THE UNIVERSITY OF ZAMBIA

SCHOOL OF MEDICINE

DEPARTMENT OF POST BASIC NURSING

"A STUDY TO DETERMINE WOMEN'S KNOWLEDGE AND PRACTICES TOWARDS CERVICAL CANCER AT ST. FRANCIS HOSPITAL IN KATETE

BY

AGNES MBEWE

ZRN (1988) LUSAKA

OTN (1994) LUSAKA

A RESEARCH SUBMITTED IN PARTIAL FULFILMENT FOR THE AWARD OF BACHELOR OF SCIENCE DEGREE IN NURSING AT THE UNIVERSITY OF ZAMBIA.

UNZA   FEBRUARY, 2008

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LIST OF ABBREVIATIONS

AIDS	-	Acquired Immune Deficiency Syndrome
ACCP	-	Alliance for Cervical Cancer Prevention
CBoH	-	Central Board of Health
CIN	-	Cervical Intraepithelial Neoplasia
CIS	-	Carcinoma In Situ
CIDRZ	-	Centre for Infectious Diseases Research in Zambia
CSO	-	Central Statistics Office
DHMT	-	District Health Management Team
E.C.G	-	Electrocardiograph (E.C.G)
HAART	-	Highly Active Anti Retroviral Therapy
HIV	-	Human Immunodeficiency Virus
HPV	-	Human papilloma virus
I.E.C		Information, Education and Communication
LEEP	-	Loop Electrosurgical Excision Procedure
MoH	-	Ministry of Health
SIL	-	Squamous Intra epithelial lesion
STIs	-	Sexually Transmitted Infections
U.TH	-	University Teaching Hospital
WHO	-	World Health Organisation
ZDHS	-	Zambia Demographic Health Survey

DECLARATION

I, Agnes Mbewe, hereby declare that the work presented in this study for a Bachelor of Science Degree in Nursing has not been presented either wholly or in part, for any other degree and is not being currently submitted to any other degree.

Signed: ...Mbewe............   Date: ..2./.04./.2008

(Candidate)

Approved: ...Musaleyela...........   Date: ...02/04/2008

(Supervising Lecturer)

STATEMENT

I, Agnes Mbewe, do hereby certify that this study is entirely the result of my own independent investigations. The various sources to which I am indebted are clearly indicated in the text and reference.

Signed: ....Mbewe...................... Date: ...2/04/ 2008.....

DEDICATION

To

My children Vaines, Salome and Marien for their understanding for I denied them motherly love at the time they needed me most

To

All women who are suffering or have suffered from cervical cancer.

ABSTRACT

Cervical cancer is an important women's reproductive health problem, especially in African countries where many women die from the disease each year. Unlike many cancers, cervical cancer can be prevented. With timely screening and appropriate treatment, deaths from cervical cancer can be reduced.

The reason of conducting this study was to find out why there was a progressive increase in cervical cancer incidences.

The focus of this study was to determine the women's knowledge and practices towards cervical cancer at St. Francis Hospital in Katete. This hospital is located in Katete district in Eastern Province along Great East Road.

Some of the factors that influence the topic under study include socio-cultural factors such as increased parity, socio-economical such as low educational levels and disease related factors like HIV/AIDS.

Literature review on cervical cancer was reviewed globally, regionally and nationally.

The study was conducted between August and September, 2007 on 50 women aged 15 to 60 years who had more than one (1) child. A non experimental explorative cross sectional study design was used and data was collected using a structured interview schedule.

The results of the study revealed that many participants were not knowledgeable about cervical cancer and the majority may be at risk of

suffering from cervical cancer at a later age due to early pregnancies and having many children and practising insertion of vaginal herbs. The study also revealed that there is no pap smear service accessible to clients in Eastern Province. All the hypotheses which were stated in the study were accepted.

The recommendation to the Ministry of Health is that it should work towards making the pap smear services available to most health facilities in the province for early detection of cervical cancer to reduce the mortality.

CHAPTER 1

1.0 INTRODUCTION

Over one million people get cancer each year and it is the leading cause of death today (http://www.cancer.org). Anyone can get cancer at any age, although about 77% of all cancers are diagnosed in people aged 55 years and older. Approximately one out of two men and one out of three women in America have some type of cancer at some point during their life time (http:/www.cancer.org). The sooner the cancer is found, and the sooner treatment begins, the better a patient's chances of cure.

Cervical cancer is the commonest reproductive cancer second to cancer of the breast and it is the silent killer disease ravaging many women of all races in the world (http://www.medscape.com). It is the major gynaecological health problem which still remains a leading cause of death among all cancers. "The incidence of cancer of the cervix in women ranges from 4.8/100,000 in West Asia, 44.3/100,000 in Eastern Africa and 61.08/100,000 in Zambia" (http://www. Medscape.com.).

1.1 BACKGROUND INFORMATION

Zambia is one of the countries in the Sub Saharan Africa. It is a land locked country covering an area of 752,612 square kilometres which is about 2.5% of Africa (Central Statistical Office, 2003). According to Central Statistical Office (CSO., 2003), Zambia shares boarders with the following countries, Democratic Republic of Congo and Tanzania in the North, Mozambique and Malawi in the East, Zimbabwe and Botswana in the South, Namibia in the South-Western part and Angola in the West. The country is divided into 9 provinces and 72 districts for administrative purposes. These provinces are Central, Lusaka, Copperbelt, Eastern, Northern, Luapula, North Western, Western and Southern. Copperbelt and Lusaka Provinces are predominately urban while the rest are rural.

Population

The population of Zambia is about 10.3 million people (C.S.O., 2003). The total number of females is estimated to be 51 percent and males are 49 percent. The annual growth rate is 2.9% (C.S.O., 2003). The population density is 65 people per square kilometre and 5 people per square kilometre in North Western Province. The mostly densely populated provinces are Copperbelt and Lusaka which are urbanised. The life expectance from birth is 48 years (C.S.O., 2003).

Health Care Systems in Zambia

Zambia's health care system faces many challenges. Financing of the Basic Health Care Package is one of the plans or strategies that were estimated to reduce both morbidity and mortality rates and contribute to poverty reduction. In 1980s, Zambia experienced a decline in its health services (Central Board of Health, 1997). Institutions and communities were affected by economic decline as budgets were reduced. There were no new facilities built to meet the need of the growing population. There was shortage of equipments, drugs and staff in the health institutions. Many preventable diseases were taking lives of young people. It is for this reason that Health Reforms were designed to reverse the situation or trends and to build a strong health nation.

According to Central Board of Health (CBoH, 1997), the Health Reforms created an enabling environment for achieving significant improvement for the people of Zambia. The main thrusts for Health Reforms were to decentralise the management planning and decision making for the smooth running of health services to the districts and hospital boards. This introduced a good referral system of cases from the community to the health centre, to the district hospital (first referral hospital), then to general hospital (second referral hospital) and later to central hospital or speciality hospital (third referral hospital) like University Teaching Hospital (U.T.H).

Overview of cervical cancer in Zambia

Zambian health care facilities offer curative and preventive services to the families and communities. Cervical cancer is one of the cases that are being

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attended to in health care facilities. The numbers of cervical cancer cases seen are increasing every year. The highest incidences of cervical cancer cases are reported from Lusaka followed by Eastern Province as shown on Table 1.

TABLE: 1

INCIDENCES OF CERVICAL CANCER IN THE LAST FIVE YEARS PER PROVINCE

	Central	C/Belt	Eastern	Luapula	Northern	N/Western	Southern	Western	Lusaka	Total
2002	1	0	40	2	3	1	16	1	126	190
2003	3	26	62	4	6	2	42	0	130	275
2004	7	28	68	3	7	2	44	2	175	326
2005	4	34	76	0	5	0	49	1	219	388
2006	2	36	42	0	2	0	26	0	275	386

SOURCE: ZAMBIA NATIONAL CANCER REGISTRY, U.T.H.

Summary of table 1.

The table above show a progressive increase in incidence of cervical cancer in Lusaka between 2002 to 2006 and in Eastern Province between 2002 to 2005.

1.2   STATEMENT OF THE PROBLEM

Cervical cancer was chiefly known to be the disease of the pre menopausal women with the peak incidence of 45% to 55% in the age group of 50 to 60 years (Chishimba, 2002). However, from mid 1990's the trend has been that more and more women are being diagnosed with the disease with the peak incidence in the age group of 34 to 45 years globally.

Regionally, in Sub Saharan Africa, cervical cancer still remains the most highest condition among all cancers.

St. Francis Hospital being a referral hospital attends to a lot of women with gynaecological problems and cervical cancer cases are among the list. Between 2005 and 2006, the numbers of cervical cancer cases increased from 82 to 87 (St. Francis Hospital, 2007). Most of these women sought medical attention when they have symptoms of abnormal vaginal bleeding and when the condition was in advanced stages which could not be treated. This, therefore, contributes to the increase in morbidity and mortality rates as the consequence of the problem.

It is in this reason that the government has availed free pap smear services in some health facilities, St Francis inclusive. However, pap smears at St Francis are not currently being done due to lack of trained personnel and sufficient equipment. Pap smear is important for screening and early detection of abnormal cervical cells which develop into cervical cancer.

In Lusaka district, the increase in the incidence of cervical cancer stands at 16% magnitude, while St Francis hospital in Katete district, has shown a progressive increase in the incidence of cervical cancer women of 12.5% magnitude between 2002 to 2006 as illustrated in table 1. These increases show a state of concern in our health care system.

1.3 FACTORS CONTRIBUTING/INFLUENCING TO THE INCREASED NUMBER OF CERVICAL CANCER CASES.

There are several factors that contribute to increased cervical cancer. These factors are discussed under broad categories such as socio-cultural factors, disease related and service related factors.

SOCIO-CULTURAL FACTORS

Age

A number of epidemiological investigations have found that women having sexual relations at early ages (before the age of 16) have about twice the risk compared to women who initiate sexual intercourse after the age of 20 years (WHO, 1992).

Traditionally, young women in Eastern Province are married off at an early age after they drop out at school or get pregnant C.S.O. (2003). This situation puts women at a higher risk of developing cervical cancer later in life.

Increased parity

The increased number of children (more than four) a woman gives birth to increases her chances of developing cervical cancer as a result of repeated trauma to the cervix during child birth (Ignatavicius and Workman, 2006).

