirus (HPV), is a significant global health issue, particularly affecting women in low and middle-income countries where access to screening and vaccination is limited. Despite being largely preventable through

vaccination against HPV and regular cervical cancer screening, it remains a leading cause of cancer-related morbidity and mortality among women worldwide.

The development of cervical cancer typically follows a well-defined progression from the presence of precancerous lesions, known as cervical intraepithelial neoplasia (CIN), to invasive cancer. This progression provides a window of opportunity for early detection and intervention through screening programs such as Pap smears or HPV testing. However, lack of awareness about the importance of screening and vaccination, as well as socio-economic factors, contribute to disparities in cervical cancer incidence and mortality rates globally.

Epidemiology

Cervical cancer is the fourth most common cancer among women worldwide. In 2022, it was estimated that approximately 660,000 women were diagnosed with cervical cancer globally, and around 350,000 died from the disease. Most of these cases [about 90%] occur in low-and middle-income countries due to limited access to preventive measures such as HPV vaccination and regular screening program. (World Health Organization, 2022)

Understanding the risk factors associated with cervical cancer is crucial for prevention and early detection efforts. While persistent infection with high-risk HPV strains is the primary risk factor, other factors such as smoking, immunosuppression, early onset of sexual activity, multiple sexual partners, and lack of access to healthcare services also contribute to the development of cervical cancer.

Knowledge of the Causes and risk factors of Cervical Cancer

Human papillomavirus (HPV) is a common sexually transmitted infection which can affect the skin, genital area, and throat. Almost all sexually active people will be infected at some point in their lives, usually without symptoms. In most cases the immune system clears HPV from the body. Persistent infection with high-risk HPV can cause abnormal cells to develop, which go on to become cancer.

Persistent HPV infection of the cervix (the lower part of the uterus or womb, which opens into the vagina – also called the birth canal) if left untreated, causes 95% of cervical cancers. Typically, it takes 15–20 years for abnormal cells to become cancer, but in women with weakened immune systems, such as untreated HIV, this process can be faster and take 5–10 years. Risk factors for cancer progression include the grade of oncogenicity of the HPV type, immune status, the presence of other sexually transmitted infections, number of births, young age at first pregnancy, hormonal contraceptive use, and smoking.

In a study carried out by Eric (2019) in Obio Akpor LGA, Rivers State, Nigeria it was discovered that the knowledge of the causes of cervical cancer was poor among women. In another study carried out by Adeyemi, (2023) in Yenagoa, Bayelsa State, Nigeria it was discovered that despite the high level of awareness of cervical cancer disease among the respondents, the majority had poor knowledge of the causes of the disease. Another study carried out by Stanley, (2018) in Kenya showed that the level of knowledge about cervical cancer to a great extent is low. A study carried out by Danjuma (2022) in southwest Tanzania discovered that most women in the study area had a basic understanding of

cervical cancer as well as its causes. A study carried out by Edet in (2020) on the knowledge, practice and attitude towards cervical cancer screening among women revealed that there was low Knowledge regarding the causes of cervical cancer.

Signs and Symptoms of Cervical Cancer

Women with early cervical cancers and pre-cancers usually have no symptoms. Symptoms do not begin until the cancer becomes larger and grows into nearby tissue (National Cancer Institute 2019). When this happens, the most common symptoms are:

1. Abnormal vaginal bleeding, such as bleeding after vaginal sex, bleeding after menopause, bleeding and spotting between periods, or having (menstrual) periods that are longer or heavier than usual. Bleeding after douching may also occur.
2. An unusual discharge from the vagina – the discharge may contain some blood and may occur between your periods or after menopause.
3. Pain during sex
4. Pain in the pelvic region

Signs and symptoms seen with more advanced disease can include:

1. Swelling of the legs
2. Problems urinating or having a bowel movement
3. Blood in the urine.

In a study carried out by Eric (2019) in Obio Akpor LGA, Rivers State, Nigeria it was discovered that the respondents had moderate knowledge of the signs and symptoms of cervical cancer. In another study carried out by Adeyemi, (2023) in Yenagoa, Bayelsa State, Nigeria it was discovered that the respondents were aware about the signs and symptoms of cervical cancer as they had high level of awareness of cervical cancer. Another study carried out by Stanley, (2018) in Kenya showed that the level of knowledge about the signs and symptoms of cervical cancer was low among the respondents.

A study carried out by Danjuma (2022) in southwest Tanzania discovered that most women in the study area had a basic understanding of cervical cancer as well as it's causes and the signs and symptoms. A study carried out by Edet in (2020) on the knowledge, practice and attitude towards cervical cancer screening among women revealed that there was low knowledge regarding the signs and symptoms of cervical cancer.

