BARRIERS TO UTILIZATION OF CERVICAL CANCER SCREENING SERVICES AMONG WOMEN OF REPRODUCTIVE AGE GROUP IN ONDO TOWN, ONDO STATE

BY

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A PROJECT SUBMITTED TO THE DEPARTMENT OF HEALTH PROMOTION AND EDUCATION,FACULTY OF PUBLIC HEALTH,COLLEGE OF MEDICINE IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF PUBLIC HEALTH (HEALTH PROMOTION AND EDUCATION) OF THE UNIVERSITY OF IBADAN.

MARCH, 2015

DEDICATION

This research work is dedicated to Almighty God for his wisdom and grace that saw me through to this point, to my late parents and late brother who laid the solid foundation for me.

ACKNOWLEDGEMENTS

I am eternally grateful to God Almighty for his grace that has been all sufficient throughout this study. My sincere appreciation goes to my supervisor, Dr. Oyedunni Arulogun for her wisdom, patience, constructive and motherly supervision all through the period of this project work despite her tight schedules. Thank you ma and may the lord take you to your desired position in life in Jesus name. My sincere appreciation to the Head of the Department Prof. O. Oladepo and other lecturers in the department of Health Promotion and Education for imparting knowledge and equipping me with adequate skills needed for my career in the public health profession and also to the administrative staffs of the department for their supports. I cannot but thank the effort of Mr. John Imaledo for his ever encouraging words and contributions to the success of this project, thank you sir.

My heart felt gratitude to my late parents,Late Mr&Mrs L.O Womitenren through whom I came to this world and my late brother Late Barr.,Dare Womitenren who took me up and took over the place of parents in their absence but unfortunately he could not see the dream come through, ADIEU Big Brother

My profound gratitude to my wonderful siblings, firstly Dr Tokunbo Womitenren for giving me the background knowledge of Public Health, for the encouragement to come for Public Health, believing in me and giving me the full support I needed all through the programme. Thank you dear sisters, Mrs Wemimo Omole, Mrs Bolanle Atanlogun, Mrs Oluwaseun Ademuwagun your encouraging words, calls, your anticipation to see the end of the programme and your prayers worked wonders in my life, thanks for your immense spiritual and moral support during this study couldn't have asked for better siblings, you are the best and I will forever be grateful. To my in-laws: Mr Adebowale Adeboye, Dr Temitope Atanlogun, Pastor Favour Ademuwagun, Mrs Bimpe Womitenren for their unfading love and support and my God's own nephews and nieces for their tender hearted love and understanding. I love you all.

My sincere appreciation also goes to Dr Adeyelu Charles for the encouragement, motivation and support in coming for Public Health, your motivational words kept me going this far and your anticipation to see the end of the program. My special thanks to my colleagues who am priviledged to meet and learn together with and my endless list of friends for their useful contributions and encouragement, you all have touched my life in different ways. I am also grateful to the following people for their prayers, assistance and support during this study: The Akintolas' for accommodating me through out my stay in Ibadan, Akinjare Taiwo whose laptop rescued my project work, Pastor Gabriel Omonuku, Pastor Olusola John, Pastor Michael Odunaro, Akintola Seyi, Esan Foluke, Dr Steve Okpe and Odunlade Aanu among others.

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ABSTRACT

Cervical cancer (CC) is the malignant cancer of the cervix area and human papilloma virus infection is the necessary factor for the development of nearly all cases of cervical cancer. CC is the second most commonly diagnosed cancer among women of reproductive age group; yet screening for early detection of the disease among them is not a common practice in Nigeria. Past studies have documented knowledge and perception of cervical cancer screening services practices and its antecedents among Nigerian women but few have indepthly access the perceived factors that have contributed to low utilization of screening services among women in semi-urban areas in Nigeria. This study therefore, investigated the barriers to utilization of cervical cancer screening service among women of reproductive age in Ondo town, Ondo State.

A descriptive cross-sectional survey was adopted using a four stage sampling technique to select two hundred and forty four consenting women of reproductive age in Ondo town. A validated semi-structured interviewer administered questionnaire was used to solicit information including a 30 point CC-related knowledge and 12-point perception scales questions on utilization and barriers to utilize the screening service from respondents. Knowledge scores ≤10,>10-≤20,>20-30 were classified poor, fair and good respectively. Perception scores <7 and ≥7 were categorized as negative and positive perception respectively. Data were analyzed using descriptive statistics and Chi-square test at p=0.05.

Respondents' mean age was 30±6.8 years, 75.4% were Yoruba, 81.6% were of Christians faith and 70.9% were married. More than half (58.2%) had tertiary education. Overall mean knowledge score was 17.1±5.3; Respondents with poor, fair and good knowledge of CC were 11.1%, 53.3%, 35.6% respectively. Majority, (73.8%) have heard about CC, 67.8% correctly defined CC with 76.1% reported virus as causes of cervical cancer and 42.6% had positive perception towards CC. More than half (58.9%) were aware of CC screening methods. Only (15.6%) of the respondents have done screening for CC and the decision to do the screening was personal in 78.6% of the respondents. The main barriers

hindering the utilization of CC screening services were: fear of the result (65.1%), negative attitudes of health worker (51.3%) and husband's influence on decision (51.0%). The knowledge of respondents was not significantly associated with their utilization of cervical screening service. Also, respondents' perception was not significantly associated with their knowledge about cervical cancer.

Low utilization of the screening services based on perceived misconception was noticed among study participants. Health promotion strategies such as social mobilization that will target community leaders, traditional rulers, religious organizations and faith based institutions and not just families. Also, NGOs can partner with health facilities in promoting service availability, affordability and utilization. Health workers should help change perception of non susceptibility of the women. Recruiting and training of health care providers on procedures of the screening and how to educate women on the need to go for the cervical cancer screening service.

Keywords: Cervical cancer, Knowledge, Perception, Utilization and Barriers to utilization of the screening service.

Word count: 475

CERTIFICATION

I certify that this study was carried out by Miss. Yewande Tolu Womitenren under my supervision at the Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan

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ABBREVIATIONS/ACRONYMS

CC……..Cervical Cancer

VIA…….Visual Inspection with Acetic acid

STI……..Sexually Transmitted Infection

WHO……..World Health Organization

NDHS…….Nigeria Demographic and Health Survey

SPSS……..….IBM Statistical Package for Social Sciences

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Cancer is a class of diseases characterized by out-of-control cell growth. There are over 100 different types of cancer, and each is classified by the type of cell that is initially affected. Cancer harms the body when damaged cells divide uncontrollably to form lumps or masses of tissue called tumors (except in the case of leukemia where cancer prohibits normal blood function by abnormal cell division in the blood stream). Tumors can grow and interfere with the digestive, nervous, and circulatory systems, and they can release hormones that alter body function. Tumors that stay in one spot and demonstrate limited growth are generally considered to be benign. When a tumor successfully spreads to other parts of the body and grows, invading and destroying other healthy tissues, it is said to have metastasized. This process itself is called metastasis, and the result is a serious condition that is very difficult to treat (WebMD 2014).

Cervical cancer constitutes a major public health threat to women in many low and medium resourced countries in South and Central America, sub-Saharan Africa, South and Southeast Asia where it is still the leading type of cancer among women .The high burden of cervical cancer in these countries is due to both a high prevalence of Human Papillomavirus (HPV) infection and the lack of effective cervical cancer screening programs. In cases where effective screening programs are available, poor knowledge and negative health seeking behaviour of the populace have led to poor utilization of such services (Arulogun and Maxwell 2012)

Globally, cervical cancer comprises approximately 12% of all cancers in women. It is the second most common cancer in women worldwide but the commonest in developing countries. Annual global estimates are 470,600 new cases and 233,400 deaths from

cervical cancer annually. Cervical cancer is also one of the most preventable cancers because of increased awareness for early detection (Van Ballegooijen, 2000).

All over the world, women face several sexual and reproductive health challenges such as cervical cancer, breast cancer, sexually transmitted infections including HIV/ AIDS, unsafe abortion to mention a few. Studies have shown that utilization of preventive reproductive health services are a major factor in reducing the burden of reproductive health challenges. Cervical screening is acknowledged currently as the most cost effective approach to cervical cancer control. A study done on cervical cancer screening approaches in low resource settings showed that the use of pap smear for routine screening of women resulted in a dramatic decline in cervical cancer deaths over a period of four decades in wealthier countries but a continuing high mortality in the developing world (Sherris et al., 2009).

About 80 to 85% of cervical cancers are squamous cell carcinomas, which develop in the flat, skin like cells that line the cervix. Cervical cancer begins on the surface of the cervix and can penetrate deep beneath the surface with slow, progressive changes in normal cells on the surface of the cervix. This means that if left untreated, they may progress to cancer, sometimes after years. The cancer can spread directly to nearby tissues, including the vagina or it can enter the rich network of lymphatic vessels inside the cervix, then spread to other parts of the body and rarely spread through the bloodstream. The younger a woman was the first time she had sexual intercourse and the more sex partners she has had, the higher her risk of cervical cancer (Pedro et al., 2013).

However, in many countries, including most middle-income developing countries, the existing programmes are failing to achieve a major impact as utilization of screening services has become a major problem (Daniyam et al, 2010).The disease, cervical cancer, has been associated with high morbidity and mortality among women. Studies have shown that simple screening could detect this disease at early stage when intervention could change the course of the disease. Some of the proven screening tests for cervical cancer include cytology, visual inspection under acetic acid and human papillomavirus testing are available in many settings in the developed and some developing countries

(Kerr and Fiander, 2009). However, uptake of any of these screening services in the developing countries like Nigeria has been low compared to the developed countries.

This study focused on awareness, perception, and utilization of cervical screening services as well as barriers to utilization of these services among women of reproductive age.

1.2 Statement of the Problem

Over the years awareness and uptake of these services had remained poor despite all the interventions done on cervical cancer screening. Various studies indicated that cervical screening service is poorly utilized and the awareness of the need for it is very low but can be treated if detected early (Kerr and Fiander,2009). Problems associated with cervical cancer incidence include late reporting, ignorance and cultural issues relating to cervical cancer screening. Barriers identified were ignorance about cervical cancer, cultural constraints/beliefs about illness, economic factors, domestic gender power relations, alternative authoritative sources of reproductive health knowledge and unfriendly health care services (Onyije et al 2010). Presently worldwide about 751 women die from cervical cancer everyday and more than 80% of these deaths come from the sub saharan Africa in which Nigeria is included. In Nigeria,14,000 to 20,000 new cases are diagnosed every year while 9,659 deaths occurs every year translating to the loss of 26 women everyday due to cervical cancer which is a preventable disease and the utilization rate of cervical cancer screening service is still very low (Brimlime 2014).

In developing countries especially in Africa, reproductive ill- health has been a great concern as morbidity and mortality rates among women of reproductive age are very high compared to the developed world. Poor knowledge of the available reproductive health services among women of reproductive age group has been indicated as a factor responsible for a consequent low utilization of these services (Moronkola, 2006). Ideally, these services should be available, accessible and affordable by all but there is still a high burden and impact of preventable reproductive health problems due to poor accessibility especially in rural communities (Akinyemiju, 2012).

1.3 Justification

Studies have shown that there has been decreased mortality in developed countries as a result of high level of awareness about preventive reproductive health services. There is a need to explore the factors responsible for poor utilization of screening services for cervical cancer among women of reproductive age group in Nigeria. Therefore this study will help to identify barriers to utilization of the screening service and provide recommendations that will help to design a health promotion and education programs to promote utilization of cervical screening service among women of reproductive age.

1.4 Research questions

1. What are respondents' perceptions on cervical cancer screening services?
2. What is the knowledge of respondents about cervical cancer?
3. What is the knowledge of respondents about cervical screening services?
4. What proportion of respondents is utilizing cervical cancer screening services?
5. What are the barriers to utilizing cervical screening service among respondents?

1.5 Objectives of the study

Broad objective

The broad objective of the study was to investigate the barriers to utilization of cervical screening services among women of reproductive age in Ondo Town, Ondo State

Specific objective

The specific objectives of the study were

1. To assess the perception of women in the reproductive age group in Ondo town on cervical cancer screening
2. To assess the level of knowledge of cervical cancer among women in the reproductive age group in Ondo town

3. To assess the level of knowledge of cervical cancer screening services among women in the reproductive age group
4. To determine the proportion of women in the reproductive age group utilizing cervical screening services.
5. To assess the barriers responsible for poor utilization of cervical screening services among women in the reproductive age

1.6 Hypothesis

The following hypotheses were tested by the study

1. There is no association between perception of respondent and their knowledge of cervical screening service
2. There is no association between knowledge of respondent and their utilization of cervical screening service
3. There is no association between selected socio-demographic and their utilization of cervical screening service.