Habits such as smoking of cigarettes

Smoking has demonstrated excess risk of both pre-invasive and invasive cervical abnormalities among smokers. Nicotine and cotinine have a biological mechanism for a smoker to develop cervical cancer (Lewis, et. al, 2004). Women who smoke have 50% higher risk for developing the cervical cancer than non smokers. This risk is greatest in those with longer smoking period, increased number of cigarettes smoked and use of unfiltered cigarettes.

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Traditional Beliefs

In most African traditions, women believe that whenever they have an abnormal vaginal bleeding, they have been bewitched. Therefore, they tend to seek service from traditional healers first before going to the hospital.

Traditional Practices

In most rural areas women have a practice of inserting herbs in the vagina with the belief that the herbs tighten and dry up the vaginal canal. This is because it is believed that their spouse enjoy sexual intercourse better in a dry and tight vagina (Nyirenda, 2006).

Religions

Some religions hinder their congregants from attending health services as they believe that God will heal their ailments. This increases the chances of conditions such as cervical cancer to progress without any intervention.

SOCIO-ECONOMICAL FACTORS

Poverty

Low socio-economic status causes poverty which encourages young ladies to engage in prostitution in order to make ends meet. Multiple sexual partners increase the risk of developing cervical cancer (Phipps et al., 2003).

Poverty causes some dietary deficiencies of vitamins A and C as well as derangement of folic acid which may cause immunosuppression which also increases the risk of cervical cancer (Phipps et al., 2003).

Low Educational Status.

Low education status among women make them not to be knowledgeable about the risk factors of cervical carcinoma as they are not likely to be visiting the health facilities for any services. Illiteracy makes understanding and articulation of issues to be very difficult (http://thegallopingbeaver.blogspot).

DISEASE RELATED FACTORS.

Human Papilloma Virus

Infection of human papilloma virus (HPV) is evidenced to contribute to the pathogenesis of cervical intra-epithelial neoplasia and cancer. Women with HPV are over fifteen times likely to develop cervical intra epithelial neoplasia than those without infection (Chela, 1996).

Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS)

HIV/AIDS alters the host immune system such that it predisposes her to opportunistic infections such as cervical cancer (Phipps et al., 2003). Women who are HIV positive have poor prognosis.

The chronic nature of the disease

The disease is chronic in nature, therefore, it is asymptomatic in early stages. This makes most women not to detect anything wrong until when the symptoms appear and this is quite too late for treatment.

SERVICE RELATED FACTORS

The health care facility staff and service provision can also have an influence on the knowledge and practices of women towards cervical cancer.

Staffing levels.

Staffing levels in health facilities leads to provision of poor quality service and short cuts. With limited staff at present in health facilities, inadequate health education on health related matters such as like cervical cancer, its causes or predisposing factors, its signs and symptoms and prevention is given to women as they attend health facilities for either curative or health promotion services. This influences the women not to have knowledge about the cervical cancer and they continue with the usual practices.

Staff attitude

Some health care staff have a negative attitude towards work such that they seem to be too busy to sit down with the clients to explain the services that

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are offered at the health facilities such as pap smear examination to detect any dysplasia of the cervix. This makes women not to be knowledgeable about the services that are available for screening purposes.

Lack of orientation

A lot of women are not oriented to where certain procedures such as pap smear can be done, so they are less likely to utilise the services.

Inadequate health facilities which offer pap smear examination.

There are inadequate health facilities which offer pap smear examination in the country especially in rural areas (MoH, 2006). This makes it difficult for women to access service in order to assess the conditions of their cervices for possible early treatment before any metastasis occurs.

FIGURE 1

1.4 DIAGRAM OF PROBLEM ANALYSIS

SOCIO-CULTURAL
LATED
FACTORS

DISEASE RELATED

FACTORS

SERVICE RE

FACTORS

| Age at first intercourse | Smoking cigarettes | Infections e.g HIV/AIDS and HPV | Inadequate health facilities |

| Traditional practices | Habits |

| Vaginal herbs | Increased cervical cancer cases | Lack of health education |

| Low education status | knowledge |

| Multi parity |

| Increased number of sexual partners | Increased STIs | Staff attitude |

| Low socio-economic status | prostitution | Staffing levels |

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1.5 JUSTIFICATION OF THE STUDY.

There has been an increase in the numbers of cancer of the cervix world wide. Zambia is equally affected. St Francis Hospital in Katete records increasing numbers of the same condition each year.

Deaths associated with cervical cancer are the most telling indicators of the disease's impact on women, their families and their communities. A mother's death dramatically compromises the health of a family especially the children. However, with timely screening and appropriate treatment, deaths from cervical cancer can be reduced.

In line with the government's vision of improving maternal health, this study endeavours to determine women's knowledge and practices towards cervical cancer. When the knowledge and practices of women towards cancer of cervix are known, measures can be put in place to assist women with knowledge about Pap smear services for screening and early diagnosis.

The findings of this research will be used to make recommendations to the health care providers, policy makers and Non Governmental Organisations (NGOs) to put strategies like I.E.C, an early diagnosis and Pap smear in place which will cater for the total health of the women.

1.6 RESEARCH OBJECTIVES.

1.6.1 GENERAL OBJECTIVE.

To determine the knowledge levels and practices of women towards cancer of the cervix at St Francis Hospital.

1.6.2 SPECIFIC OBJECTIVES.

• To assess the knowledge levels of women about cervical cancer.
• To identify women's practices which predispose to cervical cancer.
• To establish women's knowledge about Pap smear services.

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1.7 HYPOTHESES

• Lack of knowledge of women about causes of cervical cancer increases the chances of one to develop the cancer of the cervix.

• Women's sexual practices increases the risk of cervical cancer development.

• Inadequate information about Pap smear screening for cervical cancer leads to under-utilisation of the service in the country.

1.8 OPERATIONAL DEFINITION OF TERMS

Attitude	Manner of feeling and behaviour towards a particular thing.
Cancer	A growth which is malignant.
Cervix	The neck of the uterus.
Dysplasia	Abnormal tissue development.
Gynaenocological	Condition that pertains to women's reproductive system
Health facility	An institution that offers health care services to the people. This could be a health post, health centre or hospital.
In situ	The tumour that suggests malignancy microscopically but does not penetrate surrounding tissues.
Invasive	The ability of something to infiltrate the surrounding tissue and destroy it.
Knowledge	What one knows and understands about a certain phenomenon.
Practice	This is the ability to put something into action habitually.
Malignant tissues.	Abnormal tissue growth which spreads to surrounding
Staff	Health care providers who offer a service to the client.

1.9 VARIABLES AND CUT OFF POINTS.

A variable is a characteristic of a person, object, event or a phenomena that is capable of taking values (Polit and Hungler, 1997).There are basically two types of variables

• Dependent variable

• Independent variable

Dependent Variable

The dependent variable is often referred to as the consequence or the presumed effect that varies with a change in the independent variable. The dependent variable is a phenomenon in the experimental study used to test the hypothesis. It is not manipulated, but is accepted as it occurs. The dependent variable is also called the effect, response, criterion measure; behaviour or outcome that the researcher wishes to predict, study, explain etc. Example of dependent variable is increased cervical cancer cases.

Independent Variable

The Independent variable has a presumed effect on the dependent variable. The Independent variable is that phenomenon in the experimental study used to test the hypothesis, and is manipulated by the investigator to determine their relationship to observed phenomena. These influence the core problem. Independent variables are also those that stand alone and not dependent on any other. They are also called the cause, stimulus, experimental variable or treatment. Examples of Independent variables are age, religion and education. The indicator for age is as follows:- young age considered to range from 14 to 19 years, middle aged ranging from 20 to 40 years and elderly which is 41 years and above.

The indicator for educational level is as follows:- no formal education for those who never attended school, low educational level for those who had primary education, moderate level of education meant for those who had secondary education and higher educational level is meant for those who went up to college or university.

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TABLE: 2

VARIABLES AND CUT OFF POINTS.

VARIABLES	INDICATOR	CUT OFF POINTS	QUESTION NUMBERS
KNOWLEDGE	High level of knowledge	More than 4 correct responses	13, 14
	Moderate levels of knowledge	3 to 4 correct responses	13, 14
	Low levels of knowledge	1 to 2 correct responses	13,14
	Lack of knowledge	No correct response	9,12,15,16
PRACTICE	Good practices	Does not practice risk factors	18, 19, 22
	Bad practices	Practicing risk factors	18, 19, 22

2.0 LITERATURE REVIEW

2.1 INTRODUCTION

Literature review is a critical summary on the topic of interest, often prepared to put a research problem in context or as the basis for an implementation project (Polit and Hungler, 2001).

The purpose of review of literature is to determine what is already known about the topic under study so that the comprehensive picture of the state of knowledge on the topic can be given. Literature review gives the researcher some clues to the methodology and types of data collecting tools which can be used. It also helps the researcher to refine certain parts of the study.

Studies have been conducted world wide on the prevalence of cervical cancer, but very few have been conducted to find out why there was an increase in the number of cervical cancer.

Literature review for this study focuses on both published and unpublished studies. The literature related to the research problem identified about increased numbers of cervical cancer will be reviewed and discussed in this chapter under the following headings: global, regional, national perspectives.

2.2 GLOBAL PERSPECTIVE OF CERVICAL CANCER

"Each year 2,800 women in United Kingdom are diagnosed with cervical cancer" (http://www.cancer back up.org.).

"Cervical cancer is the commonest reproductive cancer among women in the United States" (Ignatavicius and Workman, 2006). It was estimated that more than 10,370 new cases of the invasive cervical cancer and more than 3,710 deaths occur in the United States annually. The incidence of Cervical Carcinoma in Situ (CIS) is at least five (5) times greater than that of the invasive cancer.

According to the report from the American Cancer Society (Ignatavicius and Workman, 2006), it was found that although the rate of the invasive cervical cancer has decreased over the last decade, it had increased in the recent years in women younger than 50 years. It was reviewed that Cervical Intraepithelial Neoplasia (CIN) occurs in young women with the peak incidence of dysplasia occurring in the clients in their mid-20s. CIS occurred in women of about 50 years old, and invasive cancer occurred most commonly in the late 40s.