Prevention of Cervical Cancer

One of the best things women can do for their health is to get screened for cervical cancer on a regular basis. In addition to the Pap smear, testing for the human papillomavirus (HPV), which is thought to be responsible for 90% of cases of cervical cancer, has become a recommended screening tool for women 25 years of age and above. According to the American Cancer Society's (ACS) most recent recommendations, women between the ages of 25 and 65 should preferentially undergo HPV testing every five years. The American Cancer Society (ACS) advises women to have a Pap test every three years or a combined HPV/Pap test every five years if that screening option isn't available. No additional

screenings are advised for women 65 years of age and older whose previous tests came back normal.

Boosting public awareness, access to information and services are key to prevention and control across the life course. This includes;

- Being vaccinated at age 9–14 years is a very effective way to prevent HPV infection, cervical cancer, and other HPV-related cancers.
- Screening from the age of 30 (25 years in women living with HIV) can detect cervical disease, which when treated, also prevents cervical cancer.
- At any age with symptoms or concerns, early detection followed by prompt quality treatment can cure cervical cancer.

HPV vaccination and other prevention steps

As of 2023, there are 6 HPV vaccines available globally. All protect against the high-risk HPV types 16 and 18, which cause most cervical cancers and have been shown to be safe and effective in preventing HPV infection and cervical cancer.

As a priority, HPV vaccines should be given to all girls aged 9–14 years, before they become sexually active. The vaccine may be given as 1 or 2 doses. People with reduced immune systems should ideally receive 2 or 3 doses. Some countries have also chosen to vaccinate boys to further reduce the prevalence of HPV in the community and to prevent cancers in men caused by HPV.

Other important ways to prevent HPV infection include:

- Being a non-smoker or stopping smoking
- Using condoms
- Voluntary male circumcision.

Knowledge of Preventive methods of cervical cancer

In a study carried by Kehinde (2019) in an urban area in Ekiti State, Nigeria, it was discovered that the women had low knowledge of the preventive methods of cervical cancer as well as negative attitudes towards screening. In another study carried out by Williams (2018) in Kenya, it was found out that the respondents had low levels of awareness of the screening methods for cervical cancer as well as the preventive methods. Another study carried out by Onyedika (2018) in an Urban Community in Imo State, Nigeria revealed that although knowledge of cervical cancer was poor, the respondents had good knowledge about the preventive methods of cervical cancer. Furthermore, A study carried out by Azubike et al, (2020) on the Assessment of knowledge, practice and attitude towards cervical cancer preventive methods revealed that the respondents had good knowledge about the methods of preventing cervical cancer.

Cervical screening and treatment of precancers

Women should be screened for cervical cancer every 5–10 years starting at age 30. Women living with HIV should be screened every 3 years starting at age 25. The global strategy encourages a minimum of two lifetime screens with a high-performance HPV test by age

35 and again by age 45 years. Precancers rarely cause symptoms, which is why regular cervical cancer screening is important, even if you have been vaccinated against HPV.

Self-collection of a sample for HPV testing, which may be a preferred choice for women, has been shown to be as reliable as samples collected by healthcare providers. After a positive HPV test (or other screening method) a healthcare provider can look for changes on the cervix (such as precancers) which may develop into cervical cancer if left untreated. Treatment of precancers is a simple procedure and prevents cervical cancer. Treatment may be offered in the same visit (the see and treat approach) or after a second test (the see, triage, and treat approach), which is especially recommended for women living with HIV.

Treatments of precancers are quick and generally painless causing infrequent complications. Treatment steps include colposcopy or visual inspection of the cervix to locate and assess the lesion followed by:

- Thermal ablation, which involves using a heated probe to burn off cells.
- Cryotherapy, which involves using a cold probe to freeze off the cells.
- LEETZ (large loop excision of the transformation zone), which involves removing your abnormal tissues with an electrically heated loop; and/or
- A cone biopsy, which involves using a knife to remove a cone-shaped wedge of tissue.

Knowledge of the Screening Methods of Cervical Cancer

In a study carried out by Danjuma (2022) in southwest Tanzania it was discovered that majority of the respondents lack knowledge of the screening methods of cervical cancer, however majority expressed willingness to be screened in the future. The study carried out by Elfie (2017) in Burundi revealed poor knowledge about cervical cancer and a low uptake of cervical cancer screening among Burundi men.

A study carried out by Anderson (2016) in Nairobi revealed that a substantial majority of the women had never been screened for cervical cancer. A study carried out by Adeyemi (2013) on the assessment of knowledge, practice and attitude towards cervical cancer screening among women revealed that the respondents had low cervical cancer screening practice.