CHAPTER TWO

LITERATURE REVIEW

2.1 Overview of Cancer and Cervical Cancer

Cancer, also called malignancy, is an abnormal growth of cells. There are more than 100 types of cancer, including breast cancer, skin cancer, lung cancer, colon cancer, prostate cancer, and lymphoma. Symptoms vary depending on the type. Cancer treatment may include chemotherapy, radiation, and/or surgery.The earlier cancer is diagnosed and treated, the better the chance of its being cured. Some types of cancer - such as those of the skin, breast, mouth, testicles, prostate, and rectum may be detected by routine self-exam or other screening measures before the symptoms become serious. Most cases of cancer are detected and diagnosed after a tumor can be felt or when other symptoms develop. In a few cases, cancer is diagnosed incidentally as a result of evaluating or treating other medical conditions. Cancer diagnosis begins with a thorough physical exam and a complete medical history. Laboratory studies of blood, urine, and stool can detect abnormalities that may indicate cancer. When a tumor is suspected, imaging tests such as X-rays, computed tomography (CT), magnetic resonance imaging (MRI), ultrasound, and fiber-optic endoscopy examinations help doctors determine the cancer's location and size. To confirm the diagnosis of most cancers, a biopsy needs to be performed in which a tissue sample is removed from the suspected tumor and studied under a microscope to check for cancer cells (WebMD 2014).

Cervical cancer is the malignant cancer of cervix uteri or cervical area. This happens when normal cells in the cervix change into cancer cells. 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. 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 (Chinaka and Udeajah, 2012)

2.2 THE FEMALE REPRODUCTIVE SYSTEM

The organs and structures of the female reproductive system give women the ability to produce ova (an ovum is one egg, ova means multiple eggs) to be fertilised by sperm. They also provide a place for the fetus (baby) to grow and develop. Other structures such as the breasts give the mother the ability to feed and nourish a baby after birth. Figure 2.1 below shows the Anatomy of the female reproductive system and location of the cervix.

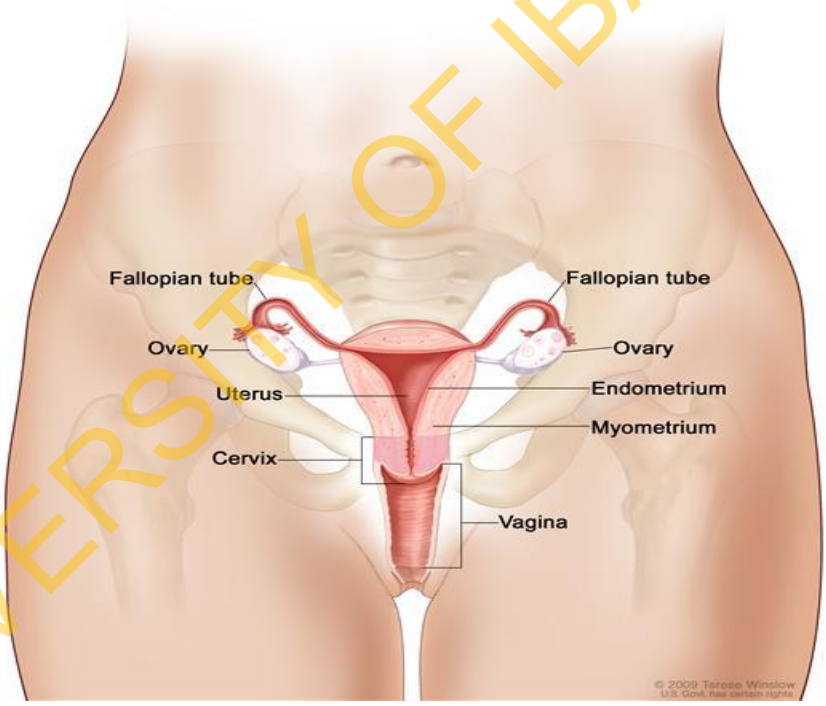

Fig 2.1 Anatomy of the female reproductive system showing location of the cervix

(Source: WebMD, 2014)

The organs in the female reproductive system include the uterus, ovaries, fallopian tubes, cervix, and vagina. The uterus has a muscular outer layer called the myometrium and an inner lining called the endometrium. The cervix is the lower, narrow end of the uterus (the hollow, pear-shaped organ where a fetus grows). The cervix leads from the uterus to the vagina (birth canal).

2.3 CANCER OF THE CERVIX

Cervical cancer usually develops slowly over time. Before cancer appears in the cervix, the cells of the cervix go through changes known as dysplasia, in which cells that are not normal begin to appear in the cervical tissue. Later, cancer cells start to grow and spread more deeply into the cervix and to surrounding areas. Human papillomavirus (HPV) infection is the major risk factor for cervical cancer. Anything that increases risk of getting a disease is called a risk factor. Having a risk factor does not mean that the person will get cancer; not having risk factors doesn't mean that you will not get cancer (Chinaka et al 2012).

Infection of the cervix with human papillomavirus (HPV) is almost always the cause of cervical cancer. Not all women with HPV infection, however, will develop cervical cancer. Women who do not regularly have tests to detect HPV or abnormal cells in the cervix are at increased risk of cervical cancer (Onyije ., Eroje and Fawehinmi 2010).

The primary cause of cervical cancer is infection with one or more types of high risk human papilloma virus (HPV). High risk HPV types are:

- Type 16,
- Type 18,
- Type 31,
- Type 33,and
- Type 45 in which type 16 and 18 causes 70% of cervical cancer cases,(Chinaka and Udeajah, 2012) .

The major risk factors for the development of cervical cancer includes;

1) Multiple sexual partnering,

2) A male partner with multiple previous sexual partners

3) Early age at sexual debut,

4) Giving birth to many children,

5) Late age at getting married

6) Prolong use of combined oral contraceptives, and

7) Cigarette Smoking.

8) Associated genital infections,

9) Family history and

10) Lack of circumcision in the male sexual partner (Onyije et al., 2010).

Early detection of pre-cancerous changes using Papanicolaou smear and visual inspection with acetic acid (VIA) is an effective strategy for prevention of cervical cancer as there are usually no noticeable signs or symptoms of early cervical cancer but it can be detected early with regular check-ups. (Kerr and Fiander, 2009).

Symptoms of cervical cancer include:

1. Vaginal discharge containing blood,
2. Abnormal vaginal bleeding,
3. Pelvic pain, blood in urine,
4. Bowel symptoms,
5. Blood in stool, painful sex,
6. Unusual vaginal bleeding,
7. Unusual vaginal discharge,
8. Contact bleeding,
9. Vaginal mass,
10. Moderate pain during sexual intercourse,
11. Loss of appetite,
12. Weight loss,
13. Fatigue.

Symptoms of advanced cervical cancer may include:

1. Loss of appetite,
2. Weight loss,

3. Fatigue,
4. Pelvic pain,
5. Back pain,
6. Leg pain,
7. Swollen leg,
8. Heavy bleeding from the vagina and
9. Leaking of urine or faeces from the vagina . (Chinaka et al 2012)

Tests that examine the cervix are used to detect and diagnose cervical cancer. The following procedures may be used:

- **Physical exam and history** : An examination of the body to check general signs of health, including checking for signs of disease, such as lumps or anything else that seems unusual. A history of the patient's health habits and past illnesses and treatments will also be taken.
- **Pelvic exam** : The doctor or nurse examines the vagina, cervix, uterus, fallopian tubes, ovaries, and rectum by inserting one or two lubricated, gloved fingers of one hand into the vagina and places the other hand over the lower abdomen to feel the size, shape, and position of the uterus and ovaries. A speculum is also inserted into the vagina and the doctor or nurse looks at the vagina and cervix for signs of disease.

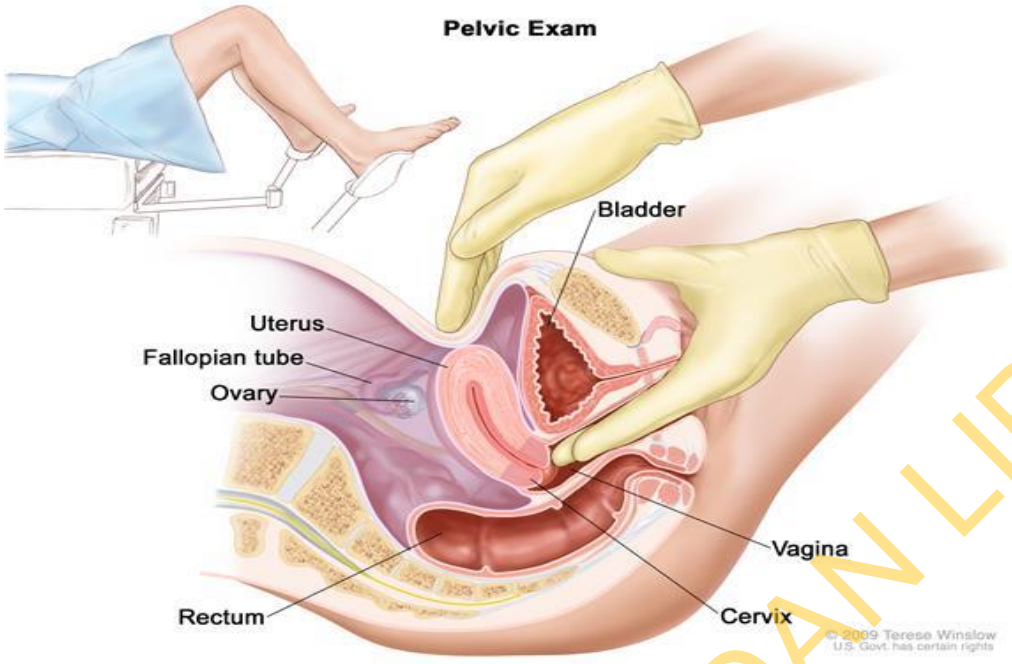

Fig2.2 Pelvic Examination ,Source: WebMD, 2014

- **Pap test**: A procedure to collect cells from the surface of the cervix and vagina. A piece of cotton, a brush, or a small wooden stick is used to gently scrape cells from the cervix and vagina. The cells are viewed under a microscope to find out if they are abnormal. This procedure is also called a Pap smear. (National cancer institute 2014)

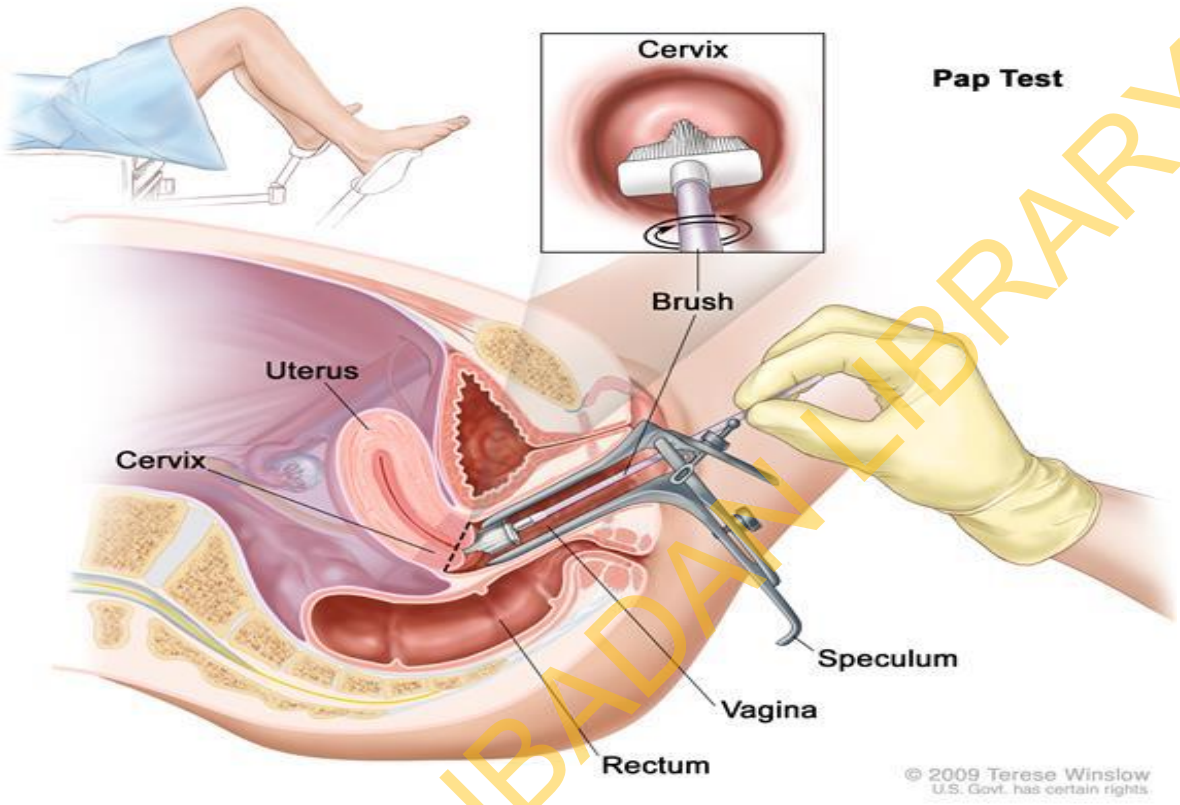

Fig2.3 PAP SMEAR TEST ,Source: WebMD, 2014

- **Human papillomavirus (HPV) test** : A laboratory test used to check DNA or RNA for certain types of HPV infection. Cells are collected from the cervix and DNA or RNA from the cells is checked to find out if an infection is caused by a type of human papillomavirus that is linked to cervical cancer. This test may be done using the sample of cells removed during a Pap test. This test may also be done if the results of a Pap test show certain abnormal cervical cells.
- **Endocervical curettage** : A procedure to collect cells or tissue from the cervical canal using a curette (spoon-shaped instrument). Tissue samples may be taken and checked under a microscope for signs of cancer. This procedure is sometimes done at the same time as a colposcopy.