Cervical cancer has a major impact on the lives of women world wide, particularly those in the developing countries. The Alliance for Cervical Cancer Prevention (ACCP, 2004), reported that approximately 1.4 million women worldwide are living with cervical cancer. The estimates reflected the accumulation of the new cases each year and the fact being that, few women in developing countries receive treatment. About 493,000 new cases of cervical cancer occur each year among women, while 274,000 women die from the disease annually. About 83% of new cases are in developing countries where screening programs are not well established or effective.

It costs about 100$ US to screen a woman for cervical cancer every five years and about 2 600$ to treat a woman with cervical cancer. According to ACCP (2004), the regions hardest hit by cervical cancer are among the world's poorest which are the Central and South America, the Caribbean, Sub Saharan African, parts of the Oceania and parts of Asia as shown in the figure in appendix iv.

Based on what is known about how cancer develops, two to five times this many women, or up to 7 million worldwide, may have precancerous condition that needed to be identified and treated. If the cancer is not detected in a timely way, cervical cancer is nearly always fatal. In developing countries mortality ratios are reported at 11.2 per 100,000 women on average. Nearly 40% of the cervical cancer deaths in developing countries occur in Central Asia, a heavily populated area that includes India, Pakistan and Bangladeshi (ACCP, 2004). India has an estimated number of 132, 000 new cases of

cervical cancer and some other incidence rates are reported from some countries such as Asia (30/100,000), Tanzania (69/100,000), Bolivia (55/100,000) and Papua New Guinea (40/100,000).

Current estimates of cervical cancer incidence and death rate are probably lower than the actual rates because many women are not aware or have no knowledge about the disease and do not receive medical care and therefore are not included in the cancer registries. Limitations of diagnostic facilities and their tendency not to reach older women (those with late stage illness) or those unable to pay for a services, present further challenge to developing accurate estimates. It was discovered that an important reason for the sharply higher incidence of cervical cancer in developing countries is lack of effective screening programs to detect precancerous conditions and treat them before they progress to cancer. Cervical cancer prevention efforts worldwide have focused on screening women for the disease using a laboratory test called pap smear which was developed in the 1940's and named after the inventor Dr. George Papanicolaou. Pap smear screening, followed by timely treatment when necessary has achieved impressive results in reducing cervical cancer in developed countries (ACCP, 2004).

According to WHO (1998), a study was done in United Kingdom by Sherman and Kurman in 1996 to identify which type of HPV predisposes to cervical cancer. The results showed that Squamous cell tumours in HPV 16 (55%) is predominant. Adenocarcinoma and adenosquamous tumours are more in HPV 18 (14%) followed by HPV45 (11%) and HPV 31 (5%). The results confirm a role of HPV, a sexually transmitted agent, as the central etiological factor for cervical cancer world wide. They also suggest that most genital HPV are associated with cancer of the cervix at least occasionally (WHO, 1998).

A study which was done on prostitutes by Armstrong and Munoz in Spain in 1996 showed that HIV positive prostitutes were at high risk of Cervical Intraepithelial Neoplasia (CIN) as compared to HIV negative prostitutes or as compared to a group of non-prostitutes. No association between CIN and

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positivity to serological markers of the exposure to Chlamydia trachomatis and Treponema pallidum where found (WHO, 1997).

Another cohort study was conducted in Sweden among 36,856 women, after hospital discharge diagnosis of alcoholism between 1965 and 1994 (http://cepb.aacrjournals.org). The aim of the study was to compare the incidence of the cancers among alcoholics and the general population.

The study revealed that among women alcoholics, the excess risk for invasive cervical cancer might not arise only because they get fewer pap smears. These alcoholic women were also at higher risk for progression from HPV infection to a malignant lesion for lifestyle-related reasons, such as promiscuity and early initiation of sexual intercourse. Alcoholic women are likely to have smoked more than women in general. Women who smoke have a significantly increased risk of cervical cancer compared with non-smokers. Tobacco-specific carcinogens were present in the mucus of the female genital tract. Therefore, smoking was a strong confounder for noncervical genital cancers which makes the direct contact possible between the carcinogens and the cervical and vulvar tissues (http://cepb. aacrjournals.org).

Another study which was done by Bosch and Magnin in Columbia in 1995 showed that the ever use of oral contraception for an extended period of time over 5 years was related to cervical cancer (WHO, 1996), and they also reported that early age at first intercourse was the independent factor for CIN III. The other results from the study suggested an independent effect for low educational level, number of sexual partners and early age at first birth.
It was also reported that there is greatly reduced risk of cervical cancer in nuns (sisters) due to abstinence from sexual intercourse (WHO, 1996).

According to a study which was conducted in Peru San Martin rainforest region in 1999, 100 women had their pap smears done. 23% of women had abnormal pap smears and were given treatment as well followed up (http://www.path.org). It was observed that women harboured a lot of

misconceptions about the disease as many women said it was punishment from God for something that was done in the past.

According to WHO (2005), a study was conducted in Rhode Island among 147 Dominicans and Perto Ricans women aged between 25 to 45 years to explore perception of cervical cancer in 2004. The results revealed that women would only get a cervical test if they have knowledge and proper explanation about a particular service. 60% of these women did not practice regular screening as they held misconceptions about the screening guidelines. 20% cited confianza (trust and confidence) in their doctors as they provided information and explanations as important factors in increasing their likelihood of getting screened. 20% of the clients did not even try to have the test as they were not aware of the test.

2.3 REGIONAL PERSPECTIVE

The most common female tumor in Africa is cancer of the cervix, a disease associated with HPV (http://www.voanews.com). Poor nutrition aggravates the situation because it compromises the immune system.

Cervical cancer has been depleting the health economic and social infrastructures of the countries throughout the Sub-Saharan Africa (ACCP, 2004). In African population, carcinoma of the cervix develops in much young age groups.

Lima, et al., (2006), conducted a retrospective case-control study to analyze histopathological results from 201 women (94 HIV positive and 107 HIV negative) who underwent loop electrosurgical excision procedure (LEEP) in Belo Horizonte, Brazil. In this study, researchers looked at recurrence of cervical lesions after LEEP which is a form of treatment used to excise abnormal cervical tissue (http://hivandhepatitis.com). Patients were followed up for a period of two years, with cytological and colposcopic examinations every six months.

The results revealed that Cervical Intraepithelial Neoplasia (CIN) recurred in 40 women after LEEP. In a logistic regression analysis, it was found that factors independently associated with recurrence were glandular involvement (95%), HIV infection (95%) and compromised margins of cervical lesions (95%).

Rates of recurrence were 33% among HIV positive women, compared with 8% among HIV negative women. Among the women with HIV, risk of recurrence was higher among those with lower CD4 cell counts.

From this study, the main risk factors associated with cervical intraepithelial neoplasia recurrence after loop electrosurgical excision procedures were HIV-1-infection, glandular involvement, and compromised margins in cone biopsy.

According to a study conducted in Nigeria and Kenya in 2000, on 150 women aged 20 to 50 years revealed that 10% to 15% of women knew about cervical cancer and far fewer knew ways to prevent it (Ikeoluwapo and Adewolfe, 2001). The women did not go for screening because of the embarrassment about having the examination and fear of the procedure.

In Ghana, a project was done at Ridge Hospital and Amasaman Health Center in the Greater Accra Region, between 2002 and 2003, 100 women had a Pap smear test for the screening of the cervical cancer. 13% of these women had results indicating precancerous conditions and 6% were tested to have the cervical cancer. The project also undertook outreach efforts to try to motivate women to get tested and to gain their husband's support. The project demonstrated that educational and counselling messages must be refined so that clients and male partners could better understand test results and the differences between cervical cancer and precancerous conditions (Amy and Koustky, 2004).

A study done in South Africa, in 1998 revealed that out of women who had Pap smear done on them, 60% to 80% of women who had a positive diagnosis of pre cancerous cells never returned back to health facility for follow up (Eric and Crum, 1999). 34% of these were followed up in their

homes while the rest could not be traced due to the fact that people were constantly moving in search of employment. As a result women would report back to the health facility when the condition was worse.

Another study done in Uganda by Ssembatya (1995), reported that a majority of the women did not want to undergo a pap smear because of shame and embarrassment that was associated with the examination. This caused a lot of women no to use the services available.

2.4   NATIONAL PERSPECTIVE

Cervical cancer has been reported to be highest among all cancers in Zambia with the peak age group ranging from 25 to 65 yeas as shown in Table 3 on the next page.

TABLE: 3

AGE GROUP DISTRIBUTION OF CERVICAL CANCER

YEAR	0-14	15-24	25-34	35-44	45-54	55-64	65+	NOT KNOWN	TOTAL
2002	1	1	32	54	30	34	21	17	190
2003	1	3	40	44	72	41	30	26	257
2004	0	46	94	94	66	67	30	17	326
2005	0	8	45	88	77	48	54	68	388
2006	0	4	57	110	66	50	56	43	386

SOURCE: ZAMBIA NATIONAL CANCER REGISTRY, U.T.H

Summary of the table:

There is an increased incidence of cervical cancer in age groups of 15 to more 65 years from 2002 to 2006.

According to Parham, et al., (2006) a presentation was made at the XVI International AIDS Conference, on August 13-18, 2006, in Toronto, after the cross-sectional study was conducted to determine Prevalence and predictors of squamous intraepithelial lesions of the cervix in HIV-infected women in Lusaka. A study was done on 150 non-pregnant, 36 years, HIV-infected women who received care in Lusaka at University Teaching Hospital (http://hivandhepatitis.com/email).

The women had pelvic examinations, and their cervical cell samples were tested for HPV and analyzed for cellular abnormalities using the Thin Prep Pap Test.

The results showed that 90% of the women had some degree of cervical cell abnormalities and only 6.2% were normal. The mean CD4 cell count was 161cells/mm3. 77% were on antiretroviral therapy, but most of them had started Highly Active Anti Retroviral Therapy (HAART) only within the previous six months and the remaining 23% were treatment-naive. Only 6% of the women had completely normal cervical cell samples, leaving more than

90% with some degree of abnormality. Low-grade Squamous Intra epithelial lesion (SIL) was present in 23%, while 34% had high-grade SIL, and 19% had lesions suggesting cervical cancer. The remaining 17% of women had lesions of indeterminate status.