Early detection, diagnosis, and treatment of cervical cancer

Cervical cancer can be cured if diagnosed and treated at an early stage of disease. Recognizing symptoms and seeking medical advice to address any concerns is a critical step. Women should see a healthcare professional if they notice:

- Unusual bleeding between periods, after menopause, or after sexual intercourse
- Increased or foul-smelling vaginal discharge
- Symptoms like persistent pain in the back, legs, or pelvis
- Weight loss, fatigue, and loss of appetite
- Vaginal discomfort
- Swelling in the legs.

Clinical evaluations and tests to confirm a diagnosis are important and will generally be followed by referral for treatment services, which can include surgery, radiotherapy, and chemotherapy as well as palliative care to provide supportive care and pain management. Management pathways for invasive cancer care are important tools to ensure that a patient is referred promptly and supported as they navigate the steps to diagnosis and treatment decisions. Features of quality care include:

- A multidisciplinary team ensuring diagnosis and staging (histological testing, pathology, imaging) takes place prior to treatment decisions.
- Treatment decisions in line with national guidelines; and
- Interventions are supported by holistic psychological, spiritual, physical, and palliative care.

As low- and middle-income countries scale-up cervical screening, more cases of invasive cervical cancer will be detected, especially in previously unscreened populations. Therefore, referral and cancer management strategies need to be implemented and expanded alongside prevention services.

Knowledge and Awareness of Cervical Cancer General Knowledge Among Students

Awareness of cervical cancer among female undergraduate students varies depending on factors such as education, access to healthcare, cultural norms, and geographic location. Generally, awareness has been increasing due to educational campaigns, access to information online, and healthcare initiatives. Below are some points regarding general knowledge and awareness among female undergraduate students.

1. Understanding of Cervical Cancer: Many female undergraduate students have a basic understanding of what cervical cancer is, including its association with the human papillomavirus (HPV) and its impact on reproductive health.
2. Risk Factors: Awareness of risk factors such as early sexual activity, multiple sexual partners, smoking, and HPV infection is increasing among this demographic.
3. Preventive Measures: There is growing awareness of preventive measures such as regular cervical cancer screenings (Pap smears or HPV tests), vaccination against HPV, and practicing safe sex.
4. Importance of Vaccination: More students are becoming aware of the HPV vaccine and its role in preventing cervical cancer. However, misconceptions and myths about the vaccine still exist in some communities, which can hinder vaccination efforts.
5. Access to Healthcare: Awareness may vary based on access to healthcare services. Students from underserved communities or regions with limited access to healthcare may have lower awareness levels.
6. Education Initiatives: Universities and healthcare organizations often conduct educational programs and campaigns to increase awareness of cervical cancer among students. These initiatives can significantly impact knowledge levels.
7. Cultural Factors: Cultural attitudes toward discussions about reproductive health and cancer screenings may influence awareness levels. In some cultures, discussing these topics openly may be considered taboo, leading to lower awareness.

While awareness of cervical cancer among female undergraduate students is generally increasing, there is still a need for education and outreach efforts to ensure that all students have access to accurate information and preventive healthcare services.

Factors Influencing Knowledge and Awareness

The factors influencing knowledge and awareness of cervical cancer involves exploring a range of demographic, cultural, and social influences such as.

Demographic Factors:

Age: Older women may have more awareness due to exposure to health education over time.

Gender: Women are more likely to be aware due to personal relevance.

Education Level: Higher education correlates with greater awareness as educated individuals may seek health information more actively.

Income Level: Higher income may afford better access to healthcare and information resources.

Geographical Location: Rural areas may have lower awareness due to limited access to healthcare and health education programs.

Marital Status: Married women may have higher awareness due to discussions within the family.

Cultural Influences:

Cultural Taboos: Societies with taboos around discussing reproductive health may hinder awareness.

Religious Beliefs: Religious beliefs may influence attitudes towards healthcare seeking behaviors and preventive measures.

Traditional Practices: Traditional healing methods may compete with modern healthcare, affecting awareness.

Language Barriers: Immigrant populations may have lower awareness due to language barriers.

Perceptions of Disease: Cultural beliefs about the causes of cancer can impact awareness and screening behaviors.

Social Influences:

Family Influence: Family members' attitudes towards healthcare and screening may influence awareness.

Peer Influence: Social networks can disseminate information and influence attitudes towards healthcare.

Healthcare Provider Influence: Trust in healthcare providers can affect willingness to seek information and screening.

Media Influence: Exposure to health campaigns, news, and social media can raise awareness.

Community Support: Availability of support groups and community resources can enhance awareness.

Health Policies: Government policies promoting screening programs can increase awareness.