- **Colposcopy** : A procedure in which a colposcope (a lighted, magnifying instrument) is used to check the vagina and cervix for abnormal areas. Tissue samples may be taken using a curette (spoon-shaped instrument) and checked under a microscope for signs of disease.
- **Biopsy** : If abnormal cells are found in a Pap test, the doctor may do a biopsy. A sample of tissue is cut from the cervix and viewed under a microscope by a pathologist to check for signs of cancer. A biopsy that removes only a small amount of tissue is usually done in the doctor's office. A woman may need to go to a hospital for a cervical cone biopsy (removal of a larger, cone-shaped sample of cervical tissue). (National Cancer Institute, 2014)

It is estimated that over one million women worldwide currently have cervical cancer, most of whom have not been diagnosed, or have no access to treatment that could cure them or prolong their lives. In the developing countries of the world, a large proportion of cervical cancers are diagnosed in advanced stages, with poor rates of survival. In addition, the incidence of cervical cancer begins to rise at age 20-29 years, reaches a peak around 55-64 years, and declines somewhat after 65 years. The age-standardized incidence rates during 1993-97 varied from 20-55 per 100,000 women in most of the regions in developing countries where incidence data were available (Arulogun and Maxwell 2012)

Cervical cancer is one of the most preventable of all cancers through primary and secondary prevention, prophylactic Human Papillomavirus (HPV) vaccination and cervical screening. Cervical cancer is the most common malignancies among females worldwide especially in women of 20–39 years of age which contributes to cancer burden across all cultures and economies. 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. Awareness of screening programme, preventive vaccination and diet are preventive measures that reduce the incidence of cervical cancer (Chinaka et al 2012).

Cervical cancer is the second most common cancer among women worldwide, with an estimated 529,409 new cases and 274,883 deaths in 2008. Cervical cancer is one of the

leading causes of cancer death in women in the developing world. The primary underlying cause of cervical cancer is infection with human papillomavirus (HPV), a very common virus that is sexually transmitted. Most HPV infections resolve spontaneously; those that persist may lead to the development of precancer and cancer. It usually takes 10 to 20 years for precursor lesions caused by HPV to develop into invasive cancer. Effective interventions against cervical cancer exist, including screening for, and treatment of, precancer and invasive cancer. An estimated 95% of women in developing countries have never been screened for cervical cancer. Over 80% of women newly diagnosed with cervical cancer live in developing countries; most are diagnosed when they have advanced disease. The cure rate for invasive cervical cancer is closely related to the stage of the disease at diagnosis and the availability of treatment. If left untreated, cervical cancer is almost always fatal. Because of its complexity, cervical cancer control requires a team effort and communication between health care providers at all levels of the health care system (World Health Organization, 2006).

2.4 Treatment of Cervical Cancer

Treatment depends on the stage of the cancer. It may include surgery, radiation therapy, and chemotherapy. Treatment of cervical cancer during pregnancy depends on the stage of the cancer and the stage of the pregnancy. For cervical cancer found early or for cancer found during the last trimester of pregnancy, treatment may be delayed until after the baby is born (Pedro, Ramirez, David, and Gershenson, 2013)

Early stages:

If only the surface of the cervix is involved (early stage I), doctors can often completely remove the cancer by removing part of the cervix using the loop electrosurgical excision procedure, a laser, or a cold knife, done during a cone biopsy. These treatments preserve a woman's ability to have children. Because cancer can recur, doctors advise women to return for examinations and Pap tests every 3 months for the first year and every 6 months after that. Rarely, removal of the uterus (hysterectomy) is necessary.

If early-stage cancer involves more than the surface of the cervix (late stage I) or has begun to spread within the pelvis (early stage II), options include

- A hysterectomy plus removal of surrounding tissues, ligaments, and lymph nodes (radical hysterectomy)
- A radical hysterectomy plus radiation therapy and chemotherapy (which are often given before surgery to shrink the tumor)

Either treatment results in about 85 to 90% of women being cured. The ovaries may be removed, but normal, functioning ovaries in younger women are not removed. If doctors discover during surgery that cancer has spread outside the cervix, radiation therapy may be used after surgery.

If women with late stage I cervical cancer wish to preserve their ability to have children, a procedure called radical trachelectomy may be done. Doctors remove the cervix, the tissue next to the cervix, the upper part of the vagina, and the lymph nodes in the pelvis. To remove these tissues, doctors may

- Make an incision in the abdomen (open surgery)
- Use a thin, flexible viewing tube (laparoscope) inserted through a small incision just below the navel, then thread instruments through the laparoscope, sometimes with robotic assistance (laparoscopic surgery).
- Remove the tissues through the vagina (no incision needed)

The uterus and vagina that remain are attached to each other. Thus, women still can become pregnant. However, babies must be delivered by cesarean. This treatment appears to be as effective as radical hysterectomy for many women with early-stage cervical cancer.

Later stages (late stage III through early stage IV):

When the cancer has spread further within the pelvis or has spread to other organs, radiation therapy plus chemotherapy (with cisplatin) is preferred. Doctors may use a laparoscope or do surgery to determine whether lymph nodes are involved and thus determine where radiation should be directed. External radiation (directed at the pelvis from outside the body) is used to shrink the cancer and treat cancer that may have spread to nearby lymph nodes. Then radioactive implants are placed in the cervix to destroy the cancer (a type of internal radiation called brachytherapy).

If the cancer remains in the pelvis after radiation therapy, doctors may recommend surgery to remove some or all pelvic organs (called pelvic exenteration). These organs include the reproductive organs (vagina, uterus, fallopian tubes, and ovaries), bladder, urethra, rectum, and anus. Which organs are removed and whether all are removed depends on many factors, such as the cancer's location, the woman's anatomy, and her goals after surgery. Permanent openings—for urine (urostomy) and for stool (colostomy) are made in the abdomen so that these waste products can leave the body and be collected in bags. After the procedure, women usually have some bleeding, a discharge, and considerable tenderness and pain for a few days. Typically, the hospital stay is 3 to 5 days. Complications, such as infection or opening of the surgical incision, blockages in the intestine, and formation of abnormal connections between organs (fistulas), can occur. This procedure cures up to 40% of women (Pedro et al., 2013).

2.5 Knowledge and Perception of Women on Cervical Cancer

It is believed by previous researchers that the knowledge or perceived importance of cervical cancer and its screening methods determines how women utilize these services. In a study among American women, it was demonstrated that there was a high level of knowledge of cervical cancer and screening services and utilization of these services even more than recommended (Sirovich and Welch, 2004). In Hong Kong, a study demonstrated women's knowledge of cervical cancer, but a need for further knowledge of the preventive nature of screening services was shown (Twinn et al., 2002).

A study among female nurses in Nigeria reported that despite the level of knowledge on cervical cancer among the study respondents, gaps in knowledge still exist about other risk factors for cervical cancer. Majority of the respondents were of the opinion that only promiscuous women are at risk of cervical cancer. This is a misconception because not only promiscuous women are at risk of the disease, women who are faithful but whose husbands visit sex workers are equally at risk of being infected with HPV as they might be infected by their husbands. Women whose husbands have also been infected in the past are also at risk of being infected with the Human Papilloma Virus. This could lead to stigmatization and wrong labeling of those who are suffering from the disease as being

promiscuous and cause a big barrier to women accessing screening services (Arulogun et al 2012).

A study in a rural community in South Africa reported that only 6% knew all the selected risk factors of cervical cancer and that less than half (49%) knew use of pap smear knew that Pap smear is used for prevention of cervical cancer. The study also documented that only 18% had ever done Pap smear. The study concluded that low uptake of Pap smear characterized the study and low level of knowledge of prevention of cervical cancer (Hoque & Hoque 2009). Another study done in Cameroon showed that only 28% had a prior knowledge of cervical cancer and concluded that respondents had low knowledge of cervical cancer (Tebeu et al., 2008).

Sirovich & Welch, (2004) among American women reported that 93% of respondents had at least one Pap smear in lifetime and most of them were screened more frequently than recommended. The study concluded that respondents had a high level of knowledge and utilization of cervical cancer screening services. Twinn et al, (2002) among Chinese women reported that respondents had a good knowledge of risk factors of acquiring cervical cancer but less knowledge about benefits of cervical cancer screening services. The study recommended ways of improving the knowledge of cervical cancer and the screening services as well as regular screening services among women of reproductive age.

In a study population in Nigeria 85% demonstrated very poor knowledge and a negative attitude to the utilization of cervical cytology service. This is associated with strong cultural and religious reasons and the non availability or at best poor information about cervical cytology screening. The non existence of a national cervical cytology screening, the lack of political-will and funding, poor advocacy and poor manpower were identified as the cause of the continuous high prevalence of this preventable cancer in Nigeria (Onyije et al 2010).

Knowledge about cervical cancer in Nigeria has been found to be very low. In Ibadan, a study done by Ogunbode et al (2005) showed that respondents were at high-risk, poorly-informed women, with very poor utilization of cervical cancer screening. Another study

from Ibadan, south west Nigeria reported that 92.7% of respondents who were married women were not aware of cervical cancer or screening services (Ndikom & Ofi, 2012). The study concluded that respondents had a low level of knowledge of cervical screening services.

2.6 UTILIZATION OF CERVICAL SCREENING SERVICES

Knowledge generally does not necessarily translate to practice in numerous cases as has been observed on certain occasions. For instance, despite the better awareness observed about cervical cancer prevention in a study population in lagos Nigeria, preventive practices were low with only 7% of all those knowledgeable about cervical cancer reported having received cervical cytology testing /Pap smear test (Wright, Aiyedehin, Akinyinka, and Ilozumba 2014)

A study among Chinese women in Hong Kong indicated that cultural issues such as modesty and embarrassment contributed to poor uptake of screening services for cancer of the cervix. Religion is also a factor that affects the willingness of women to participate in cervical cancer screening programmes (Twinn et al, 2002).

In a study in Markurdi, Nigeria (Utoo, Ngwan and Anzaku, 2013) reported several reasons given by the respondents for non utilization of services which include; Ignorance, absence of screening centres, perceived non necessity, faith in God, prohibitive cost and physician's non recommendation.Some limiting factors may include cost, availability of vaccines, and screening services as well as accessibility. Contrarily, findings done by Sirovich & Welch, (2004) among American women reported that 93% of respondents had at least one Pap smear in lifetime and most of them were screened more frequently than recommended. The study concluded that respondents in developed country unlike developing country have a high level of knowledge and utilization of cervical cancer screening services.

In a study in Ibadan among nurses, it was reported that the respondents who had never used cervical cancer screening services cited their main reasons for non-utilization as lack

of time, fear of the result, cumbersome procedure, lack of awareness of where the test can be done, cost consideration, not sexually active and not knowing about the test. Significant others was also reported as influence on respondents' decision to go for screening in a multiple response question were husbands (58.1%), doctors (49.5%) and colleagues (48.3%) were identified as influencing people (Arulogun et al 2012).

In a study in Nigeria, strong cultural and religious reasons and the non availability or at best poor information about cervical cytology screening was associated with very poor knowledge and a negative attitude to the utilization of cervical cytology service as demonstrated by 85% of the study population. The non existence of a national cervical cytology screening, the lack of political-will and funding, poor advocacy and poor manpower were also identified as the barriers to the utilization in Nigeria (Onyije et al 2010).

Julianawati et al., 2013 reported that utilization is still low because of fear of the pain and discomfort during the screening process. Moreso, Health workers attitude, availability of the screening service, opening hours of the screening facilities and not sure of the appropriate age to go for a pap smear have been found to constitute barriers to the utilization Nwozor et al (2013).

2. 7 CONCEPTUAL FRAME WORK

The PRECEDE framework and Health Belief Model was used as a guide for research.

THE PRECEDE FRAMEWORK

This outlines and describes the antecedent factors that influences behaviours.These factors are: Predisposing factors, Enabling factors and Reinforcing factors.

Predisposing factors: These are the antecedents to behavior that provide rationale for the behavior. They are knowledge, values, beliefs, attitudes, perception, norms and behavioural intensions. Most women do not have enough knowledge about cervical screening services. Predisposing factors have the potential to influence the decisions people take about their health and their given health behaviour. They do this by either encouraging the behavior or by inhibiting the behavior from occurring.