The same study revealed that only 2% smoked tobacco (a known risk factor for cervical cancer), 17% had six or more lifetime sexual partners (another known risk factor), and 25% reported consistent condom use. More than 85% had one or more "high-risk" types of HPV associated with cervical cancer, The most common HPV types were 16,18, 52, 61, 62, and 58 while many women had multiple types.

In this study, most women had been on HAART only for a short time. Therefore, it was not possible to determine whether antiretroviral therapy and CD4 cell recovery had an effect on progression of cervical abnormalities. However, severe cervical abnormalities were significantly associated with older age, Lower CD4 cell count and presence of high risk HPV types.

A study done at University Teaching Hospital (UTH) by Chishimba in 2002 in wards CO2, CO3 and gynaecological clinics on a sample of 150 cervical cancers, 100 were case files and 50 were interviewed. It was found that the most affected age groups were 41 to 45 years. 30% (45 cases) fell in this age group, followed by 46 t0 50 years age group 26%. 70% (106 clients were married and 26% (24) were divorced and 7% were single. These results confirm that cancer of the cervix is the highest in women who are sexually active or had been sexually active before the onset of the disease.

Out of the 50 patients who were interviewed 80% (40) had gone as far as Primary level in education or never went to school, 12% went up to Secondary school and 8% went up to University. The importance of education is appreciated because those who are educated have a higher chance to undergo one or more cervical screening test.

From the study, it was revealed that those with higher education had good knowledge about the cervical cancer (80%). It was also found that about 64%

(32) started sexual intercourse at between 16 to 19 years, 28% (14) had first intercourse between the age of 12 to 15 years, 4% (2) had sex intercourse over the age of 20 and 4% (2) had first intercourse between the age of 8 to 11 years. This was concluded that about 96% were teenagers at their first encounter. This confirms that sexual intercourse at an early tender age predisposes many women to cervical cancer.

In the same study, 62% (31) respondents had 2 to 3 sexual partners before the onset of the disease, 8% had between 4 to 5 sexual partners and 6% had over 6 sexual partners.

Those who had over 4 sexual partners, 60% of them had STIs which included gonorrhoea (25%), syphilis (20%) and 15% had HPV 16 and 18.

This confirms that the higher the number of sexual partners the higher the chances of getting sexually transmitted infections (STIs) which increases the risk of one to develop cervical cancer.

Chishimba further discovered that the symptoms the women presented with were vaginal discharge 27% (40), inter menstrual bleeding 23% (35), backache 18% (27), post coital bleeding 7% (10) and a total of 38 patients (25%) with a combination of the above symptoms. It was revealed that more clients reported late for medical attention due to the strong belief in traditional medicines. Overall 70% (35) of patients interviewed reported after two months sited having tried traditional medicines, 30% (15) reported late to hospital as they thought the symptoms will cease on their own. Out of these 82% (117) presented to hospital in stage II and III while 16% reported early enough. This was attributed to low levels of knowledge about the disease among women.

Furthermore, Chishimba did the HIV test on 50 clients and 70% of these were HIV positive. The most affected age group between 35 to 40 years comprised 48%. This confirms that HIV infection increases the chances of one to develop cervical cancer and this age group is vulnerable since they are sexually active.

A case control study was conducted by Kilembe in 2002, at U.T.H in the department of Obstetrics and Gynaecology to determine the common factors which are associated with cervical cancer. A sample of 39 subjects was used, it was found that the most affected (17 or 43.6%) were aged between 35 to 44 years, 13 (33.3%) were between 25 to 34 years and the least affected were aged between 45 to 54 years with 9 (23.9%). It was observed that 22 (56.6%) had sexual intercourse before the age of 16 years while 3 (7.7%) had sexual intercourse after the age of 20 years. 11 (28.2%) had many sexual partners and 285 (71.8%) had the parity of between 5 and 8 children.

This indicated that cervical cancer is more common among women who indulge in sexual intercourse at an early age, those with more than one sexual partner in the previous ten years and high parity.

According to a study done by Chela, (1996) in Lusaka urban, on 100 clients on knowledge about cervical cancer revealed that 58% (58) women had heard about cervical cancer while 42% (42) had never heard about it and when they were asked 24% (24) gave a proper description of the condition, 16% (16) had a misconception and 60% (60) could not describe it.

A study done by Kasolo in 1987, at U.T.H on 276 patients (168 females and 108 males) admitted with malignancies, revealed that the commonest carcinomas were cancer of the cervix (28.9), cancer of the liver (13.0%), Kaposis Sarcoma (10.1%), cancer of the oesophagus (7.6%), breast (7.6%) and urinary bladder (6.5%). An increase in the cases cervical cancer and Kaposis Sarcoma was related to HIV/AIDS incidences.

This concludes that cervical cancer is more common in the HIV positive women because numbers of the cases are high in patients with HIV.

Another study was done by Kaliba, (1999), at U.T.H on 50 subjects who were nurses. The study revealed that most women had overwhelming positive

attitudes towards screening for cervical cancer but 88% had poor practice towards the examination. The reason was that they were afraid of unknown. 12% expressed that they were not aware about the test being done at U.T.H.

CONCLUSION

From the above studies many assumptions can be drawn such as the following. The women's knowledge about cervical cancer can be misunderstood and can cause under utilization of the pap smear service. Women who are pre menopausal and those who are sexually active are more vulnerable to developing the disease and clients who delay in seeking medical attention risk poor prognosis. Therefore, the earlier the client seeks medical attention when she presents with symptoms, the better the prognosis of condition.

Low socio economical status is also a predisposing factor to developing cervical cancer as women may engage in prostitution which increases the number of sexual partners that encourages transmission of STIs later leading to cervical cancer.

Women with HIV are more likely than HIV negative women to be infected with human papillomavirus (HPV), and are more likely to develop pre-cancerous cell changes, known as squamous intraepithelial lesions (SIL) or cervical intraepithelial neoplasia (CIN). They also have a faster rate of progression from low-grade to high-grade SIL, are less likely to experience spontaneous regression and are more likely to experience recurrence after treatment.

There is a linear relationship between decreasing CD4 cell counts and increasing cervical abnormalities. The high prevalence of abnormal squamous cytology in some studies was due to severe immunosuppression among the women studied, and that poor nutrition may also play a role. In wealthy countries, invasive cervical cancer is not more common among HIV positive women, largely due to routine Pap screening that detects early cervical lesions at a treatable stage. In low-income countries before the advent of HAART, women with cervical abnormalities typically died of other causes before they had a chance to develop full-blown cervical cancer.

CHAPTER 3

3.0 RESEARCH METHODOLOGY

3.1 INTRODUCTION

According to Polit and Hungler (2001), research methodology is the method or technique used by the scientist to collect data, to use statistical manipulation and to arrive at a logical conclusion. This chapter focuses on the research design, study setting, study population, sample selection, sample size, data collection tool, data collection technique, pilot study, validity, reliability, ethical and cultural considerations of the study.

3.2 RESEARCH DESIGN

A research design is the researcher's overall plan or strategy for answering research questions or testing the hypotheses (Polit and Hungler, 2001).

A non experimental explorative cross sectional study design was used for this study. The design was appropriate for this study because the researcher sought to identify and explore the variables responsible for the increase of cervical cancer in Katete. The design, therefore, enabled the researcher to gain more understanding of the problems through the levels knowledge and practices women had towards cervical cancer without any manipulation of variables.

3.3 RESEARCH SETTING

According to Polit and Hungler (2001), a research setting is a physical location and conditions in which data collection takes place in a study.

The research study was conducted at St. Francis hospital. This hospital is located in Katete district in Eastern Province along Great East road. Katete district shares boundaries with Chadiza, Chipata, Petauke and Mambwe districts as well as the country of Mozambique. The hospital is 4.5 kilometres away from Katete shopping centre.

District Profile

Overview of Katete District

Katete district is situated about 490 kilometres from Lusaka (CSO., 2003). According to CSO (2003), the district has the population of 240, 097 and the majority of the people are subsistence farmers who grow maize, groundnuts, sunflower and cotton.

Poverty and illiteracy levels are very high in the district such that children do not go far in education and girl children are forced into early marriages and some engage in prostitution in order to find financial resources to earn a living. (CSO., 2003). This predisposes girls more to development of cervical cancer at a later age.

Katete district being along the Great East Road, has a lot of primary schools and a number of secondary schools (CSO., 2002). It also has one second level hospital and 25 health centres.

Hospital Profile

Katete district has a second level hospital called St. Francis. The hospital was founded by the Anglican Church in 1948 (St. Francis Hospital, 2006). St. Francis hospital is a referral hospital for Eastern Province. The hospital has a bed capacity of 360 beds. A lot of patients with different gynaecological problems such as cervical cancer, uterine fibroids, vesicle vaginal fistula, abortions, and infertility seek medical attention from St. Francis. These clients come from within and outside the district.

St. Francis hospital offers specialised services such as X- rays, Electrocardiograph (E.C.G) and Ultrasound. Furthermore, the hospital has other specialties like medical, surgical, eye, dental, gynae and family planning clinics.

This study was conducted in two clinics which are Gynae and Family planning clinics. These clinics attend to a lot of female clients from most parts of the province with different ailments pertaining to reproductive health.

The research setting was chosen because it has a qualified gynaecologist therefore, a lot of clients are referred from different parts of the province to the hospital. This availed the researcher with a chance of getting views from women with different backgrounds and education levels.

3.4 STUDY POPULATION

A study population refers to the entire number of units under study (Walter, et. al., 2005).

The study population comprised all the women aged between 15 to 60 years who were attending family planning and gynae clinics at St Francis hospital. The target population were women with more than one child.

3.5 SAMPLE SELECTION

Sample selection is the process of selecting a portion of the population to present the entire population (Polit and Hungler, 2001).

Probability sampling method was used to select the sample for the study. According to Basson and Uys (2000), this type of sampling method gives all the units equal chances of inclusion in the sample. The primary characteristic of probability sampling is the random selection of elements from the population. Simple random sampling was the sampling design which was used to select the subjects for the study and the rotary technique was employed.

Every morning during the period of data collection, the researcher introduced herself to clients at either gynae or family planning clinics. A brief explanation about the study was given. The cards of the women who were willing to participate in the study were collected to ascertain their ages and parity. All those who were in age group 15 to 60 and with more than one child were taken aside. The researcher wrote two sets of similar numbers on the pieces

of paper depending on the number of women on a particular day. Each woman was asked to pick a piece of paper from one set. The researcher selected randomly by rotary technique 5 papers from the other set of pieces of paper. Those women who had the similar numbers as the ones the researcher picked participated in the study. On each day 5 participants were selected until the required sample size of 50 was reached.