WHO Response

All countries have made a commitment to eliminate cervical cancer as a public health problem. The WHO Global strategy defines elimination as reducing the number of new cases annually to 4 or fewer per 100 000 women and sets three targets to be achieved by the year 2030 to put all countries on the pathway to elimination in the coming decades:

- 90% of girls vaccinated with the HPV vaccine by age 15
- 70% of women screened with a high-quality test by ages 35 and 45
- 90% of women with cervical disease receiving treatment.

Modelling estimates that 74 million new cases of cervical cancer can be averted, and 62 million deaths can be avoided by reaching this elimination goal.

Prevention of HPV-associated precancer and cancer is also a key element of WHO's Global health sector strategy on HIV, hepatitis, and sexually transmitted infections 2022–2030, and the World Health Assembly resolution WHA74.5 (2021) on oral health includes actions on mouth and throat cancers.

Global health sector strategies on, respectively, HIV, viral hepatitis, and sexually transmitted infections for the period 2022-2030 guide the health sector in implementing strategically focused responses to achieve the goals of ending AIDS, viral hepatitis B and C and sexually transmitted infections by 2030.

The 2022-2030 strategies recommend shared and disease-specific country actions supported by actions by the World Health Organization and partners. They consider the

epidemiological, technological, and contextual shifts of recent years, foster learnings across the disease areas, and create opportunities to leverage innovations and new knowledge for effective responses to HIV, viral hepatitis, and sexually transmitted infections.

The strategies call for a precise focus to reach the people most affected and at risk for each disease that addresses inequities. They promote synergies under a universal health coverage and primary health care framework and contribute to achieving the goals of the 2030 Agenda for Sustainable Development. The Seventy-Fifth World Health Assembly requested progress reports on the implementation of the strategies in 2024, 2026, 2028 and 2031, noting that the 2026 report will provide a mid-term review based on the progress made in meeting the strategies' 2025 targets.

Cervical cancer is a preventable disease. It is also curable if detected early and adequately treated. Yet it remains one of the most common cancers and causes of cancer-related death in women across the globe. The annual number of new cases of cervical cancer has been projected to increase from 570,000 to 700,000 between 2018 and 2030, with the annual number of deaths projected to increase from 311,000 to 400,000. More than 85% of those affected are young, undereducated women who live in the world's poorest countries. Many are also mothers of young children whose survival is subsequently truncated by the premature death of their mothers.

Few diseases reflect global inequities as much as cancer of the cervix. In low- and middle-income countries its incidence is nearly twice as high and its death rates three times as high

as in high-income countries. Proven and cost-effective measures for eliminating cervical cancer exist, but to date have not been widely implemented in regions of the world where the disease burden is highest. To be optimally effective, these measures must be scaled to national levels and delivered using health service platforms that are sensitive to women's needs, their social circumstances, and the personal, cultural, social, structural, and economic barriers hindering their access to health services. Health services that are integrated and people centered, and that respect and uphold women's rights and dignity, are vital.

Urgent and bold action is needed to scale up and sustain implementation of the evidence-based interventions (human papillomavirus (HPV) vaccination, cervical cancer screening and management of detected disease) for eliminating cervical cancer as a public health problem, but such action must be strategic.

Summary of Literature Review

According to Alsairafi and Mohamed, (2009) lack of knowledge can be a barrier to cervical cancer prevention (AlNagger, 2012). Many participants in previous screening studies revealed that they have little knowledge of cervical cancer (OON et al., 2011) and that early screening using pap smear test can save their lives. Respondents also reported that they perceived that cervical cancer ultimately leads to death and can never be cured. (Austin, Ahmed, McNally, and Stewart, 2002; Wong, Low, Khoo and Shuib,2009)

In Nigeria, a study on the knowledge and attitude toward cervical cancer screening among female students and staff in a tertiary Institution in the Niger Delta showed that most of the

respondents were aware of cervical cancer (70% of students, 80% of staff). In the University of Ibadan, 71% of the undergraduate females were aware of cervical cancer. Also, among health workers in Benin more than 65% were aware of cervical cancer, in fact, with regards to the screening for cervical cancer (Owoye and Ibrahim 2013). Among female health workers in Ilorin and Sokoto, a very high level (69.8% and 90.5% respectively) of awareness of cervical cancer and its screening procedures such as pap smear was recorded. (Aboyeji, Ijaiya and Jimoh, 2004). According to Nwozor and Oragudosi, (2012), in a study conducted in Onitsha, the reverse was the case as the respondents among whom were students 35.5% had low awareness of cervical cancer and its screening. Previous research also reveals that if women feel healthy, they feel no immediate need to attend screening (Hewitt, Devesa & Breen, 2004). There is also the contributing factor of not wanting to receive positive test results from the PAP smear (Oon et al., 2011). Albeit life threatening, many respondents did not want to learn more about cervical cancer as they found the issue uncomfortable (Austin et al., 2002; Al-Naggar et al., 2010). Young Hispanic women refused to attend the screening for cervical cancer as they would not want to admit engaging in sexual intercourse (Byrd, Peterson, Chavez and Heckert 2004). Other women failed to present for screening as they believe that they would contract an infection from the Pap smear test procedure (AlSairafi and Mohammed, 2009). In India associated stigma due to the prevailing cultural disbelief especially in rural India as this test are meant for sexually active women forces them to reject screening (Singh and Badaya, 2012). Mexican women understood their susceptibility to and the severity of