Enabling factors: These factors are also antecedents to behavior because they also influence the realization of motives, aspirations and decisions. These include skills, everyday routines, personal resources, community resources (e.g. availability of health resources, accessibility of health resources), and ability to source for these resources, government policies and access to health related skills

Reinforcing factors: This comprises of the feedback or influence of significant orders or people that influence the continuance or discontinuance of a particular behaviour. Examples of these factors include pressure from peers, siblings, co-workers, policy makers, parents, peer groups and other social support group. They are also factors subsequent to behavior that provide perpetual rewards or incentives for the behavior and contribute to its persistence or extraction

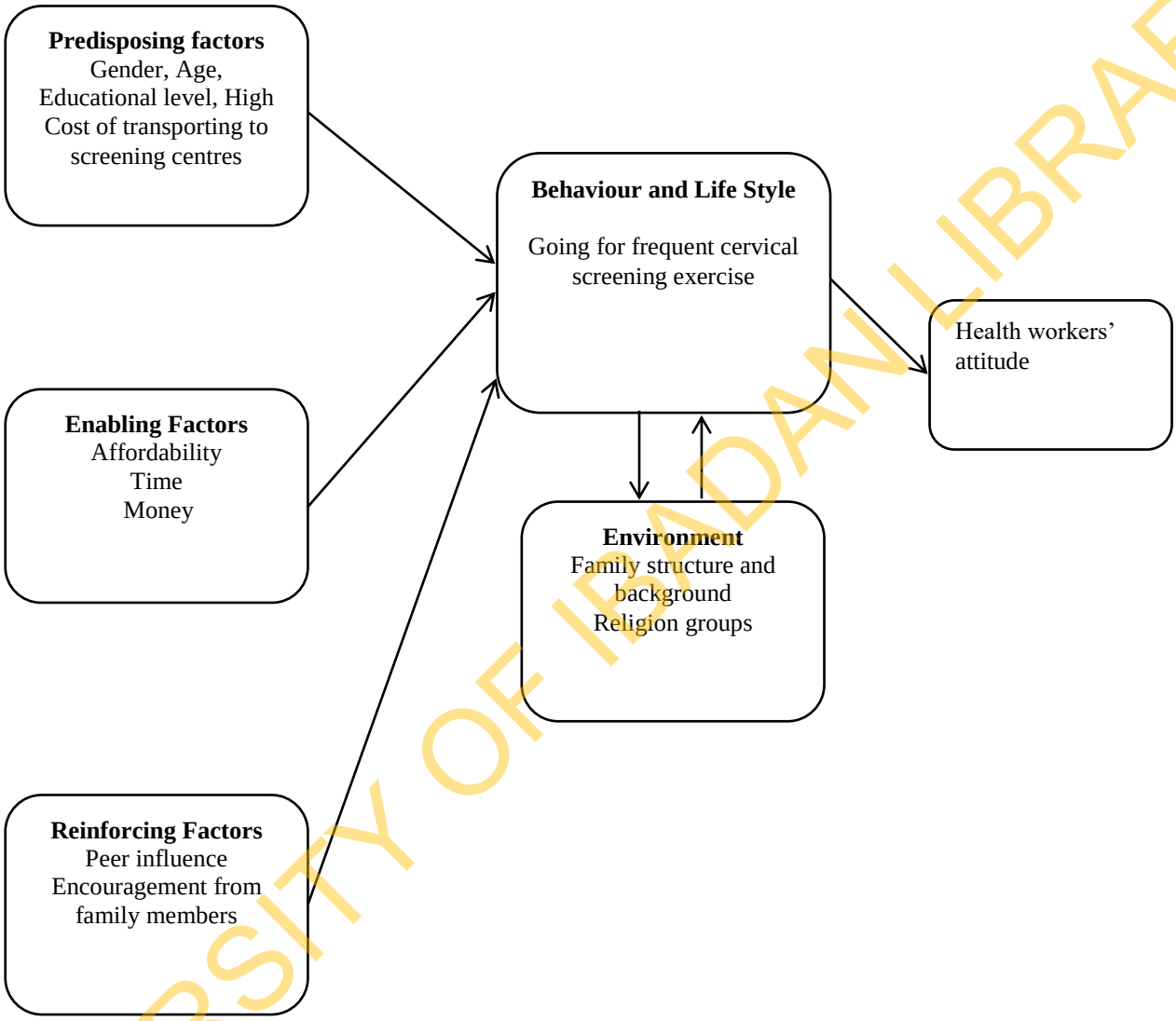

Fig 2.4: PRECEED Model in relation to barrier to utilization of cervical screening service among women of reproductive age group in Ondo town Area of Ondo State

THE HEALTH BELIEF MODEL FRAMEWORK

The HBM was first developed in the 1950s by social psychologists Godfrey Hochbaum, Irwin Rosenstock, and Stephen Kegels working in the U.S. Public Health Services. The model was developed in response to the failure of a free tuberculosis (TB) health screening program. The TB screening program provided adults with free TB screening x-rays from mobile units conveniently located in various neighborhoods. When few adults came out for the free services, program organizers began investigating why more adults did not come out. Hochbaum, however, began to study what motivated the few who did come out. He quickly learned that their perceived risk of the disease and perceived benefits of action were crucial factors in their motivation (Sharma & Romas, 2012).

The model was first presented with only four key concepts: Perceived Susceptibility, Perceived Severity, Perceived Benefits, and Perceived Barriers. The concept of Cues for Action was added later to "stimulate behavior." Finally, in 1988, the concept of Self-Efficacy was added to address the challenges of habitual unhealthy behaviors such as smoking and overeating (Stretcher and Rosenstock, 1988). Since then, the HBM has been adapted to explore a variety of long- and short-term health behaviors, including sexual risk behaviors and the transmission of HIV/AIDS as well as a variety of health education topics including sexuality education.

Since the HBM is based on motivating people to take action, (like using condoms) it can be a good fit for reproductive health education programs that focus on:

- Primary prevention — for example, programs that aim to prevent cervical cancer and educate on the risk factors
- Secondary prevention — for example, programs that aim to increase early detection of cervical cancer,to ensure screening for the disease and early treatment of the conditions.

Application of the HBM to barriers to utilization of cervical screening service

- **Perceived Susceptibility:** Women may perceive that they may be exposed to cervical cancer since they are already sexually active.

- **Perceived Severity:** Women believe the consequences of having cervical cancer with knowledge or treatment are significant enough to make them go for the screening.

- **Perceived Benefits:** Women believe that the recommended action of getting screened for cervical cancer would benefit them — possibly by allowing them to get early treatment or preventing them from infecting others.

- **Perceived Barriers:** Women identify their personal barriers to getting tested (i.e., getting to the clinic or being seen at the clinic by someone they know) and explore ways to eliminate or reduce these barriers.

- **Cues to action:** Women receive reminder cues for action in the form of incentives (such as a key chain that says, Get tested!") or reminder messages (such as posters that say, "75% of sexually active women are at risk of cervical cancer. Have you been screened? Get tested today").

- **Self-Efficacy:** Women receive guidance (such as information on where to get tested) or training (such as practice in making an appointment).

The above can be illustrated in the theoretical framework below;

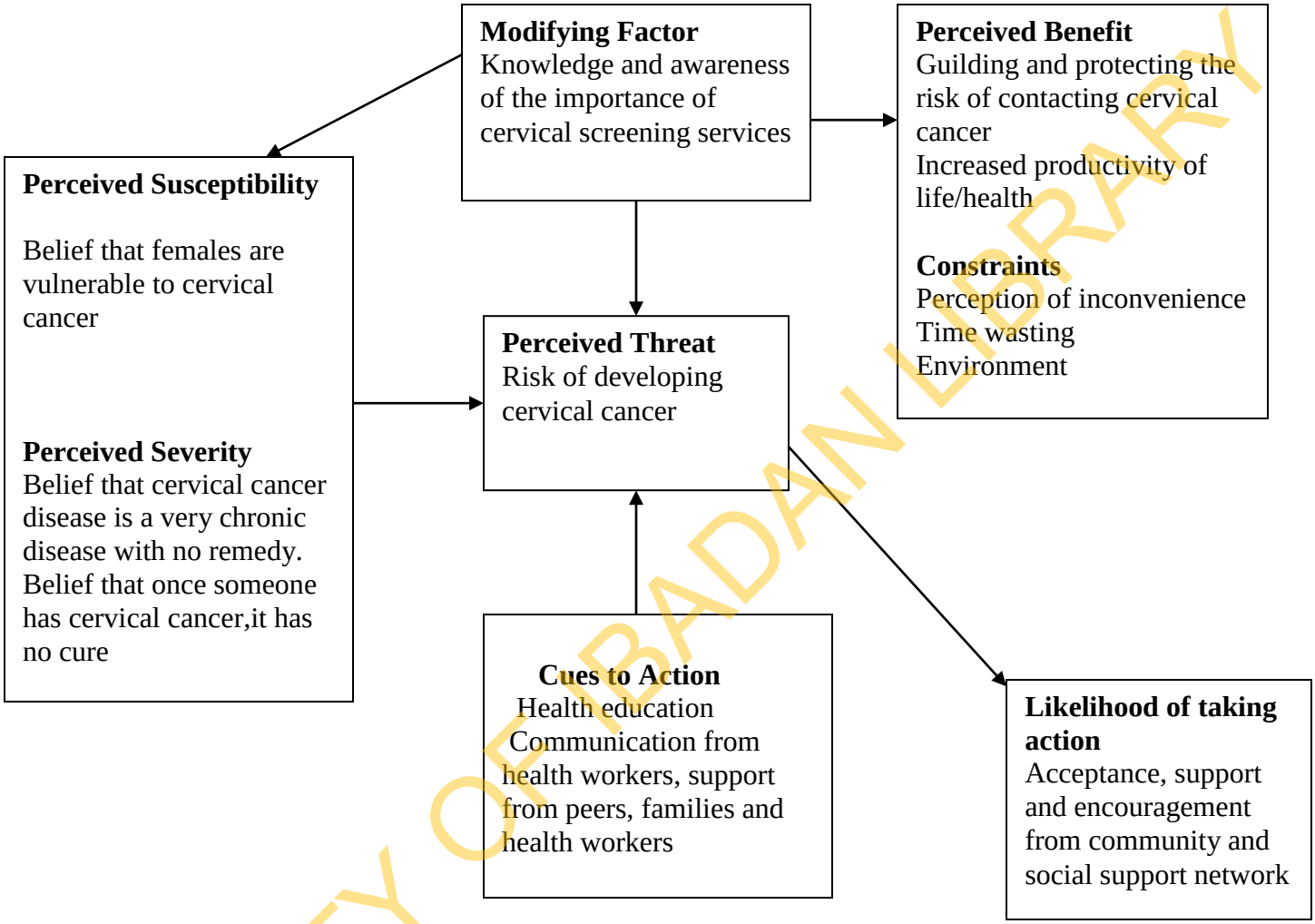

Fig 2.5: Health Belief Model in relation to barrier to utilization of cervical screening service among women of reproductive age group in Ondo town Area of Ondo State

CHAPTER THREE

METHODOLOGY

3.1 Study Design

This is a descriptive cross-sectional study design that was set out to determine the barriers to utilization of cervical screening services among women of reproductive age group in Ondo town of Ondo State

3.2 Study Location

The study was carried out in Ondo town in Ondo State. Ondo Town is located in the southwestern part of Nigeria rainforest. It is the second largest city in the state and has population of 275,917 people. It is also primarily inhabited by the Yorubas, it is the trade center for the surrounding region and the largest producer of cocoa products in the region. Ondo West Local Government has 12 wards in which Ondo town has 6 wards out of the 12 wards which includes Ward1,Ward3,Ward7,Ward8,Ward10,Ward11 In Ondo town there are many schools, banks, 2 secondary health facilities and many primary health care centres, 2 tertiary institutions,local industries etc are situated there.

3.3 Study Population

The study comprise of consenting women of reproductive age group in Ondo town in Ondo State

3.4 Sample Size Calculation

The sample size (n) for the study was determined or estimated using the estimation formular

$N = \frac{Z\alpha^2 pq}{d^2}$ (Lwanga and Lemeshow (1991))

where

n = minimum sample size

Zα = standard normal deviation corresponding to a 2 sided level of significance of 5% =1.96

p = Prevalence of utilization of Pap smear amongst female civil servants in Jos, Nigeria = 10.2% (Hyacinth et al., 2012)

q = 1 - p

d = desired level of precision = 5%

q = 1-p

= 1-0.102

= 0.898

d = desired level of precision =5%

$$n = \frac{(1.96)^2 \times 0.102 \times 0.898}{(0.05)^2}$$

= 140.75

Adjusting for 10% non-response rate= 1 - 0.10

= 0.90

Therefore N=141/0.9

= 156.6

Adjusting for cluster effect, 156.6 x 1.5 = 235

3.5 Sampling Techniques

A multi-stage sampling technique was used to select the eligible respondents.

Stage 1: 3 out of the 6 wards was selected by simple random sampling by balloting

Stage 2: Simple random sampling was used to select 1 community each out of the 3 selected wards

Stage 3: Proportionate sampling was used to select the number of women of reproductive age to be interviewed in each of the communities

Stage 4: Systematic sampling techniques was used to select every other house in the communities selected. Every woman of reproductive age that was willing to be interviewed in the selected house was interviewed.