The selection was entirely objective and free from personal prejudice. The method gave each participant an equal chance of being included in the sample and this was feasible in terms of time, human, financial and material resources.

The advantages the researcher encountered were as follows:
• The only prior information the researcher needed to interview the women were their age and parity.
• The method used made selection of participants quick and easy in the sense that all what the women did in order to be included in the study, was to pick papers. No interviews were data prior to data collection.
• This method enabled the researcher to collect data from women from different cultural, social and economic background because they were selected randomly.

3.6 SAMPLE SIZE
Sample size is the total number of subjects/objects to represent the population under study (Basson and Uyus, 2000).

A sample size of 50 women participated in the study. The sample size was considered because of the limited time and financial resources in which the study was conducted.

3.7 DATA COLLECTION TOOL
According to Walter, et. al.,(2005), a data collection tool is an equipment used to collect data, it may take a form of a questionnaire, an interview

schedule, a projective device or some other type of tool for eliciting information .

In this study, the data collection tool that was used is the structured interview schedule. Data collection was done between 27thAugust to 7th September, 2007.

An interview schedule is a guide to interview which allows the investigator to question research subjects about facts, ideas, behaviours, preferences, problems, feelings, attitudes and so forth (Basavanthappa, 2006). A structured interview schedule was used to collect data from the respondents because they had different educational levels. Some of the candidates were able to read and write while others were not able to do so. Furthermore, the instrument allowed the participants to seek clarification of questions where the respondent was not clear. The instrument has a higher response rate than written questionnaires because the researcher would ensure the participant answers all the questions.

3.8 DATA COLLECTION TECHNIQUE

Data collection technique is the actual method on how the data is going to be collected; it allows for systematic collection of information from respondents (Polit et. al., 2001).

The interview was conducted in the following manner:-

- The interviews were done in the In-charge's office and one of the screening rooms of the Gynae and Family planning clinics respectively.
- The researcher introduced herself to the participant in order to make the participant feel at ease.
- The purpose of the study was explained to the participant to enable the participant participate in a study that she was fully aware of.
- Confidentiality was assured to enable the participant participate in the study without any fear.
- Questions were read clearly to avoid cross examining participant.

- Questions not understood were repeated, in order to maintain the same meaning and without indicating the direction to the answer.
- Probing was done to questions not fully answered by participant.
- All the responses were immediately noted down on the interview schedule to avoid missing out any information.
- At the end of each interview, the researcher checked through the interview schedule for consistency in the answers given and for completeness of the interview schedule.
- The researcher asked the participants for any questions, comments or contributions regarding the study and thanked the respondents for taking part in the study.

3.9 PILOT STUDY

According to Polit and Hungler, (2001), a pilot study is a small scale version or trial of the major study. The pilot study was carried out at UTH (Gynae clinic – B 02) from 20 to 21st August 2007. Five (05) women participated in the pilot study. The pilot study findings were used to make necessary changes to the methodology.

3.10 VALIDITY

Basson and Uys, (2000) define validity as "the degree to which an instrument measures what it is supposed to measure. It constitutes both internal and external validity". External validity is the extent to which the findings of the research can be generalized to a larger population or to a different social, economical and political setting (Basson and Uys, 2000). To ensure external validity the sample size comprised people from different social, economic, political and religious backgrounds.

Internal validity refers to interpretation of the findings within the study or data collected (Basson and Uys, 2000). It is concerned with the extent to which conclusions can be drawn about the effects of one variable on another e.g. independent on the dependent variables.

To maintain internal validity, the same questions were asked to all research participants and questions were made simple, concise and brief. For content validity, all the variables under study were covered in the interview schedule. The questions were clearly constructed and pre-tested to avoid misunderstandings. For face validity, the interview schedule was tested during the pilot study and three colleagues who have done research before were asked to check the interview schedule before use to ensure that it measured what it was supposed to measure.

External validity is the extent to which the findings of the research can be generalized to a larger population or to a different social, economical and political setting (Basson and Uys, 2000). To ensure external validity the sample size comprised people from different social, economic, political and religious backgrounds. In addition, current sources of literature on cervical cancer and experts were consulted to evaluate the tool.

3.11 RELIABILITY

Reliability is the measure of the extent to which random variation may have influenced stability and consistency of the results (Morse and Field, 1996). The instrument should be able to bring out the accurate information whereby if the same instrument has to be used after some time, it would produce the same responses. The same instrument was used to collect data from all the respondents and the scientific calculator was used for data analysis.

3.12 ETHICAL AND CULTURAL CONSIDERATIONS

The development and implementation of research should be ethically and culturally acceptable. According to Polit and Hungler, (2001), ethics are a system of moral values that is concerned with the degree to which research procedures adhere to professional, legal, and social obligations to study participants. It is important to consider ethics in research to ensure the protection of human rights.

The researcher got permission to carry out the study from, Head of Department of Post Basic Nursing – School of Medicine, Executive Director of St. Francis Hospital and research participants.

CHAPTER FOUR

4.0 DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 INTRODUCTION

The purpose of this chapter is to present information on how the research data were analysed and what information was obtained.

4.2 DATA ANALYSIS

Data analysis is the systematic organisation and synthesis of research data, and the testing of research hypotheses using those data (Polit and Hungler, 2001).

The data presented were obtained from 50 respondents who were chosen randomly. After the data was collected, it was sorted out, edited for consistency and accuracy. Furthermore, data was re-arranged manually using a data master sheet as soon as the data was collected and a scientific calculator was used to analyse the data.

4.3 PRESENTATION OF FINDINGS

Data has been presented on frequency tables, pie charts, and cross tabulations. The tables are suitable because they summarise the findings in meaningful ways, which are easy to understand. The cross tabulations are helpful in showing the relationships between the variables from which meaningful inferences can be drawn. The findings have been presented under sections A, B and C.

- Section A will present the respondents' demographic data
- Section B will present the women's knowledge of cervical cancer
- Section C will present the women's practice towards cervical cancer.

SECTION A. DEMOGRAPHIC DATA

Table 4: Participants' age distribution (n=50)

Age	Frequency	Percentage
15-19 years	1	2
20-24 years	7	14
25-29 years	7	14
30-34 years	11	22
More than 34 years	24	48
Total	**50**	**100**

24 (48%) participants were aged more than 34 years, 11 (22%) were aged between 30-34 years, 7 (14%) were aged between 25-29 years, 7 (14%) were aged between 20 -24 years, whereas 1 (2%) of participants were aged between 15-19 years.

Table 5: Participants' marital status (n=50)

Marital status	Frequency	Percentage
Single	3	6
Married	36	72
Separated	0	0
Divorced	3	6
Widowed	8	16
Total	**50**	**100**

The majority of the participants, 36 (72%) were married, 3 (6%) were single, 3 (6%) were divorced, while 8 (16%) were widowed.

Figure 2: Participants' religion (n=50)
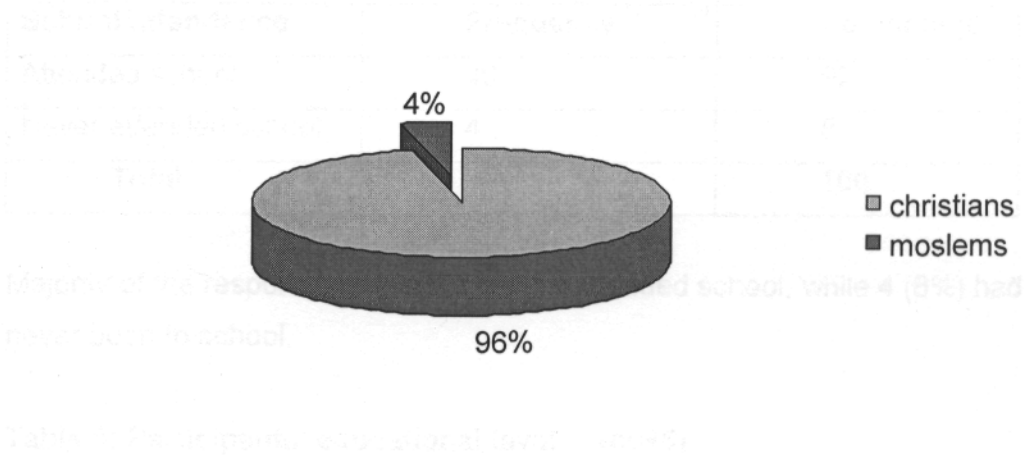
48 (96%) of the participants were christians whereas 2 (4%) were moslems.

Table 6: Participants' denomination (n=48)

Denomination	Frequency	Percentage
Roman Catholic Church	13	27.1
Pentecostal	8	16.7
Jehova's Witness	6	12.5
Reformed church in Zambia	12	25
African church	5	10.4
New Apostolic church	4	8.3
Total	**48**	**100**

Out of 48 (100%) respondents who were christians, 13 (27.1%) belonged to the Roman Catholic Church (RCC), 8 (16.7%) belonged to Pentecostal, 12 (25%) belonged to Reformed Church of Zambia, 6 (12.5%) belonged to Jehovah's Witness, 5 (10.4%) of the respondents belonged to African Church, while 4 (8.3%) belonged to New Apostolic Church.

Table 7: Participants' school attendance (n=50)

School attendance	Frequency	Percentage
Attended school	46	92
Never attended school	4	8
Total	**50**	**100**

Majority of the respondents, 46 (92%) had attended school, while 4 (8%) had never been to school.

Table 8: Participants' educational level   (n=46)

Educational Level	Frequency	Percentage
Primary	21	45.6
Secondary	15	32.6
College	10	21.7
University	0	0
Total	**46**	**100**

Out of 46 participants who had attended school, 21 (45.6%) had primary level education, 15 (32.6%) had secondary education, 10 (21.7%) went up to college, while none of the participants attended university education.

Table 9: Participants' number of children (n=50)

Number of Children	Frequency	Percentage
2	21	42
3	11	22
4	8	16
More than 4	10	20
Total	**50**	**100**

21 (42%) of participants had 2 children, 11 (22%) had 3 children, 8 (16%) had 4 children, while 10 (20%) had more than 4 children.