cervical cancer. The women overwhelmingly agreed that numerous benefits exist when regular screening is done. It includes peace of mind and finding a problem before it develops into cancer (Leyva et al., 2006).

In Nigeria, low level of participation was attributed to educational status (Ezem, 2007). However, there are other factors. In Sokoto, Ilorin and Niger-Delta respondents claimed that they were not at risk of contracting. Specifically in Ilorin, cost and access barrier, fear of vaginal exposure, exposure to pain and danger of the disease were adduced, hence they would not oblige screening. (Oche et al., 2013; Aboyeji et al., 2004; Owwoeye and Ibrahim, 2013). In Botswana similar reason was noted (Ibekwe et al., 2010)

A study in Sokoto, Nigeria revealed that only 10% of the respondents had undergone the screening for cervical cancer, although 89.2% opined that Pap smear should be done by all women. (Oche et al., 2013). The situation in Ilorin, Nigeria, was that although the level of knowledge about Pap smear was high among health workers, their utilization of the test was very low. (Aboyeji et al., 2004). According to Hewitt et al (2004) fee of screening was preventing many women from screening. Providing subsidies impacted positively on cervical screening uptake. (Al-Naggar et al., 2010). Ejitoma (2001) says that in Nigeria, there is lack of screening programs which means that the disease is not identified until symptoms develop and low budgetary allocation to the health sector makes this impossible. Moral decadence in tertiary institutions which teams up with a lot of youthful exuberant is becoming a growing negative trend. Away from the close supervision and moral guidance of their parents many young ones see the university environment as a fertile ground where

all their sexual fantasies that were once incubating at home can be brought to reality. Research on sexual promiscuity among female undergraduates in tertiary institutions conducted in Imo State, indicated that sexual promiscuity exists amongst female undergraduates and sexually transmitted diseases and other health problems such as infertility, cervical cancer is some of the effects of promiscuity (Okafor & Duru, 2010).

CHAPTER THREE

METHODOLOGY

This chapter is an outlined explanation on the information about the research methodology adopted for the study. They are discussed under the following sub-headings:

- Design of the Study
- Population of Study
- Sample and Sampling Technique
- Research Instrument
- Validity of Instrument
- Reliability of Instrument
- Method of Data Collection
- Method of Data Analysis

Design of the Study

The research design adopted for this study is the descriptive survey research design. This method was considered the most appropriate for the research. The descriptive survey is a design that collects data on a given population, and describes the data in a systematic manner pointing out the characteristic features or facts about that population. It was designated in such a way that their needed result will be accomplished to achieve a higher level of confidence.

Population of the Study

The population of the study comprises the 16 faculties of the University of Benin. The population comprises full time Undergraduate students of the various facilities during 2022/2023 academic session. While its target population is focused on female undergraduate students in the 8 departments of the faculty of Education with the total 4398, (Students Affairs 2022/2022). The departments are shown in the table below:

Table of the departments in the faculty of Education;

S/N	DEPARTMENT	POPULATION OF THE STUDY
1	ADULT AND NONFORMAL EDUCATION (VTE)	400
2	CURRICULUM AND INSTRUCTIONAL TECHNOLOGY (CIT)	621
3	EDU EVALUATION AND COUNSELLING (EECP)	324
4	EDUCATIONAL MANAGEMENT (DEM)	892
5	EDUCATIONAL FOUNDATION (DEF)	1148
6	HUMAN KINETIC AND SPORT SCIENCE (HKS)	213
7	HEALTH ENVIRONMENTAL EDUCATION (HSE)	524
8	VOCATIONAL AND TECHNICAL EDUCATION (VTE)	276
	TOTAL	4398

Sample and Sampling Technique

The simple random sampling technique was used to select 5% of female students from four departments in the faculty of education (ADT, DEF, HSE and DEM) to obtain a sample size of 148 which were randomly selected to represent the total number of female students in the faculty of education, university of Benin, Benin City.