Name of wards	Wards selected using simple random sampling	Communities in the selected wards
Ward 1-	Ward 1	Enu owa, Obalalu
Ward 3	7	Lodasa,Iparaku, Ijoka
Ward 7	11	Oke lisa,Oke doko, Ogbodu
Ward 8		
Ward 10		
Ward 11		

Population of women of reproductive age in the communities are listed below.The information on the population was gotten from election registration overview due to the unavailability of the data at the population census board .

Enu Owa = 12000

Ijoba = 8000

Oke Lisa = 6500

1) Proportionate sampling of Enu Owa

= Number of women of reproductive age in Enu Owa X Sample size

Number of women of reproductive age in Enu Owa,Ijoba and Oke Lisa

12000 X 235

26500

= 106.42

=106 women

2) Proportionate sampling of Ijoba

= Number of women of reproductive age in Ijoba X Sample size

Number of women of reproductive age in Enu Owa, Ijoba and Oke Lisa

8000 X Sample size

26500

=70.94

=71 women

3) Proportionate sampling of Oke Lisa

= Number of women of reproductive age in Oke Lisa X Sample size

Number of women of reproductive age in Enu Owa,Ijoba and Oke Lisa

6500 X 235

26500

= 57.64

=58 women

Therefore, 106 women of reproductive age in Enu Owa, 71 women of reproductive age in Ijoba and 58 women of reproductive age in Oke Lisa was recruited for the study.

3.6 Inclusion criteria

All consenting women of reproductive age group, not diagnosed of cancer of the cervix or receiving treatment for cervical cancer.

3.7 Exclusion criteria

Women diagnosed of cancer of the cervix or receiving treatment for cervical cancer

3.8 Data Collection Instrument

Information was collected using semi-structured interviewer-administered questionnaire (Appendix I) written in English.The questionnaire was translated to Yoruba (AppendixII) and translated back to English to preserve their original meanings. The questionnaire was divided into six sections according to the specific objectives:

SECTION A: Socio-demographic characteristics

SECTION B: Perception of the study population towards the available cervical cancer services

SECTION C: Awareness and Knowledge of cervical cancer

SECTION D: Knowledge of cervical cancer screening service

SECTION E: Utilization of the cervical cancer screening services and factors affecting their utilization

SECTION F: Barriers to utilizing the screening services

3.9 Validity of the Instrument

The instrument was validated by ensuring that a comprehensive review of related literatures was conducted and salient variables relating to barriers to utilize the cervical screening service among women of reproductive age were teased out from them. The result of the literature review was used to develop the questionnaire. After development of the questionnaire, it was subjected to peer review by specialist in Health Promotion and Education in which the opinions of supervisor and experts was sought to ascertain the face and content validity of the developed instrument. It was then pre-tested in a similar community with Ondo town in Ondo State which was Akure.

3.10 Reliability and Pre-testing of Instrument

This refers to the consistency of a measure. A measure is said to have a high reliability if it produces consistent results under consistent conditions.The validity and reliability of the instruments was ensured by conducting a pre-test among 25 (10% of minimum sample size) women of reproductive age in Akure with a draft of the questionnaire to determine its consistency and accuracy.

A revision was made based on the analysis of the results of the pre-test and some modification was made on some of the questions, this was to determine how effective the developed instrument would be in collecting appropriate data relevant to the research objectives. Reliability analysis for questionnaire was done by using Cronbach- Alpha statistical test with a reliability coefficient of 0.703.

3.11 DATA COLLECTION PROCESS

The data collection process was done by recruiting four (4) research assistance who were mature female undergraduates, the training lasted for a day to ensure proper understanding and administration of the instrument.The data collection took a maximum of Ten (10) days which always start with consent seeking of the respondents and explaining the essence of the research before administering the questionnaires

3.12 Data Management and Analysis

Serial number was assigned to each question for easy identification and for correct data entry and analysis. A coding guide was developed to code and enter each question into the computer for analysis. Analysis was done with the use of Statistical package SPSS version 15. The frequency tables were properly checked by my supervisor for the purpose of accuracy. Data were summarized using frequency tables, means and standard deviations, analysis was also done with chi-square test to compare proportions for categorical variables and the outcome variable.

Knowledge and perception scores was determined. Each correct answer was scored 2 and each wrong answer was scored 0. The total knowledge score on cervical cancer and the screening service = 30 points, the grading was 1-10point as poor knowledge, 11-20points as fair knowledge and 21-30points as good knowledge.Total Perception score on cervical cancer screening service =12 points, respondent that scored 0-6 points has negative perception while 7-12 points has positive perception.

3.13 Ethical Consideration

Ethical approval was sort for and received from the Ethical Review Committee of the Ondo State Ministry of Health, Akure (see Appendix III) before commencement of the research.Verbal informed consent was also obtained from respondents before the interview and administration of the questionnaires. Ethical issues like confidentiality, opportunity to decline interview at any stage and non exposure to risk was also discussed with each respondent. Only respondents who were able to give informed consent (i.e. are able to demonstrate an understanding of the objectives of the study and the implication of their role in it) were recruited into the study. A written consent was obtained with Anonymity and confidentiality of responses was ensured as interviews were conducted as privately as possible using serial numbers only and not names. They were informed that participation is voluntary and that data collected would be used mainly for research purposes. Minimal harm was done to the Respondents as the study did not involve any invasive procedure.

Confidentiality of data: In order to assure respondents of confidentiality of the information that were supplied, names of respondents were not required, only serial number was assigned to the questionnaires for proper recording.

Translation: Information was collected using semi-structured interviewer-administered questionnaire, written in English. The questionnaire was translated to Yoruba and translated back to English to preserve their original meanings.

Beneficence to participants: The outcome of the research will be of benefit not only to the participants, but to women of reproductive age as it will help to address the barriers to utilization of the screening service and Hence, a better healthcare for the women.

Non-maleficence to participants: The research did not require collection of invasive materials. Hence minimal harm was done to the participants.

Voluntariness: The participants were given the full detail concerning the research before taking part in it so as to ensure that she fully understands the research and is willing to take part in it.

3.14 Limitation of the study

Responses from the study cannot be generalized for barriers to utilization of cervical screening service in the state since only one town in the state was used for the study, the genuineness of their responses cannot be ascertained as some of the participants were not willing to give all the information therefore this could be associated with under reporting or over reporting.

Accurate and correctly updated census of the population, streets and houses was scarce to obtain at the Local Government secretariat and most of the residents were unavoidably absent at home

CHAPTER FOUR

RESULTS

The findings from this study are presented in this section. They are organized into the following subsections:

- Socio demographic characteristics
- Perception towards cervical cancer screening services
- Awareness and Knowledge of cervical cancer
- Knowledge of cervical screening services
- Utilization of cervical cancer screening services
- Barriers to utilization of the screening service

4.1. Respondents Socio-demographic Characteristics

The socio-demographic profile of the respondents is presented in Table 4.1. Respondents interviewed were all women of reproductive age. The ages of the respondents ranged from 15-49 years with a mean age of 30.0±6.8years. A high proportion (61.5%) of the respondents were between 25-34 years of age and few (4.9%) of the respondents were 45-49 years of age.

Majority (70.9%) of the respondents were married, (25.4%) were unmarried (80.9%) of the respondents were from monogamous settings and (19.1%) were from polygamous settings also, more than half (58.2%) had tertiary education as their highest level of education and few of them (0.4%) had no formal education.

Majority (81.6%) were Christians and (75.4%), belonged to the Yoruba ethnicity, respondents' mean age at marriage were 25.2±3.9 years. Majority of the respondents were traders (31.1%) and (16.4%) were students; 58.2% of respondents had 1-4 children and with mean age at sexual debut of 21.4±5.4 years. Majority (88.9%) had one sexual partner in the last six months. The results are presented in table 4.1 below

Table 4.1a Socio-demographic characteristics **N=244**

Socio-demographic variable	Frequency	Percentage(%)
Age Bracket(in years)		
15-24	42	17.2
25-34	150	61.5
35-44	40	16.4
45-54	12	4.9
Mean age 30.0±6.8		
Marital status		
Never married	62	25.4
Married	173	70.9
Separated	7	2.9
Divorced	1	0.4
Widowed	1	0.4
Age at marriage N=182		
14-23 years	58	31.9
24-33 years	123	67.6
34-43 years	1	0.5
Mean age=25.2± 3.9 years		
Family Type N=173		
Monogamy	140	80.9
Polygamy	33	19.1
Level of education		
Primary	19	7.8
Secondary	82	33.6
Tertiary	142	58.2
None	1	0.4
Religion		
Christianity	199	81.6
Islam	39	16.0
Traditional	6	2.5

Table 4.1b Socio-demographic characteristics **N=244**

Socio-demographic variable	Frequency	Percentage(%)
Tribal affiliation		
Yoruba	184	75.4
Hausa	19	7.8
Igbo	35	14.3
Delta	6	2.5
Occupation N=244		
No occupation	7	2.9
Trader	76	31.1
Student	40	16.4
Artisan	12	4.9
Health worker	31	12.7
Youth corper	1	0.4
Teacher	21	8.6
Civil servant	50	20.5
Farmer	6	2.5
Number of children N=244		
None	83	34
1-4	142	58.2
5-7	19	7.8
Age at sexual debut N=244		
12-21 years	110	45.1
22-31 years	117	48.0
32-41 years	3	1.2
Cant remember	2	0.8
Never had sex	12	4.9
Mean age=21.4± 5.4 years		
Number of sexual partners in the last 6 months N=244		
One	217	88.9
Two or more	11	4.5
None	16	6.6

4.2 Perception towards cervical cancer screening services

Many (52.9%) of the respondents agreed that pap smear would affect their privacy while, 56.1% reported that they don't need pap smear since they are not promiscuous. Few of the respondents 18.9 % prefer traditional medicine as a cure to cancer while 57.4% disagreed. Majority of the respondents (74.6%) disagreed that their culture forbid women undergoing such test while (60.7%) believed that cancer has a cure so it advisable to go for screening to know status, (77.0%) agreed that regular pap smear screening can prevent the development of cervical cancer. Other results are presented in table 4.2 below

Table 4.2: Perception towards cervical cancer screening services **N=244**

Perception towards screening	Frequency	Percentages (%)
Pap smear would affect my privacy		
Agree	129	52.9
I don't know	54	22.1
Disagree	61	25.0
I don't need pap smear because am not promiscuous		
Agree	137	56.1
I don't know	28	11.5
Disagree	79	32.4
Prefer traditional medicine as it cures cancer		
Agree	46	18.9
I don't know	58	23.8
Disagree	140	57.4
My culture forbids women undergoing such test		
Agree	37	15.2
I don't know	25	10.2
Disagree	182	74.6
Cancer has no cure so why going for any test for it		
Agree	63	25.8
I don't know	33	13.5
Disagree	148	60.7
Regular pap smear screening can prevent development of cervical cancer		
Agree	188	77.0
I don't know	41	16.8
Disagree	15	6.1

4.3 Awareness and Knowledge of cervical cancer

Majority (73.8%) of respondents had heard about cervical cancer while few 26.2% have not heard, many (45.0%) heard from health workers, majority (67.8%) defined cervical cancer as abnormal growth from female's cervix, 76.1% gave virus as the cause of cervical cancer while few (2.2%) gave spiritual attack as the cause, (39.4%) gave first sexual intercourse before age 16 as a risk factor. Other results are presented in table 4.3

Table 4.3a Awareness and Knowledge of cervical cancer

Variables	Frequency	Percentage(%)
Ever heard of cervical cancer N=244		
Yes	180	73.8
No	64	26.2
Source of information N=180		
Radio	46	25.6
Television	39	21.7
Neighbour	13	7.2
health care workers	81	45.0
Internet Facility	1	0.6
Definition of cervical cancer N=180		
Abnormal growth in female's cervix	122	67.8
Abnormal growth in female's womb	16	8.9
Abnormal growth in female vaginal	30	16.7
No idea	12	6.7
Causes of cervical cancer N=180		
Virus	137	76.1
Bacterial	38	21.1
Spiritual attack	4	2.2
Germs	1	0.6
Having first sexual intercourse before age 16 yrs N=180		
Yes	71	39.4
No	61	33.9
Don't know	48	26.7
Infection with certain bacterial N=180		
Yes	122	67.8
No	31	17.2
Don't know	27	15.0

Table 4.3b Awareness and Knowledge of cervical cancer N=180

Variables	Yes	No	Don't know
Infection with certain virus	139(77.2)	24 (13.3)	17 (9.4)
Having more than one sexual partners	116 (64.4)	41 (22.8)	23 (12.8)
Having more than 4 children	22(12.2)	86 (47.8)	72 (40.0)
Prolong use of oral contraceptives	49(27.2)	50 (27.8)	81(45.0)
Smoking cigarette	88(48.9)	46 (25.6)	46 (25.6)
Late age at getting married	27(15.0)	72 (40.0)	81 (45.0)
Can cervical cancer be prevented	152(84.4)	9 (5.0)	19 (10.6)
Can cervical cancer be treated	154(85.6)	13 (7.2)	13(7.2)
Cervical cancer can kill?	163(90.6)	12 (6.7)	5(2.8)
If diagnosed early, cervical cancer could be cured	162 (90.0)	3 (1.7)	15(8.3)

4.4 Knowledge of cervical screening services

Most of the respondents (58.9%) are aware of screening methods for cervical cancer while (41.1%) are not aware, When asked about the screening methods, (16.1%) mentioned pap smear, (13.3%) VIA,(29.4%) both. A little below half (42.2%) have heard about VIA. When asked for the source of their information, quite the majority of them (84.2%) got their information from health workers with few of them (3.9%) getting the information from friends/relatives,(45.0%) have heard about pap smear, majority 82.7% heard from health workers while few 3.7% heard from neighbours. Other results are presented in table 4.4

Table 4.4: Knowledge of cervical screening services

Variables	Frequency	Percentage(%)
Awareness of screening methods for cervical cancer N=180		
Yes	106	58.9
No	74	41.1
Methods for screening cervical cancer known. N=106		
Pap smear	29	27.4
VIA	24	22.6
Pap smear and VIA	53	50.0
Ever heard of VIA N=106		
Yes	76	71.7
No	30	28.3
Source of information about VIA N=76		
Radio/television	9	11.8
friends/relatives	3	3.9
Health care workers	64	84.2
Ever heard of pap smear N=106		
Yes	81	76.4
No	25	23.6
Source of information on pap smear N=81		
Radio/television	11	13.6
Neighbours	3	3.7
Health care workers	67	82.7

4.5 Utilization of cervical cancer screening services

Majority (84.4%) of the respondents have never done any screening for cervical cancer. Of the 28 who have done, (42.9%) did pap smear,(57.1%) did VIA,(50%) did screening 1 year,(50%) also did screening 2 years ago, majority(78.6%) did the screening as a result of personal decision and after awareness of the benefits,(59.9%) have not done any screening because of unavailability of the screening service. Other results are presented in table 4.5.