Table 10: Participants' age at birth of first child   (n=50)

Age	Frequency	Percentage
14-16 years	10	20
17-19 years	18	36
20-22 years	13	26
More than 22 years	9	18
Total	**50**	**100**

18 (36%) of respondents were aged between 17-19 years when they had their first child, 13 (26%) were aged between 20-22 years, 10 (20%) had their first child when they were aged between 14 -16 years, whereas 9 (18%) were more than 22 years when they had their child.

SECTION B. KNOWLEDGE OF CERVICAL CANCER

Table 11: Ever heard of cervical cancer (n=50)

Ever heard of cei cancer	Frequency	Percentage
Yes	41	82
No	9	18
Total	**50**	**100**

Majority of respondents 41 (82%) had heard about cervical cancer, while 9 (18%) had never heard about cervical cancer.

Figure 3: Sources of information about cervical cancer   (n=41)
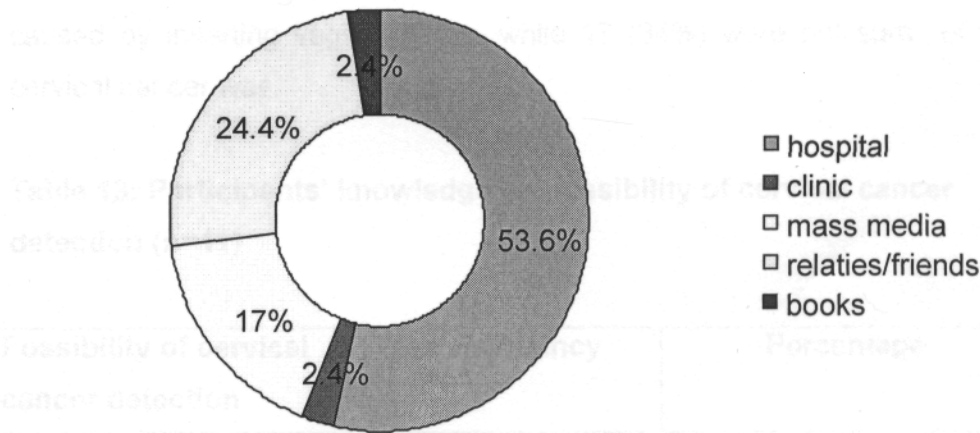
Of the 41 participants who had heard of cervical cancer, 22 (53.6%) participants had the information about cervical cancer from the hospital, 10 (24.4%) from relatives/friends, 7 (17%) from the mass media, 1 (2.4%) from the clinic, while 1 (2.4%) of participants read about cervical cancer from the books.

Table 12: Participants' explanation of cervical cancer (n=41)

Explanation of cervical cancer	Frequency	Percentage
Malignant tumour	5	12.2
Sores in the uterus	12	29.3
Disease which is caused by vaginal herbs	3	7.3
Genital sores	4	9.7
Not sure	17	41.2
Total	**41**	**100**

5 (12.2%) participants explained that cervical cancer was a malignant tumour of the cervix and uterus, 12 (29.3%) explained that cervical cancer were sores of the uterus, 4 (9.7%) explained that cervical cancer were genital sores, 3 (7.3%) explained that cervical cancer was a diseases which is caused by inserting vaginal herbs, while 17 (34%) were not sure of what cervical cancer was.

Table 13: Participants' knowledge on possibility of cervical cancer detection (n=41)

Possibility of cervical cancer detection	Frequency	Percentage
Yes	34	82.9
No	3	7.3
Not sure	4	9.8
Total	**41**	**100**

Majority of them 34 (82.9%) stated that it was possible to detect cervical cancer, 3 (7.3%) stated that it was not possible to detect cervical cancer, while 4 (9.8%) were not sure whether it can be detected or not.

Table 14: Participants' responses on methods of cervical cancer detection (n=34)

Method	Frequency	Percentage
Pap smear	7	20.6
Scanning of uterus	1	2.9
Biopsy of cervix	4	11.8
Vaginal examinations	16	47.1
Urine and blood test	6	17.6
Total	**34**	**100**

Out of 34 (100%) respondents who stated that it was possible to detect cervical cancer, 7 (20.6%) mentioned pap smear as a method of detection of cervical cancer, 1 (2.9%) mentioned scanning, 4 (11.8%) mentioned biopsy of the cervix, 16 (47.1%) mentioned that cervical cancer could be detected by vaginal examination, whereas 6 (17.6%) mentioned urine and blood tests as methods for detecting cervical cancer.

Table 15: Participants' response on whether they knew the predisposing factors of cervical cancer (n=50)

Knowledge about predisposing factors	Frequency	Percentage
Yes	31	62
Not sure	19	38
Total	**50**	**100**

31 (62%) of participants indicated that they knew the predisposing factors of cervical cancer, while 19 (38%) were not sure of the predisposing factors.

Table 16: Participants' knowledge about the predisposing factors of cervical cancer (n=31)

List of predisposing fact	Frequency	Percentage
Herbs	20	64.5
HIV/AIDS and multiple sexual partners	7	22.5
Early sex and pregnancy	3	9.7
Oral contraceptive pill	1	3.2
Total	**31**	**100**

Out of 31(62%) participants who indicated that they knew the predisposing factors of cervical cancer, 20 (64.5%) of participants mentioned herbs, 7 (22.5%) mentioned HIV/AIDS and multiple sexual partners, 3 (9.7%) mentioned early sex and pregnancy, while 1 (3.2 %) of participants mentioned oral contraceptives as a predisposing factor to cervical cancer.

Table 17: Participants' responses on signs and symptoms of cervical cancer (n=31)

Signs and symptoms	Frequency	Percentage
4 correct responses	2	6.4
3 correct responses	8	25.8
2 correct responses	8	25.8
1 correct responses	9	29.0
No correct response	4	12.9
Total	**31**	**100**

Only 2(6.4%) respondents were able to mention 4 correct responses, 8 (25.8%) mentioned 3 correct responses, 8 (25.8%) mentioned 2 correct responses, 9 (29.0%) were able to mention only 1 correct response, while 4 (12.9%) gave wrong responses about the signs and symptoms of cervical cancer.

SECTION C. PRACTICE

FIGURE 4: Participants' response to the use of vaginal substances by women to maintain dryness prior to intercourse (n=50)
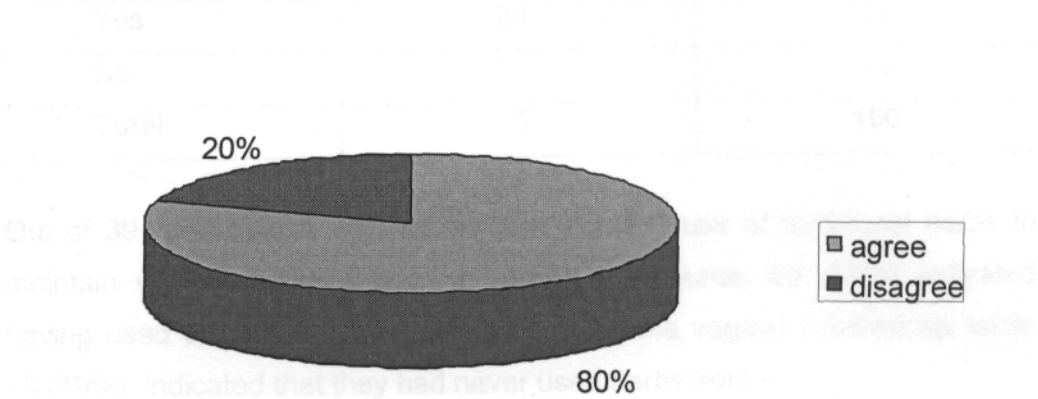
Most of the respondents, 40 (80%) indicated that women use some substances to maintain dryness of the vagina before sexual intercourse, while 10 (20%) indicated that there were no substances used prior to intercourse.

Table 18: Participants' response on the types of vaginal substances used to maintain dryness prior to intercourse (n=40)

Vaginal substances used	Frequency	Percentage
Traditional herbs	39	97.5
Flagyl	1	2.5
Total	**40**	**100**

Out of 40 (100%) participants who indicated the use of some vaginal substances, majority of them 39 (97.5%) stated use of traditional herbs, while 1(2.5%) stated use of flagyl as a substance to be inserted in to the vagina to maintain dryness prior to intercourse.

44

Table 19: Participants' response to have ever used vaginal substances such as herbs (n=39)

Ever used	Frequency	Percentage
Yes	20	51
No	19	49
Total	39	100

Out of 39 participants who stated that women use of traditional herbs to maintain vaginal dryness prior to sexual intercourse, 20 (51%) indicated having used the traditional herbs he use of some vaginal substances, while 19 (49%) indicated that they had never used herbs before.

Table 20: Participants' responses on appropriate action to take if they discovered that they had symptoms of cervical cancer (n=50)

Appropriate action	Frequency	Percentage
Seek traditional medicine	0	0
Seek medical attention	50	100
Stay at home	0	0
Total	50	100

All the respondents 50 (100%), stated that they would seek medical attention if they discovered that they had symptoms of cervical cancer.

Table 21: Participants' responses on importance of detection of cervical cancer (n=50)

Importance to det cervical cancer	Frequency	Percentage
Yes	50	100
No	0	0
Total	**50**	**100**

All the respondents 50 (100%) stated that it was important to have a test to detect cervical cancer.