S/N	DEPARTMENT	NO OF FEMALE STUDENTS	NO OF SAMPLED STUDENTS (5%)
1	ADULT AND NONFORMAL EDUCATION (ADT)	400	20
2	EDUCATIONAL FOUNDATION (DEF)	1148	57
3	HEALTH ENVIRONMENTAL EDUCATION (HSE)	524	26
4	EDUCATIONAL MANAGEMENT (DEM)	892	45
	TOTAL	2964	148

Research Instrument

The Instrument for this study is the questionnaire of 20 items used to elicit information from respondents. The questionnaire will be divided into two sections. Section A and B. Section A covers demographic data of the respondents while section B will consist of items related to the research questions. A four point scoring scale drawn along the modified Likert summated rating scale for measurement and multiple choice items will be adopted

Validity of Instrument

The instrument was validated by the researcher's supervisor and two other experts in the department of health, safety and environmental education (HSE). Their suggestions and corrections were incorporated in the final document.

Reliability of Instrument

The test re-test method was used to determine the reliability of the instrument. The questionnaire was administered to a group of 20 respondents who were not part of the study. After 2 weeks the instrument was re-administered to the same respondents. Scores will be collated using Pearson Product Moment Correlation.

Method of Data Collection

The Researcher will personally administer the instrument to the respondents. The questionnaire will be completed by the respondents and personally retrieved by the researcher.

Method of Data Analysis

In analyzing the data, the researcher made use of frequency count and simple percentage to compute the findings from the research.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS, AND INTERPRETATION

This chapters represents the results, analysis and interpretation of findings as obtained from the data collected from respondents in responses to the research questions raised to guide the study. Five research questions were raised to guide the study, with twenty (20) items generated and presented in a questionnaire form and administered to the 148 respondents drawn from the female students in the faculty of education, University of Benin, Edo State. The data obtained is presented in the tables below.

Research Question One: What is the knowledge of cervical cancer among female students in the faculty of education, University of Benin?

Table One: Respondents Knowledge of Cervical Cancer

S/N	Level of knowledge	Frequency	Percentage
1.	Low knowledge	62	41.9%
2.	High Knowledge	86	58.1%

Decision 0-1 low, 2-4 High

From table 1 above 62 (41.9%) of the total respondents possess low knowledge of cervical cancer while 86 (58.1%) of the total respondents possess high knowledge of cervical cancer.

Therefore, it can be inferred the knowledge of cervical cancer among the respondents is high.

Research Question Two: What is the knowledge of the causes of cervical cancer among female students in the faculty of education, University of Benin?

Table Two: Respondents Knowledge of the Causes of Cervical Cancer

S/N	Level of knowledge	Frequency	Percentage
1.	Low knowledge	94	63.5%
2.	High Knowledge	54	36.5%

Decision 0-1 low, 2-4 High

From table 2 above, 94 (63.5%) of the total respondents possess low knowledge of the causes of cervical cancer while 54 (36.5%) of the total respondents possess high knowledge of the causes of cervical cancer. Therefore, it can be inferred the knowledge of the causes of cervical cancer among the respondents is low.

Research Question Three: What is the knowledge of cervical cancer symptoms among female students in the faculty of education, University of Benin?

Table Three: Respondents Knowledge of cervical cancer symptoms

S/N	Level of knowledge	Frequency	Percentage
1.	Low knowledge	88	59.5%
2.	High Knowledge	60	40.5%

Decision 0-1 low, 2-4 High

From table 3 above, 88 (59.5%) of the total respondents possess low knowledge of cervical cancer symptoms while 60 (40.5%) of the total respondents possess high knowledge of cervical cancer symptoms. Therefore, it can be inferred the knowledge of cervical cancer symptoms among the respondents is low.

Research Question Four: What is the knowledge of the preventive methods of cervical cancer among female students in the faculty of education, University of Benin?

Table Four: Respondents Knowledge of the preventive methods of cervical cancer

S/N	Level of knowledge	Frequency	Percentage
1.	Low knowledge	55	37.2%
2.	High Knowledge	93	62.8%

Decision 0-1 low, 2-4 High

From table 4 above, 55 (37.2%) of the total respondents possess low knowledge of the preventive methods of cervical cancer while 93 (62.8%) of the total respondents possess high knowledge of the preventive methods of cervical cancer. Therefore, it can be inferred the knowledge of the preventive methods of cervical cancer among the respondents is high.

Research Question Five: What is the knowledge of the screening methods of cervical cancer among female students in the faculty of education, University of Benin?