Table 4.5: Utilization of cervical cancer screening services

Variables	Frequency	Percentages(%)
Ever had cervical cancer screening N=180		
Yes	28	15.6
No	152	84.4
Type of screening done. N=28		
Pap smear	12	42.9
VIA	16	57.1
Last time cervical cancer screening was done N=28		
1 year ago	14	50.0
2 years	14	50.0
Person who influenced respondent to undergo the screening test N=28		
my doctor	5	17.9
My friends/relatives	1	3.6
Personal decision after awareness	22	78.6
Reason for not going for screening tests. N=152		
lack of awareness	25	16.4
Unavailable	91	59.9
Too expensive	26	17.1
Against my religion	9	5.9
No genuine reason	1	0.7

4.6 Barriers to utilization of the screening service

A little above average (51.0%) said their husband always have influence on their decision to go for screening while (51.3%) said they are sometimes not comfortable with health worker attitude. Majority of the respondents (65.1%) reported that getting a pap test would only make them worry and fearful if they eventually find out that they have the disease, (46.7%) said that Pap smear test is painful while (45.4%) said that it is expensive. Few of the respondents (28.3%) said they feel embarrassed to have any genital examination or pap test, (42.1%) said pap test is not readily available while (50%) do not know appropriate age to go for pap smear.

A little below half (48.0%) said screening takes much time and (39.5%) reported that screening facilities are only open at inconvenient time, few of the respondents (27.0%) also said that cervical cancer screening can expose them to some STIs while very few (5.9%) said their culture is against going for cervical cancer screening and few (13.8%) see going for cervical cancer screening as a waste of time because cancer has no cure. Other results is shown in table 4.6

Table 4.6a : Barriers to utilization of the cervical cancer screening service

Barrier to utilization of cervical cancer screening	Frequency	Percentages(%)
My husband has influence on my decision N=104		
Always	53	51.0
Sometimes	28	26.9
Never	23	22.1
Am not comfortable with health worker attitude N=152		
Always	26	17.1
Sometimes	78	51.3
Never	48	31.6
Long distance to health facility is an issue N=152		
Always	24	15.8
Sometimes	61	40.1
Never	67	44.1
I don't have money to access health facility N=152		
Always	15	9.9
Sometimes	62	40.8
Never	75	49.3
My family does not see reason to go to health facilities N=152		
Always	14	9.2
Sometimes	56	36.8
Never	82	53.9
Getting a pap test would only make me worry and fearful if I eventually find out that I have the disease N=152		
Strongly agree	99	65.1
Agree	20	13.2
Disagree	29	19.1
Strongly disagree	4	2.6

Table 4.6b : Barriers to utilization of the cervical cancer screening service N=152

Barrier to utilization of cervical cancer screening	Frequency	Percentages(%)
Pap smear test is painful N=152		
Strongly agree	71	46.7
Agree	27	17.8
Disagree	37	24.3
Strongly disagree	17	11.2
Pap smear is expensive N=152		
Strongly agree	69	45.4
Agree	35	23.0
Disagree	42	27.6
Strongly disagree	6	3.9
I feel embarrassed to have any genital examination or pap test N=152		
Strongly agree	43	28.3
Agree	14	9.2
Disagree	50	32.9
Strongly disagree	45	29.6
I don't know where I could go if I wanted pap test because pap test is not readily available N=152		
Strongly agree	64	42.1
Agree	27	17.8
Disagree	23	15.1
Strongly disagree	38	25.0
I do not know at what age it is appropriate to go for pap smear N=152		
Strongly agree	76	50.0
Agree	29	19.1
Disagree	34	22.4
Strongly disagree	13	8.6

Table 4.6c : Barriers to utilization of the cervical cancer screening service

Barrier to utilization of cervical cancer screening	Frequency	Percentages(%)
I don't have time to get a screening because it takes much time N=152		
Strongly agree	73	48.0
Agree	29	19.1
Disagree	33	21.7
Strongly disagree	17	11.2
I have not gone for the screening because the health facility screening service is only open during hours that is not convenient for me N=152		
Strongly agree	60	39.5
Agree	26	17.1
Disagree	41	27.0
Strongly disagree	25	16.4
Cervical cancer screening may get a woman's womb damage or remove if not handled by a professional N=152		
Strongly agree	23	15.1
Agree	20	13.2
Disagree	34	22.4
Strongly disagree	75	49.3
Cervical cancer screening can expose a woman to some STIs N=152		
Strongly agree	30	19.7
Agree	41	27.0
Disagree	28	18.4
Strongly disagree	53	34.9
My culture is against women going for cervical cancer screening N=152		
Strongly agree	13	8.6
Agree	9	5.9
Disagree	33	21.7
Strongly disagree	97	63.8
Going for cervical cancer screening is a waste of time since cancer has no cure N=152		
Strongly agree	21	13.8
Agree	9	5.9
Disagree	47	30.9
Strongly disagree	75	49.3

4.7 Knowledge score categories

Few of the respondents (11.1%) have poor knowledge of cervical cancer and its screening service, (53.3%) have fair knowledge and only 35.6% have good knowledge. The result is shown in table 4.7

Table 4.7: All knowledge scores categories

Knowledge	Frequency	Percentages (%)
Poor	20	11.1
Fair	96	53.3
Good	64	35.6

4.8 Perception scores categories

A little above average (57.4%) has negative perception towards cervical cancer screening services while 42.6% has positive perception towards the screening services.The result is shown in table 4.8

Table 4.8: All Perception score category

Perception	Frequency	Percentages(%)
Negative	140	57.4
Positive	104	42.6

4.9 Test of Hypotheses

1.There is no association between perception of respondent and their knowledge of cervical screening service

Perception	**Knowledge of cervical cancer screening**			
	Poor, (%)	Fair, (%)	Good, (%)	Total
Negative	9(10.0%)	52(57.8%)	29(32.2%)	90(100%)
Positive	11(12.2%)	44(48.9%)	35(38.9%)	90(100%)
Total	20(11.1%)	96(53.3%)	64(35.6%)	180(100%)
X2= 1.429	Df= 2	Pvalue= 0.489		

The result shows that there is no significant association between perception of respondents and their knowledge of cervical screening service, therefore we fail to reject the null hypothesis.

2.There is no association between knowledge of respondent and their utilization of cervical screening service

Knowledge	**Utilization of cervical cancer screening service**		Total
	Yes (%)	No(%)	
Poor(%)	3(15.0)	17(85.0)	20
Fair(%)	11(11.5)	85(88.5)	96
Good(%)	14(21.9)	50(78.1)	64
Total(%)	28(15.6)	152(84.4)	180

X2 =3.117 P=0.204

The result shows that there is no significant association between knowledge of respondent and their utilization of cervical screening service, therefore we fail to reject the null hypothesis.

3. There is no association between selected socio-demographics and their utilization of cervical cancer screening service.

Table 4.11 shows the association between selected socio-demographics and their utilization of cervical cancer screening service. Significant association was found in both utilization and age of respondents, utilization and religion while there was still no significant association found in utilization and their level of education

Table 4.11: Association between selected socio-demographics and their utilization of cervical screening service N=244

Variables	Utilization of cervical cancer screening service		Total	Chi Square		
	Yes(%)	No(%)		X2	P value	Significance
Age						
15-24	3(10.7)	32(21.1)	35	14.833	0.002	Significant
25-34	13(46.4)	94(61.8)	107			
35-44	7(25)	22(14.5)	29			
45-54	5(17.9)	4(2.6)	9			
Level of education						
Primary	0(0)	5(3.3)	5			
Secondary	8(28.6)	45(29.6)	53	6.360	0.095	Not significant
Tertiary	19(67.9)	102(67.1)	121			
Other	1(3.6)	0(0)	1			
Religion						
Christianity	21(75)	127(83.6)	148			
Islam	5(17.9)	25(16.5)	30	11.096	0.004	Significant
Traditional	2(7.1)	0(0)	2			

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATION

Socio-demographic characteristics of respondents'

All respondents selected were women of reproductive age group in Ondo Town Area of Ondo State.The ages of the respondents ranged from 15-49 years of age which is in line with the National Health Demographic Survey's (NDHS) 2013 (NPC/ICF International 2014) categorization of the fertility age range of women (15-49years). The mean age was 30.0±6.8years. A larger percentage (61.5%) of the respondents were between 25-34 years of age, this finding is also in line with the NDHS 2013 study that states that the age-specific fertility rate pattern of women in the urban settings depicts a narrow pick at age 25-29 years (NPC/ICF International 2014)

In this study, majority (70.9%)were married, 80.9% practiced monogamous family type, while many (58.2%) had tertiary education which correspond with the study carried out by Utoo et al 2013 in Markurdi, Nigeria. Majority of the respondents belonged to the Yoruba ethnic group (75.4%) and this could be traced to the fact that the study location is situated in the south-western part of the country where Yoruba is the predominant ethnic group. The religious group represented in this study were majorly Christians (81.6%). Respondents ages at marriage were majorly 24-33 years (67.6%) with mean age at marriage 25.2±3.9 years, they have trading (31.1%) as the major occupation while most of them (58.2%) have 1-4 children this is still in line with Utoo et al (2013). Most of the respondents 45.1% have their sexual debut at ages 12-31, majority 88.9% had one sexual partner in the last 6 months which are risk factors for the disease. From the findings in this study there is likelihood of the study population to be at risk of the disease even as majority of them had early sexual debut and majority are still sexually active therefore there is need for more education on the benefit of the screening service to the study population.

Perception towards cervical cancer screening services

Similar to findings of other studies 52.9% of the respondents still report that pap smear would affect their privacy, most African women see their privacy as a vital component of their lives that must not be compromised especially when it comes to matters relating to their sexual and reproductive life, most of them tend to keep to their friends and other people they trust. Sometimes they may prefer to keep to themselves as they feel embarrassed to have genital examination. Many of them cannot stand somebody that is not close to them or not their husband to take samples from their private parts. The finding from this study is supported by other studies who previously reported that embarrassment influences cervical cancer screening uptake using pap smear method. Most women feel uncomfortable with the idea of vaginal or 'private parts' examination with medical practitioner (Twinn et al, 2002). Previous study in the US reported that 31% of Hispanic women undertook the pap smear test admitting that the process was embarrassing, while 60% of women who did not present for screening also stated the same. Screening by male doctors affected women's decision in presenting for examination. Researchers also indicated that the feeling of embarrassment remains even if performed by a female doctor. Research in Mexico, Ecuador and Venezuela for Latin American also reported similar patient discomfort. In Botswana, the absence of female nurses or doctors prevented women from attending screening. Many respondents indicated that women doctors are gentler than their male doctor counterparts (Julianawati, Cawley, Domegan, Brenner, Rowan, 2013).

In this study some women still believe strongly that cervical cancer is associated with promiscuity as 56.1% reported that they don't need pap smear since they are not promiscuous. Studies have proven that cervical cancer is not only contacted by women who are promiscuous but women who are sexually active, Arulogun and Maxwell (2012) in their study among nurses in southwest Nigeria reported that majority of the respondents were of the opinion that only promiscuous women are at risk of cervical cancer despite the level of knowledge on cervical cancer among the study respondents,

gaps in knowledge still exist about other risk factors for cervical cancer. This is a misconception because women who are faithful but whose husbands visit sex workers are equally at risk of being infected with HPV as they might be infected by their husbands. Women whose husbands have also been infected in the past are also at risk of being infected with the Human Papilloma Virus. This misconception can lead to stigmatization and wrong labeling of those who are suffering from the disease as being promiscuous as this can become a big barrier to women accessing screening services.