Figure 5: Participants' responses if ever gone for a test to detect cervical cancer (n=50)
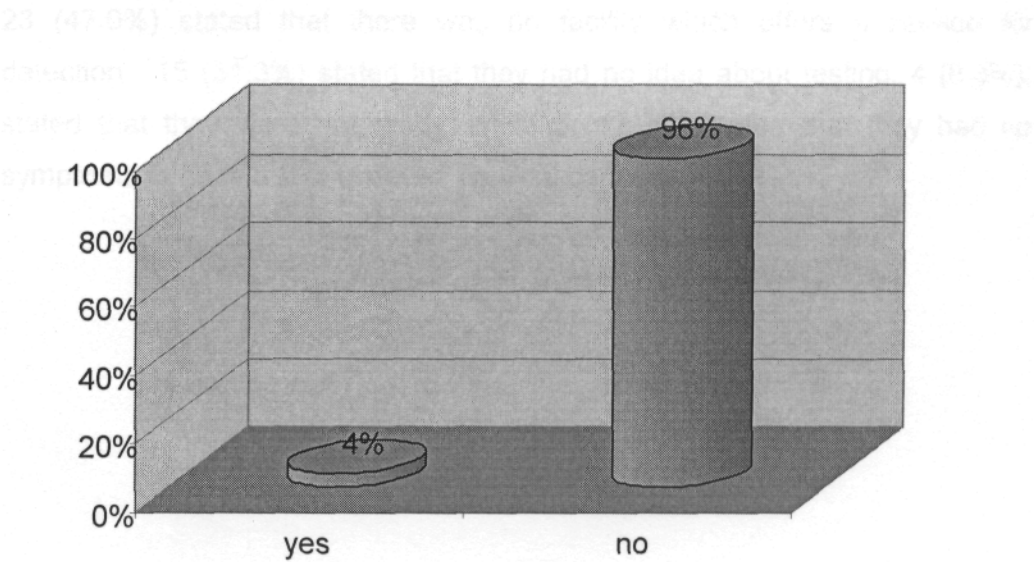
Most of the respondents, 48 (96%) had never gone for a test to detect cervical cancer, while only 2 (4%) have had a test to detect cervical cancer.

Figure 6: Participants' reasons for not having a test to detect cervical cancer (n=48)
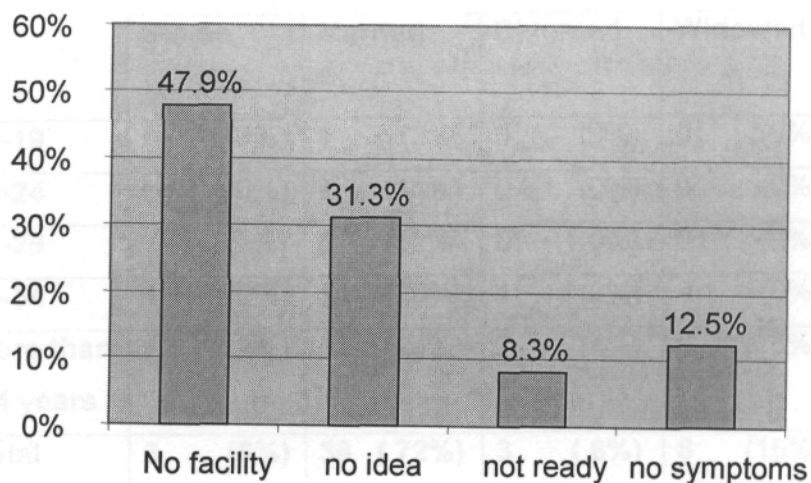
Out of 48 (100%) respondents who never had a test to detect cervical cancer, 23 (47.9%) stated that there was no facility which offers a service for detection, 15 (31.3%) stated that they had no idea about testing, 4 (8.3%), stated that they were not ready, while 6 (12.5%) stated that they had no symptoms to have a test to detect cervical cancer.

CROSS TABULATIONS

Table 22: Relationship between age and marital status (n=50)

AGE	MARITAL STATUS								TOTAL	
	Single		Married		Divorced		Widowed			
15-19	0	(0%)	1	(2%)	0	(0%)	0	(0%)	1	(2%)
20-24	0	(0%)	7	(14%)	0	(0%)	0	(0%)	7	(14%)
25-29	1	(2%)	6	(12%)	0	(0%)	0	(0%)	7	(14%)
30-34	1	(2%)	10	(20%)	1	(2%)	0	(0%)	12	(24%)
More than 34 years	1	(2%)	12	(24%)	2	(4%)	8	(16%)	23	(46%)
Total	3	(6%)	36	(72%)	3	(6%)	8	(16%)	50	(100%)

Out of 12 (24%) respondents who were aged between 30 -34years, 1 (2%) was single,10 (20%) were married, 1(2%) was divorced, while none was widowed. Among 23 (46%) respondents aged more than 34 years, 1 (2%) was single, 12 (24%) were married, 2 (4%) were divorced, whereas 8(16%) were widowed.

Table 23: Relationship between age and level of knowledge about signs and symptoms of cervical cancer (n=50)

AGE	LEVEL OF KNOWLEDGE				TOTAL	
	No knowledge	**Low**	**Moderate**	**High**		
15-19	1 (2%)	0 (0%)	0 (0%)	0 (0%)	**1**	**(2%)**
20-24	4 (8%)	1 (2%)	0 (0%)	2 (4%)	**7**	**(14%)**
25-29	1 (2%)	2 (4%)	1 (2%)	1 (2%)	**5**	**(10%)**
30-34	5 (10%)	2 (4%)	2 (4%)	2 (4%)	**11**	**(22%)**
More than 34 years	11 (22%)	4 (8%)	6 (12%)	5 (10%)	**26**	**(52%)**
Total	**22 (44%)**	**9 (18%)**	**9 (18%)**	**10 (20%)**	**50 (100%)**	

Among 11 (22%) participants aged between 30-34 years, 5 (10%) had no knowledge about signs and symptoms of cervical cancer, 2 (4%) had low knowledge, 2 (4%) had moderate knowledge and 2 (4%) had high knowledge, while out of 26 (52%) participants aged more than 34 years, 11 (22%) had no knowledge, 4 (8%) had low knowledge, 6 (12%) had moderate knowledge while 5 (10%) had high knowledge.

Table 24: Relationship between educational level and number of children (n=50)

Educational level	Number of children				Total
	2	**3**	**4**	**More than 4**	
Never Attended school	2 (4%)	1 (2%)	0 0	1 (2%)	4 (8%)
Primary	9 (18%)	4 (8%)	1 (2%)	7 (14%)	21 (42%)
Secondary	3 (6%)	6 (12%)	6 (12%)	0 0	15 (30%)
College	5 (10%)	3 (6%)	0 0	2 (4%)	10 (20%)
Total	**19 (38%)**	**14 (28%)**	**7 (14%)**	**10 (20%)**	**50 (100%)**

Among 21 (42%) respondents who had primary education, 9 (18%) had 2 children, 4 (8 %) had 3 children, 1 (2%) had 4 children, while 7 (14%) had more than 4 children. Whereas out of 10 (20%) respondents who had gone up to college, 5 (10%) had 2 children, 3 (6%) had 3 children and 2 (4%) had more than 4 children.

Table 25: Relationship between age and practice of inserting vaginal herbs in to the vagina to maintain vaginal dryness prior to sexual intercourse. (n=39)

AGE	PRACTICE				TOTAL	
	Good (never inserted herbs)		Bad (inserted herbs)			
15-19	0	0	0	0	0	0
20-24	3	(7.7%)	1	(2.6%)	4	(10.2%)
25-29	3	(7.7%)	1	(2.6%)	4	(10.2%)
30-34	6	(15.4%)	3	(7.7%)	9	(23.1%)
More than 34	7	(17.9%)	15	(38.4%)	22	(56.4%)
TOTAL	19	(49 %)	20	(51%)	39	(100%)

Out of 22 (56.4%) respondents aged more than 34 years, 7 (17.9%) had good practice of not inserting vaginal herbs in to the vagina to maintain vaginal dryness prior to sexual intercourse, while most of them 15 (38.4%), had a bad practice of inserting vaginal herbs in to the vagina to maintain vaginal dryness prior to sexual intercourse.

Table 26: Relationship between education level and age at first child (n=50)

EDUCATION LEVEL	AGE AT FIRST CHILD				TOTAL
	14-16	17-19	20-22	More than 22 years	
Never attended school	2 (4%)	1 (2 %)	0 0	1 (2%)	4 (8%)
Primary	4 (8 %)	10 (20%)	4 (8 %)	2 (4 %)	21 (42%)
Secondary	5 (10%)	5 (10%)	4 (8 %)	1 (2 %)	15 (30 %)
College	1 (2%)	4 (8%)	3 (6%)	3 (6%)	10 (20 %)
Total	12 (24 %)	20 (40 %)	11 (22%)	7 (14%)	50 (100%)

Among 4 (8%) respondents who had never attended school, most of them 2 (4%) had a first child when they were aged between 14 -16 years,1 (2%) had a first child when she was aged between 17 -19 years, while 1 (2%) had a first child at the age of more than 22 years. Out of 21 (24%) participants who had primary education, 4 (8%) had a first child when they were aged between 14 -16 years, 10 (20%) had a first child when they were aged between 17 -19 years, 4 (8%) had a first child when they aged between 20-22 years, while very few 2 (4%) had a first child when they were aged more than 22 years

Table 27: Relationship between educational level and knowledge about source of information of cervical cancer (n=41)

EDUCA-TIONAL LEVEL	SOURCE OF INFORMATION					TOTAL
	Hospital	Clinic	Friends/ relatives	Mass media	Books	
Never attended school	0 0	0 0	1 (2.4%)	0 0	0 0	1 (2.4%)
Primary	4 (9.7%)	1(2.4%)	7(17.1%)	5(12.2%)	0 0	17 (41.5%)
Secondary	11(26.8%)	0 0	2 (4.9%)	0 0	1(2.4%)	14 (34.1%)
College	7 (17.1%)	0 0	0 0	2(4.9%)	0 0	9(21.9%)
TOTAL	22 (53.6%)	1 (2.4%)	10 (24.4%)	7 (17.1%)	1 (2.4%)	41 (100%)

Out of 17   (41.5%)   respondents who had primary education, 4 (9.7%) indicated that they had heard of cervical cancer from the hospital, 1 (2.4%) from the clinic, 7 (17.1%) friends/relatives, and 5   (12.2%) from the mass media, while 9 (21. 9%) who had gone up to college, 7   (17.1%), heard of cervical cancer the from the hospital and 2   (4.9%) from the mass media.

Table 28: Relationship between level of education and knowledge about predisposing factors of cervical cancer (n=50)

LEVEL OF EDUCATION	KNOWLEDGE				TOTAL
	No knowledge	Low	Moderate	High	
Never attended school	4 (8%)	0 0	0 0	0 0	4 (8%)
Primary	17 (34%)	4 (8%)	0 0	0 0	21 (42%)
Secondary	0 0	0 0	15 (30%)	0 0	15 (30%)
College	0 0	0 0	4 (8%)	6 (12%)	10 (20%)
Total	21 (42%)	4 (8%)	19 (38%)	6 (12%)	50(100%)

All respondents 4 (8%) who had never attended school and 17 (34%) who had primary education were not knowledgeable about the predisposing factors of cervical cancer, while all 15 (30%) respondents who had secondary education were moderately knowledgeable and 6 (12%) who had college education were highly knowledgeable about the predisposing factors of cervical cancer.