Table Four: Respondents Knowledge of the screening methods of cervical cancer

S/N	Level of knowledge	Frequency	Percentage
1.	Low knowledge	80	54.1%
2.	High Knowledge	68	45.9%

Decision 0-1 low, 2-4 High

From table 5 above, 80 (54.1%) of the total respondents possess low knowledge of the screening methods of cervical cancer while 68 (45.9%) of the total respondents possess high knowledge of the screening methods of cervical cancer. Therefore, it can be inferred the knowledge of the screening methods of cervical cancer among the respondents is low.

Discussion of Findings

On the knowledge of cervical cancer among female students in the faculty of education, University of Benin, majority of the respondents had high knowledge about cervical cancer. This is in line with the study of Owoye Ibrahim (2013) whose study revealed that majority of the respondents were aware of cervical cancer. Also another study by Jimoh (2014) revealed that majority of the respondents also had high knowledge and awareness about cervical cancer. However, this was contrasted by a study done by Nwozor (2012) whose

findings revealed that majority of the level of awareness among the respondents on cervical cancer was low.

On the knowledge of the causes of cervical cancer among female students in the faculty of education, University of Benin, findings from this study revealed that majority of the respondents had low knowledge. This was in consonance with a study done by Eric (2019) which revealed that the respondents had poor knowledge about the causes of cervical cancer. This was also in line with a study carried out by Adeyemi (2023) whose respondents despite having good knowledge about cervical cancer, possessed poor knowledge about the causes of cervical cancer.

Further findings from this study on the knowledge of cervical cancer symptoms among female students in the faculty of education, University of Benin revealed that the knowledge of cervical cancer symptoms among the respondents is low. This is in agreement with a study done by Edet (2020) whose respondents had low knowledge about the signs and symptoms of cervical cancer. However, studies by by Danjuma (2022) in southwest Tanzania contrasted this study as the respondents in his study had a basic understanding of cervical cancer as well as it's causes and the signs and symptoms. Also, in another study by Adeyemi, (2023) it was revealed that the respondents were aware about the signs and symptoms of cervical cancer as they had high level of awareness of cervical cancer.

On the knowledge of the preventive methods of cervical cancer among female students in the faculty of education, University of Benin, it was revealed that the respondents possessed high knowledge which was in agreement with a study done by Onyedika (2018) whose respondents had good knowledge about the preventive methods of cervical cancer. This study however was in contrast to studies by Kehinde (2019) and Williams (2018), whose respondents respectively had low knowledge regarding the preventive methods of cervical cancer.

Lastly on the knowledge of the screening methods of cervical cancer among female students in the faculty of education, University of Benin, the findings of this study revealed that the respondents had low knowledge. This was in line with a study by Danjuma (2022), where majority of the respondents lacked knowledge of the screening methods of cervical cancer. In another study by Adeyemi (2013) on the assessment of knowledge, practice and attitude towards cervical cancer screening, his findings also revealed had low knowledge cervical cancer screening as well as it's practice.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter has to do with the summary, conclusion and recommendations based on the findings.

Summary

This study was conducted to examine the knowledge of cervical cancer among female students in the faculty of education, University of Benin. To achieve the purpose of the study, five (5) research questions were raised and there was a review of literatures related to the study. The descriptive research design was used for this study and the population consisted of 4398 female students from the faculty of education, University of Benin. A total of one hundred and forty-eight (148) female students were selected. The instrument used for data collection was a well-structured questionnaire. The questionnaire was validated by the project supervisor and two other lecturers in the Department of Health, Safety and Environmental Education. The split half reliability method was used to establish the reliability of the questionnaire. A total of one hundred and forty-eight (148) questionnaires were administered to the sample respondents and data collected was analyzed using frequency count and percentage.

Findings

The findings of the study revealed that:

1. Respondents have a high level of knowledge about cervical cancer.
2. Respondents have a low level of knowledge about the causes of cervical cancer.
3. Respondents have a low level of knowledge about the symptoms of cervical cancer.
4. Respondents have a high level of knowledge about the preventive methods of cervical cancer.
5. Respondents have a low knowledge about the screening methods of cervical cancer.

Conclusion

In line with the findings, respondents have high knowledge of cervical cancer as well as a high knowledge about its preventive methods. However they possess low knowledge regarding the causes of cervical cancer, its signs and symptoms as well as the screening methods of cervical cancer.

Therefore, it is imperative that measures should be outlined and students should be enlightened on the basic and necessary information regarding cervical cancer as well as their role in ensuring that they take preventive steps against cervical cancer by engaging in regular screening or manage the disease properly for those diagnosed with the disease. This way they are able to take charge and control of their own health.