Culture is the values, norms, belief and the general way of life of people in a particular location. It is quite understood that peoples' cultures can not be overlooked but need to be looked into especially when it relates to the health of the people. Previous researchers reported that culture and religious factors are prominent as the exposure of the vagina is a sensitive issue and relates exclusively to husband and wife Research in Mexico, Ecuador and Venezuela for Latin American also reported similar patient discomfort (Julianawati et al 2013) and (Onyije et al 2010) in Nigeria. In this part of the world culture is still embraced as a vital thing in every steps or decision people take even as regards their health as few 25.4% of the respondents still agrees that their culture forbids women undergoing screening service.

People are knowledgeable about cervical cancer and the cure for it but need more enlightenment and motivation to go for the screening service because a larger percentage of the respondents (60.7%) believed that cancer has a cure so it advisable to go for screening to know status and (77.0%) agreed that regular pap smear screening can prevent the development of cervical cancer. In summary, 57.4% has negative perception towards cervical cancer screening services while 42.6% has positive perception towards the screening services.The findings in this study buttresses the need to do more awareness campaign and health education on the benefit associated with the screening for cervical cancer.

Knowledge of cervical cancer

In this study it was observed that quite a majority (73.8%) of respondents are aware of cervical cancer while few 26.2% are still not aware of the disease unlike studies from

Nwozor and Oragudosi (2013) that reported that only 35.56% were aware of cervical cancer among women in Onitsha. The awareness observed in this study indicates that there is need for more awareness programs to be done in this study site which can have greater effect on the study population. Health workers in any community are seen as role models that can help in influencing the attitudes of people towards their health so therefore there is need to engage the health workers in the awareness programs so that they can enlighten women on the disease and the risk factors associated with it in order to change their wrong or negative perception about the disease. From this study, majority (67.8%) defined cervical cancer as abnormal growth from female's cervix which means they have good knowledge of the disease and a little below average (45.0%) of the respondents heard about cervical cancer from health workers which stresses the impact of health workers in the community. In educating these women, there should be emphasis on the risk factors and preventive measures that are needed to be taken. Health workers should also try to dissuade women out the belief that cervical cancer is caused by spiritual attacks as this can serve as the predisposing factor to their utilization. From this study, a few (2.2%) still reported spiritual attack as the cause while (76.1%) correctly reported virus as the causes of cervical cancer and (39.4%) reported first sexual intercourse before age 16 as a risk factor which corresponds with a study carried out among female nurses in University College Hospital by Arulogun and Maxwell (2012) and contradicts a study in Cameroun by Tebeu et al, (2008) that reported that only 28% of respondents had a good knowledge of cervical cancer. This disparity might be because of the differences in the socio demographic characteristics between Nigeria and Cameroun.

Knowledge of cervical screening services

Knowledge of the respondents about the screening service is a bit low whereby not all who were aware of cervical cancer are equally aware of the screening service for it. From this study only (58.9%) of the respondents are aware of screening methods for cervical cancer while 73.8% were aware of the disease. Health workers have been found to be a major source of information about cervical cancer and the screening service which is pointing to the fact that they can serve as resource personnel to enhance the screening

service among women as reported that majority got their information from health workers. From this study 11.1% of the respondents have poor knowledge of cervical cancer and its screening service, (53.3%) have fair knowledge and only (35.6%)have good knowledge. Therefore,this study recommends ways of improving the knowledge of the screening services as well as regular screening services among women of reproductive age.

Utilization of cervical cancer screening services

Similar to findings of other studies, this study reports low utilization of screening services among the "aware" group for cervical cancer screening; as low as 15.6% of the entire population studied had ever screened for the disease. Although, this rate is higher than the 1.78%, reported by (Nwozor et al 2013) and still lower than the finding of 18% reported by Hoque et al., in a rural community in South Africa . This should raise a serious level of concern for all stake holders in reproductive health. The parliament should be magnanimous to make laws that will promote screening as has been done in other parts of the world. Utilization rate of the screening service is becoming a major challenge as even people that are more knowledgeable about the disease and the screening service have never been screened, this shows that knowledge is not statistically significant with people's utilization of the service. From this study, majority (84.4%) of the respondents have never done any screening for cervical cancer. Of the 28 who had ever screened for the disease, majority (78.6%) did the screening as a result of personal decision and after awareness of the benefits. Also from this study, it was reported that (59.9%) have not done any screening because of lack of awareness and unavailability of the screening service, therefore service should be made accessible, available and affordable to all. This low utilization here is also in line with study done by Arulogun OS et al (2012) that showed very low utilization of the screening service among nurses despite their awareness and knowledge about the disease and screening service. This study concluded that there was low uptake of Pap smear among the respondents despite their knowledge of prevention of cervical cancer.

Barriers to utilization of the screening service

Barriers are impediment to some steps or actions, barriers to utilization of the cervical screening service from several studies were influence of significant others in which husbands serves as major components, fear of the result, perceived to be painful, health workers attitude, availability of the service, time and cost of the screening, embarrassment to have genital examination and culture. From this study, a little above average (51.0%) said their husband always have influence on their decision to go for screening. This points out the effect of male involvement in women reproductive health issue as an emerging trend in reproductive health utilization as pointed out in a study done by Arulogun et al (2012).

Moreso, participants in a study admitted they did not go for cervical screening because of fear of pain and discomfort during the screening process (Julianawati et al., 2013). From this study, a little below average (46.7%) reported that Pap smear test is painful and (65.1%) reported fear of the result. Health workers attitude was also mentioned by (51.3%) and (42.1%) said pap test is not readily available while 50% do not know the appropriate age to go for a pap smear. Few (39.5%) complained of time while very few (5.9%) said their culture is against women going for cervical cancer screening. All these support findings from a study done by Nwozor et al (2013).

Implications for Health Promotion

Awareness and Health Education: There is need for more awareness and health education programs on cervical cancer and the risks associated with the disease so as to encourage people to utilize it and to reduce the burden of cancer in this part of the world because some might be living with the disease and not be aware of it. There is need to create awareness especially to the significant orders to provide social support to women.

Training should be done to health workers on how to do the screening: Recruiting and training of health care providers on procedures of the screening and how to educate women on the need to go for the screening service

Advocacy: Advocacy should be made to encourage people to utilize the screening service by making the screening free or subsidized so that it is generally accessible and affordable to all. Service should be made available, accessible, affordable and sustainable. Social mobilization should target community leaders, traditional rulers, religious organizations and faith based institutions and not just families. NGOs can partner with health facilities in promoting service availability, affordability and utilization. Health workers should help change perception of non susceptibility of the women. Funding research on cervical cancer and disseminating evaluation results across the country

Conclusion

From this study it was observed that there is still very low utilization of the service among women of reproductive age even though a large percentage of them are aware of the disease.

There is need for the continuation of community-based involvement and the need for more studies on barriers to utilization of cervical screening service. A combination of health education approaches should be adopted to tackle this problem (advocacy, health education and training). More still, there is need for sensitization of people both men and women, young and old, leaders within the community, stakeholders on the magnitude of this problem by encouraging open dialogue on various contribution to break the cultural and societal factors affecting the utilization of the screening service.

Women in the rural areas always have difficulty in accessing clinics due to lack and cost of transportation compared to those living in urban areas. Health centres that provide this service in areas inaccessible to public transport creates barriers to the attendance of vital screening. Poverty, besides low education level, happens to be one of the reasons why the health seeking behaviour is different between urban and rural areas. Understanding and identifying barriers can be used to enhance participation rates in prevention programmes even when offered free of charge. Individuals may reconsider attending cervical cancer screening if barriers are identified and subsequently hurdled.

RECOMMENDATIONS

Community people constitute an important group/economic driving force in the country and therefore it is important to know whether knowledge and perception of cervical cancer among women of reproductive age is significant with their utilization. This study recommends ways of improving the knowledge of cervical cancer and the screening services as well as regular screening services among women of reproductive age.

The findings of this study provided an insight on the barriers to utilization of cervical screening service and will have a great and far reaching implication for the planning and development of research and for the provision of baseline data in the area of cervical screening among women of reproductive age which will stress more on their awareness,knowledge, perception and barriers to utilization of the screening service.

1. There is need to create awareness especially to the significant orders to provide social support to women. There should be the provision of support groups in strategically located places to help improve self-esteem of women suffering from cervical cancer.

2. Promotion of investments in effective prevention, diagnosis and treatment initiatives which is essential for cervical cancer in order to safeguard the well-being of women.

3. Social mobilization should target community leaders, traditional rulers, religious organizations and faith based institutions and not just families. NGOs can partner with health facilities in promoting service availability,affordability and utilization. Health workers should help change perception of non susceptibility of the women.

4. Cervical cancer screening service should be made available,accessible,affordable and sustainable. Awareness campaigns should be done to re-strategise how best information can be disseminated to community people.

5. Recruiting and training of health care providers on procedures of the screening and how to educate women on the need to go for the screening service.

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APPENDIX I

QUESTIONNAIRE

BARRIER TO UTILIZATION OF CERVICAL SCREENINING SERVICES AMONG WOMEN OF REPRODUCTIVE AGE GROUP IN ONDO TOWN AREA OF ONDO STATE

Consent form

Dear Ma,

I am **WOMITENREN YEWANDE TOLU** a post graduate student of University of Ibadan, Oyo State. I am collecting data on barriers to utilization of cervical screening service among women of reproductive age in Ondo Town Area

You have been chosen to be interviewed because you are among women of reproductive age group and my research is focusing on you, therefore I will like to ask you some questions about cervical screening services.I am not going to ask of your name, address, or any information of identifying your person.Information you are going to provide will be treated with utmost confidentiality.

Participation is voluntary and there is no negative consequence for refusing to participate if you chose not to participate.However, your participation in this study will be appreciated and will help to identify some barriers to utilization of cervical screening services among women of reproductive age in Ondo Town Area. The interview takes a short time.

For research purpose only

S/No……..

Date.....

Section A: socio-demographic data

1. Age at last birthday …… (please specify in years)

2. Marital status (i) Never married (ii) Co-habiting (iii) Married (iv) Separated (v) Divorced (vi) Widowed

3. Family type (i) Monogamy (ii) Polygamy (iii) Not married

4. Level of education completed (i) No formal education (ii) Primary (iii) Secondary (iii) Tertiary (iv) Other (please specify)……

5. Religion (i) Christianity (ii) Islam (iii) Traditional Religion

(iv) other (please specify) …….

6. Tribe (1) Yoruba (ii) Hausa (iii) Igbo (iv) other (specify)……

7. Age at marriage.....

8. Occupation ……

9. Number of children……

10. Age at first sexual intercourse……

11. Number of sexual partners in the last 6 months……..

Section B: Perception towards cervical cancer screening services

s/n	Statement	Agree	I don't know	Disagree
I	Pap smear would affect my privacy; I don't like it.			
II	I don't need pap smear since I am not promiscuous.			
III	I prefer traditional medicine as it cures cancer.			
IV	My culture forbids women undergoing such test.			
V	Cancer has no cure, so why going for any test for it?			
VI	Regular Pap smear screening can prevent development of cervical cancer.			

Section c: Awareness and knowledge of cervical cancer

12. Have you ever heard of cervical cancer? (i) yes (ii) no **(if no skip to Q16)**

13. What is your source of information? (i) Radio (ii) television (iii) neighbour (iv)from health worker (v) other (please specify)…….

14. What is cervical cancer…… (i) Abnormal growth in female's cervix (ii) Abnormal growth in female's womb (iii) Abnormal growth in female's vagina (iv) No idea

15. What do you think causes cervical cancer? (i) Virus (ii) bacterial (iii) Spiritual attack (iv) other (please specify) …….

16. The following factors increase women's chances of developing cervical cancer ;(Tick the one that applies to you)

s/no	Risk factors	Yes	No	Don't know
I	Having first sexual intercourse before age 16 years			
II	Infection with certain bacterial			
III	Infection with certain virus			
IV	Having more than one sexual partners			
V	Having had more than four children			
VI	Using oral contraceptives for years			
VII	Smoking of cigarette			
VIII	Late age at getting married			

17. Can cervical cancer be prevented? (i) Yes (ii) No (iii) Don't know

18. Can cervical cancer be treated? (i) Yes (ii) No (iii) Don't know

19. Do you think cervical cancer kills? (i) Yes (ii) No (iii) Don't know

20. Do you believe if diagnosed early, cervical cancer could be cured?

(i) Yes (ii) No (iii) Don't know

Section D: knowledge of cervical screening services

21. Do you know of any screening method for cervical cancer? (i) Yes (ii) No **(if no skip to Q 23)**

22. Tell me any of the methods you know of ….(i) Pap smear (ii) VIA (iii) Pap smear and VIA.

23. Have you ever heard of visual inspection with acetic acid (VIA)? (i) Yes

No **(skip to Q26)**

24. Through whom did you hear of VIA? (i) Media (Radio/television) (ii) Friends/relatives (iii) Neighbour (iv) From health workers (v) Other (please specify)…….

25. Have you ever heard of Pap smear? (i) Yes

No **(Skip to 27)**

26. What is your source of information about Pap smear? (i) Media (Radio/television) (ii) Friends/relatives (iii) Neighbour (iv) From health workers (v) other (please specify)……..

Section E: Utilization of cervical cancer screening services

27. Have you ever done any cervical cancer screening test before? (i) Yes (ii) No **(if no skip to Q 31)**

28. Which one did you undergo? (i) Pap smear (ii) VIA (iii) Other (specify)……..

29. When was the last time you did the screening? Please specify in years…….

30. Who influenced you to undergo the test for cervical cancer? (i) My doctor's (ii) My friends/relatives (iii) Personal decision after becoming aware of the test and the benefit of the test (iv) Other (specify please)……..

31. If no to **Q27**, why didn't you do any of the screening tests? (i) Lack of awareness (ii) Unavailable (iii) Too expensive (iv)It is against my religion/belief (v) Other (please specify) ……..

SECTION F: Barriers to utilization of the screening service

32. My husband has influence on my decision (i) Always (ii) Sometimes (iii) Never

33. Am not comfortable with Health workers attitude (i) Always (ii) Sometimes (iii) Never

34. The distance from my house to health facility is an issue (i) Always (ii) Sometimes (iii) Never

35. I don't have money to access health facility (i) Always (ii) Sometimes (iii) Never

36. My family does not see reason to go to health facilities (i) Always (ii) Sometimes (iii) Never.

SA=Strongly Agree,A=Agree,D=Disagree,SD=Strong Disagree

S/N	Statement	SA	A	D	SD
I	Getting a pap test would only make me worry and fearful if I eventually find out that I have the disease				
II	The pap test is painful				

III	It is too expensive to have a pap test				
IV	I feel embarrased to have any genital examination or pap test				
V	I do not know where I could go if I wanted Pap test because it is not available everywhere				
VI	I do not know at what age it is appropriate to go for pap smear				
VII	I do not have time to get a screening because it takes much time				
VIII	I have not gone for the screening because the Health facility screening service is only open during hours that is not convenient for me				
IX	Cervical Cancer Screening may get a woman's womb damaged or removed if not handled by a professional				
X	Cervical Cancer Screening can expose a woman to some sexually transmitted infections				
XI	My culture is against women going for screening				
XII	Going for cervical screening is a waste of time since cancer has no cure				

APPENDIX II
YORUBA QUESTIONAIRE

AKORI: IDENA SI LILO AYEWO ARUN JEJERE OJU OPO IBIMO LAARIN AWON OBINRIN TO TI BALAGA NI ILU ONDO NI IPINLE ONDO

Iwe ifohunsokan

Olufe owon,

Oruko mi ni WOMITENREN YEWANDE TOLU,moje akekoo onipo giga keji ti ile eko giga Unifasiti ti ile Ibadan ni ipinle Oyo.Mo nse akojo ayewo awon ohun ti ondena si lilo se ayewo arun jejere oju opo ibimo laarin awon to ti balaga ni ilu Ondo ni ipinle Ondo.

A yan yin lati fi oro wa yin lenu wo nitoripe e je okan ninu awon obinrin ti o ti balaga ati pe ise iwadi mi da awon wonyi,nitorina mo ma ni lati bere ibeere lowo yin lori sise ayewo fun jejere oju opo ibimo.

Mi o ni bere oruko,adiresi yin tabi oro ti a le fi da yin mo kan kan lowo yin.

Gbogbo oro ti e ba ba mi so yoo wa ni bon kele. Kikopa ninu ise iwadi yi kii se afipa mu nise,ko si ni ewu ti e ba ni e ko dahun ibeere ti mo ba bi yin.

Amon,kiko pa ni ise iwadi yi yoo tan imole si awon ohun ti o ndena si lilo se ayewo arun jejere oju opo ibimo ni ilu Ondo ni ipinle Ondo.

Fun iwadi nikan

Nomba idani mo ……
Ojo ……

Abala A: Ohun idamo nipa eniyan

1. Ojo ori ……

2. Ipo igbeyawo (i) Mi o ti se igbeyawo (ii) Mon gbe pelu afesona mi (iii) Mo ti loko (iv) Mi o gbe pelu oko (v) Mo ti ko oko (vi) Opo

3. Iru ebi wo (i) Aya kan oko kan (ii) Oko kan aya pupo (iii)Mi o ti loko

4. Iye iwe ti e ka (i) Mi o ka iwe rara (ii) Alako bere ni kan (iii) Iwe mewa (iv) Iwe onipo giga (v) Ati awon mi

5. Esin (i) Omo eleyin Kristi (ii)Islam (iii) Esin abalaye (iv) Ati awon mi

6. Eya (i) Yoruba (ii)Hausa (iii)Igbo (iv) Ati awon mi

7. Ojo ori ni igba igbeyawo ……..

8. Ise ti e n se ……

9. Iye omo ti e bi ……

10.Ojo ori yin ni igba ti e ni ibalopo akoko …….

11. Iye awon ti e ti balopo ni osu mefa seyin ……

Abala B: Ero si ayewo arun jejere oju opo ibimo

s/n	Oro	Mogba	Mi o mon	Mi o gba
I	Sise ayewo fun oju ara le se ipalara fun ipamora mi,mi o nife si			
Ii	Mi o ni lo ayewo nigba ti mi o se isekuse			
Iii	Mo fara mo lilo ogun ibile tori o un pa jejere			
Iv	Asa mi ko fara mo obinrin la ti se iru ayewo yi			
V	Jejere ko gbogun, nitorina kini idi fun mi lati se ayewo			
Vi	Sise ayewo lore kore le dena irufe aisan jejere opo ibimo			

Abala C: Imo nipa jejere oju opo ibimo

12. Se o ti gbo nipa jejere oju opo ibimo ri (i) Beeni (ii) Beeko (Bi o ba je beeko fo si Q16)

13.Ona wo lo ti gba gbo ni pa arun jejere oju opo ibimo (i) Asoro ma gbesin (ii) Telifisan (iii) Alabagbepo (iv) Lati odo osise ilera (v) Ona mi …….(ejo e salaye)

14 Kini jejere oju opo ibimo? (i) Siso abaadi ni oju opo ibimo obinrin (ii) Siso abaadi ni apo omo obinrin (iii) Siso abaadi ni oju ara obinrin (iv) Mi o ni oye ni pa e

15 Ki loro pe o le fa jejere oju opo ibimo? (i) Kokoro a i fojuri (virus) (ii) Kokoro a i fojuri (bacteria) (iii)Ogun aitojuri/ aransi (iv) Ona mi ……..(e salaye)

16 Awon ona yi le fa itan kale arun jejere oju opo ibimo laarin awon obinrin (Mu eleyi ti o ba wu e)

s/n	Ona ewu	Beeni	Beeko	Mi o mon
I	Nini ibalopo akoko ki a to pe omo odun merindinlogun			
Ii	Kiko ni pa kokoro a i fojuri(bacteria)			
Iii	Kiko ni pa kokoro a i fojuri(virus)			
Iv	Nini ibalopo pelu eniyan pupo			
V	Nini ju omo merin lo			
Vi	Lilo ogun feto si omo bibi fun odun to ti pe			
Vii	Mimu siga			
Viii	Pipe se igbeyawo			

17. Se a le dekun arun jejere oju opo ibimo? (i) Beeni (ii) Beeko (iii) Mi o mon

18. Se a le toju arun jejere oju opo ibimo? (i) Beeni (ii) Beeko (iii) Mi o mon

19. So lero pe arun jejere oju opo ibimo le pa eniyan ? (i) Beeni (ii) Beeko (iii) Mi o mon

20. Se o nigbagbo pe ti a ba se ayewo jejere oju opo ibimo nigbati o si mo ni won ba,a le se iwosan re? (i) Beeni (ii) Beeko (iii) Mi o mon

Abala D: Imo nipa ayewo arun jejere oju opo ibimo

21. Nje o mo ona ti a ngba se ayewo jejere oju opo ibimo? (i) Beeni (ii) Beeko (bi o ba je beeko lo si ibeere 23)

22. So awon ona ti o ba mo lati se ayewo yii …….(i) Omi oju ara (pap smear) (ii) Wiwo opo ibimo obinrin (VIA) (iii) Omi oju ara (pap smear) ati Wiwo opo ibimo obinrin (VIA)

23. Se o ti o gbo nipa wiwo oju ara pelu asidi acetic (VIA)? (i) Beeni (ii) Beeko(bi o ba je beeko lo si ibeere 26)

24. Nipa ona wo lo ti gba gbo ni pa arun jejere oju opo ibimo? (i) Asoro ma gbesi ati telifisan (ii) Ore ati ojulumo (iii) Alabagbepo (iv) Lati odo osise ilera (v) Ona mi

25. Se o ti gbo nipa omi oju ara(pap smear)? (i) Beeni (ii) Beeko (bi o ba je beeko lo si ibeere 27)

26. Nipa ona wo lo ti gba gbo nipa arun jejere oju opo ibimo? (i) Asoro ma gbesi ati telifisan (ii) Ore ati ojulumo (iii) Alabagbepo (iv) Lati odo osise ilera (v) Ona mi …(e salaye)

Abala E: Lilo ayewo arun jejere oju opo ibimo

27. Nje o ti fi igbakan se ayewo oju opo ibimo ri? (i) Beeni (ii) Beeko (bi o ba je beeko lo si ibeere 31)

28. Iru ayewo wo lo se? (i) Omi oju ara (pap smear) (ii) Wiwo opo ibimo obinrin (VIA) (iii) Ona mi ……(e salaye)

29. Igba wo lo se ayewo yi keyin? Odun melo seyin ……..

30. Tani o se agbateru bi o se lo se ayewo arun jejere oju opo ibimo ?(i) Dokita mi (ii) Ore mi/ Ojulumo (iii) Ipinnu mi leyin igba ti mo ti mo nipa ayewo na ati ere re (iv) Ona mi …..(e salaye)

31. Bi o ba je beeko si ibeere 27,kini idi ti o ko si fi se ayewo kan kan? (i) Mi o gbo nipa e ri (ii) Ayewo na ko si (iii) Oti won ju (iv) O lodi si esin mi ati asa mi (v) Ona mi…(e salaye)

Abala F:Idena si lilo ayewo arun jejere oju opo ibimo

32. Oko mi ni ase lori ipinnu mi (i) Nigbogbo igba (ii) Nigba miran (iii) Rara

33.Mi o gbadun iwa awon osise ilera (i) Nigbogbo igba (ii) Nigba miran (iii) Rara

34.Ibi ti won ti n se ayewo si ile mi je isoro fun mi (i) Nigbogbo igba (ii) Nigba miran (iii) Rara

35. Emi o ni owo lati se ayewo (i) Nigbogbo igba (ii) Nigba miran (iii) Rara

36. Ebi mi ko ri idi lati lo si ile-ise ilera (i) Nigbogbo igba (ii) Nigba miran (iii) Rara

s/n	Oro	Mo gba gidi	Mo gba	Mi o gba	Mi o gba rara
I	Sise ayewo ma da wahala ati eru ti o ba lo ja si wipe mo ni				
Ii	Ayewo na o ma dun yan				
Iii	O ti won ju la ti se ayewo na				
Iv	O ma je nkan itiju ti won ba se ayewo oju ara				
V	Mi o mo ibi ti mo ti le se ayewo na nitori ko si kakiri				
Vi	Mi o mo ojo ori ti o ye ki eniyan lo fun ayewo yi				
Vii	Mi o ni akoko lati lo se ayewo yi nitoripe o ma n gba akoko				
Viii	Mi o ti lo fun ayewo nitoripe ile-ise ayewo ko kin wa ni sisi ni akoko to rorun fun mi				
Ix	Ayewo arun jejere oju opo ibimo le da jamba ba apo omo obinrin ti eni ti ko ba je a kose mon se lo se ayewo na				
X	Ayewo arun jejere oju opo ibimo le si ona fun awon arun ti o ma wa lati ibalopo				
Xi	Asa mi lo di si ayewo na				
Xii	Li lo fun ayewo arun jejere oju opo ibimo je fifi akoko sofo nigbati o je wipe arun kogbogun ni				

APPENDIX III

Ondo STATE
IṢẸ LOÒGÚN ÌṢẸ

ONDO STATE GOVERNMENT
OFFICE OF THE PERMANENT SECRETARY
MINISTRY OF HEALTH

AD.4693/186 *17th October, 2014.*

Womitenren, Yewande Tolu
Dept. of Health Promotion and Education,
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APPROVAL OF ETHICAL REVIEW COMMITTEE

The proposal on "BARRIERS TO UTILIZATION OF CERVICAL SCREENING SERVICE AMONG WOMEN OF REPRODUCTION AGE GROUP IN ONDO TOWN AREA OF ONDO STATE" has been reviewed.

The Committee found the research proposal to be in compliance with guidelines for research study.

In view of the foregoing, the Committee has given approval for the conduct of the study as proposed.

Best regards.

Dr. E.T. Oni
Permanent Secretary/Chairman
Research Ethical Review Committee