Recommendations

Based on the findings of the study, the following recommendations were made:

- A clear message should be sent that all female students are at risk for cervical cancer and that the risk increases with age so that every female students will have knowledge and awareness that they are at high risk.
- There should be sensitization of health care providers in the institution on issues related to cervical cancer screening and encourage them to have conversations with female students and provide information to help them decide whether to screen or not.
- Interventions should be developed and provided to make cervical cancer screening readily available in the institution and to promote active participation of all female students in these screening including those that cannot afford it.

Suggestion for Further Studies

1. Impact of health education on the knowledge of cervical cancer screening.
2. Awareness, knowledge and factors that influences the uptake of screening tests for cervical cancer.
3. Factors influencing cervical cancer screening among students in the University of Benin.

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APPENDIX

DEPARTMENT OF HEALTH, SAFETY AND ENVIRONMENTAL EDUCATION, FACULTY OF EDUCATION, UNIVERSITY OF BENIN, BENIN CITY

QUESTIONNAIRE ON

KNOWLEDGE OF CERVICAL CANCER AMONG FEMALE STUDENTS IN THE FACULTY OF EDUCATION, UNIVERSITY OF BENIN

Dear Respondents,

This is designed to examine the knowledge of cervical cancer among female students in the faculty of education, University of Benin. This research work is purely for academic purpose and will be treated as confidential. You are therefore required to kindly and truthfully respond by providing answers to the questions below.

Thank you.

Areh, Favour Eloho
Researcher

Section A

Instruction: please tick (✓) as appropriate.

Demographic background.

Religion: Christianity () Islam () Others ()

Age: less than 25 years () 25 – 30 years () Above 30 years ()

Level: 100 () 200 () 300 () 400 () 500 () 600 ()

Section B

INSTRUCTION: Respond accurately to the questions in this section, underlining your responses as appropriate.

Knowledge of Cervical Cancer

1. Cervical cancer begins in the -----?

a) Vagina

b) Cells of the cervix

c) Abdomen

d) Womb

2. How long does it take for cervical cancer to spread?

a) Days

b) Weeks

c) Months

d) Years

3. Can cervical cancer be cured?

a) Never

b) Sometimes

c) Frequently

d) Always

4. Which of the following HPV strain is most commonly associated with Cervical cancer?

a) HPV 6 and 11

b) HPV 16 and 18

c) HPV 31 and 33

d) HPV 45 and 52

Knowledge of the Causes of Cervical Cancer

1. What is the most common cause of cervical cancer?

a) Human papillomavirus (HPV)

b) Pollution

c) Radiation exposure

d) Usage of intravenous drugs

2. Cervical cancer can be caused by -----

a) Smoking

b) Weakened Immune system

c) Family history of cervical cancer

d) All of the above

3. Which of the following behaviors increases the risk of contracting HPV, thus increasing the risk of cervical cancer?

a) Using barrier methods during sex

b) Having multiple sexual partners

c) Regular exercise

d) Eating a balanced diet

4. Which condition is associated with a higher risk of developing cervical cancer?

a) Diabetes

b) Immunosuppression (e.g., due to HIV)

c) Hypertension

d) Asthma

Knowledge of Cervical Cancer Symptoms

1. Which of the following is a symptom of cervical cancer?

a) Severe headaches

b) Unusual vaginal bleeding

c) High Fever

d) Skin rash

2. Which of the following is an early symptom of cervical cancer?

a) Abdominal bleeding

b) Difficulty getting pregnant

c) Missed menstrual periods

d) Over sleeping

3. What might be a symptom of cervical cancer that occurs after sexual intercourse?

a) Increased appetite

b) Vaginal discharge

c) Pain or bleeding

d) Fever

4. Which symptom could indicate advanced cervical cancer?

a) Regular menstrual cycles

b) Weight loss and fatigue

c) Improved digestion

d) Heightened sense of taste

Knowledge of the Preventive Methods of Cervical Cancer

1. At what age is it recommended for women to start getting regular pap smear?

a) 18

b) 21

c) 30

d) 40

2. What is the most effective way to prevent cervical cancer?

a) Regular exercise

b) HPV vaccination

c) High fiber diet

d) Avoiding dairy products

Knowledge of Screening Methods of Cervical Cancer

1. Who should be screened for cervical cancer?

- a) All girls and teenagers
- b) Young women under age 21
- c) Adult women age 21-65
- d) Older women age 65 and older

2. How is cervical cancer diagnosed?

- a) Pap test
- b) Biopsy
- c) CT scan
- d) All of the above

3. What is the treatment for cervical cancer?

- a) Surgery
- b) Chemotherapy
- c) Radiation
- d) All of the above

4. What is life expectancy after being diagnosed with cervical cancer?

- a) 1 year
- b) 5-7 years
- c) More than 10 years
- d) It varies