Table 29: Relationship between level of education and practice of inserting vaginal herbs in to the vagina to maintain dryness prior to intercourse (n=39)

LEVEL OF EDUCATION	PRACTICE		TOTAL	
	GOOD (never inserted herbs)	BAD (Inserted herbs)		
Never attended school	0 0	4 (10.2%)	4	(10.2%)
Primary	7 (17.9%)	11 (28.2%)	18	(46.2%)
Secondary	10 (25.6%)	3 (7.7 %)	13	(33.3 %)
College	2 (5.1%)	2 (5.1 %)	4	(10.4 %)
Total	19 (48.7%)	20 (51.3 %)	39	(100 %)

Among 18 (46.2%) respondents with primary education, 7 (17.9%) had good practices of not inserting herbs in to vagina, while 11 (28.2%) had bad practices of inserting herbs in to the vagina to maintain dryness prior to intercourse. Out of 13 (33.3%) participants with secondary education, 10 (25%) had good practices, whereas 3 (7.7%) had bad practices. Among 4 (10.4%) participants who never attended school, all of them had bad practices.

Table 30: Relationship between marital status and the practice of using vaginal herbs to maintain vaginal dryness prior to sexual intercourse (n=39)

MARITAL STATUS	PRACTICE				TOTAL	
	Used		Never used			
Single	2	(5.1%)	1	(2.6%)	3	(7.7%)
Married	14	(35.9%)	11	(28.2%)	25	(64.1%)
Divorced	2	(5.1%)	1	(2.6%)	3	(7.7%)
Separated	0	0	0	0	0	0
Widowed	2	(5.1%)	6	(15.4%)	8	(20.5%)
Total	20	(51%)	19	(49%)	39	(100%)

Among 25 (64.1%) respondents who were married 14 (35.9%) had ever used vaginal herbs to maintain vaginal dryness prior to intercourse, while 11 (28.2%) had never used the herbs. Among 3 (7.7%) respondents who were single, 2 (5.1%) had used herbs, while 1 (2.6%) respondent had never used vaginal herbs to maintain vaginal dryness prior to sexual intercourse.

Table 31: Relationship between not having a test to detect cervical cancer and reasons for not having test (n=48)

PRACTICE	REASONS FOR NOT HAVING A TEST				TOTAL
	No facility	No idea	Not ready	No symptoms	
BAD (Test not done)	23 (47.9%)	15 (31.2%)	4 (8.3%)	6 (12.5%)	**48 (100%)**
Total	**23 (47.9%)**	**15 (31.2%)**	**4 (8.3%)**	**6 (12.5%)**	**48 (100%)**

All respondents 48 (100%) who never had a test to detect cervical cancer gave the following reasons, 23 (47.9%) stated that there was no facility, 15 (31.2%) stated that they had no idea about the test, 4 (8.3%) stated that they were not ready to have a test, while 6 (12.5%) stated that they had no symptoms to let them undertake a test to detect cervical cancer.

CHAPTER FIVE

5.0 DISCUSSION OF THE FINDINGS AND IMPLICATIONS FOR THE HEALTH CARE SYSTEM

5.1 INTRODUCTION

The discussion of findings of this study are based on an analysis of responses from 50 research participants who attended gynae and family planning clinics at St. Francis Hospital.

5.2 CHARACTERISTICS OF THE SAMPLE

The age range for the participants was from 15 to 60 years. The mean age range was 25-29 years, while the modal age was more than 34 years. The participants had 2 or more children. 21 (42%) had 2 children, 11 (22%) had 3 children, 8 (16%) had 4 children, while 10 (20%) had more than 4 children **(table 9)**.

Most of the respondents, 28 (56%) had their first child before the age of 20 years. 10 (20%) had their first child when they were aged between 14 -16 years and 18 (36%) were aged between 17-19 years, whereas 13 (26%) were aged between 20-22 years, and 9 (18%) were more than 22 years when they had their first child **(table 10).**

The majority of participants, 36 (72%) were married, 3 (6%) were single, 3 (6%), were divorced, 8 (16%) were widowed while none of the participants were separated **(table 5)**. The higher proportion of married women can be attributed to the fact that marriage in most cultures is valued as a source of pride to parents, especially if their daughters are married. Traditionally, women are considered be more respected in society when they are married (Calcoun, et. al., 1998).

The other characteristic worth noting is the educational level. The participants had different educational levels. These included; college, secondary and primary education. Most of the participants 21 (45.6%) had primary education, 15 (32.6%) had secondary education, 10 (21.7%) went up to

college, while none of the participants attended university **(table 8)**. 4 (8%) participants had no formal education **(table 7)**. Katete district being along the Great East Road has many schools which enables every parent to send a child to school. However, 21 (45.6%) respondents in this area have substantially lower educational attainment due to high failure rate at grade 7 and drop out of school due to pregnancy (CSO, 2003).

Majority of the respondents were christians. 13 (27.1%) belonged to the Roman Catholic Church (RCC), 8 (16.7%) belonged to Pentecostal Assemblies, 12 (25%) belonged to Reformed Church of Zambia, 6 (12.5%) belonged to Jehovah's Witness, 5 (10.4%) of the respondents belonged to African Church, while 4 (8.3%) belonged to New Apostolic Church **(Table 6)**. Religion serves as an important role in society as it bring unity among individuals. According to Calcoun, et. al., (1998), religion promotes social unity, creates moral and intellectual consensus. On the other hand, Zambia is pre-dominantly a christian nation.

5.3   DISCUSSION OF VARIABLES
5.3.1 KNOWLEDGE
Having knowledge about cervical cancer is an important step in promoting early detection and prevention of cervical cancer (MoH, 2001). The participants were asked on the following in order to assess their knowledge; whether they had heard of cervical cancer, their sources of information on cervical cancer, explanation of what cervical cancer is, possibility of cervical cancer detection, methods of cervical cancer detection, whether they knew the predisposing factors of cervical cancer, as well as signs and symptoms of cervical cancer.

The results showed that the majority of respondents, 41 (82%) had heard about cervical cancer, while only 9 (18%) had never heard about cervical cancer **(table 11)**. Of the 41 (100%) participants who had heard of cervical cancer, 22 (53.6%) participants had got the information from the hospital, 10 (24.4%) from relatives and friends, 7 (17%) from the mass media, 1 (2.4%) from the clinic and 1 (2.4%)   read about cervical cancer from the books

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(figure 3 and table 27). Currently in Zambia, there is an increased sensitization of people regarding cervical cancer. Despite many sources of information, results of this study showed that most of the people who go to health facilities have a better chance of being health educated on cervical cancer.

In this study, 31 (62%) participants indicated that they knew the predisposing factors of cervical cancer, while 19 (38%) were not sure of the predisposing factors **(table 15)**. Out of 31 participants who indicated that they knew the predisposing factors of cervical cancer, 20 (64.5%) participants mentioned herbs, 7 (22.5%) mentioned HIV/AIDS and multiple sexual partners, 3 (9.7%) mentioned early sex and pregnancy, while 1 (3.2 %) of the participants mentioned oral contraceptives as a predisposing factor to cervical cancer **(table 16).** Herbs were mentioned by many respondents because women are aware that traditionally, most women use herbs to ensure the vagina is dry before having sexual intercourse to satisfy their partners. This is in line with the study which was conducted in Lusaka which reviewed that 86% of participants used herbs to promote dry sex (Nyirenda, 1992).

Level of education matters a lot in the way individuals would understand and articulate issues. Out of the 25 (50%) participants who were not knowledgeable about cervical cancer, 17 (34%) had been to primary school and 4(8%) had never attended school. On the other hand, out of 10 (20%) participants who had college education, 6 (12%) were highly knowledgeable about cervical cancer **(table 28)**. These results reveal that low education level affects the way one would acquire knowledge on health issues. This is in line with the statement which states that people with higher educational levels are able to have more knowledge on health issues as they have intellectual capacities to understand, analyze and articulate issues better than those with lower educational levels (http://thegallopingbeaver.blogspot).

Although many participants, 34 (100%) stated that it was possible to detect cervical cancer, only 7 (20.6%) mentioned pap smear as a method of detection. 1 (2.9%) mentioned scanning, 4 (11.8%) mentioned biopsy of the

cervix, 16 (47.1%) mentioned that cervical cancer could be detected by vaginal examination, and 6 (17.6%) mentioned urine and blood tests as methods for detecting cervical cancer **(table 14).** These results indicate that many participants 27 (79.4%) did not know about the method of cervical cancer detection though they had earlier stated that they knew. This misconception may attribute to many individuals not going for a pap smear. This may result in an increase of clients suffering from cervical cancer due to lack of early detection and treatment (MoH, 2001).

Majority of participants, 38 (76%) may be at risk of suffering from cervical cancer at a later age due to early pregnancies and having many children. 10 (20%) respondents had more than 4 children **(table 9)** and 28 (56%) had their first child when they were aged between 14-19 years **(table 10).** The risk for cervical cancer seem to increase as the woman's age at first intercourse and pregnancy decreases to less than 18 years, as well as in multiparity (Ignatavicius and Workman, 2006),

5.3.2 PRACTICE

Practice is something that is usually or regularly done often as a habit, tradition or custom (Walter, 2005). In this case, the practice of women towards cervical cancer could be considered either bad or good. To determine their practices, the participants were asked the following; if they knew what substances women use to maintain dryness of the vagina before sexual intercourse, if they had used such, and whether they had taken a test to detect cervical cancer.

Majority of the respondents, 40 (80%) indicated that women use some substances to maintain dryness of the vagina before sexual intercourse, while 10 (20%) indicated that there were no substances used prior to intercourse **(figure 4).**

Among 20 (51%) respondents who had inserted vaginal herbs, 11 (28.2%) had been to primary school, while 4 (10.4%) respondents had never attended

school **(table 29)**. The results indicated that the level of education one attains determines the nature of practices one would engage in. These respondents did not know the side effects of inserting vaginal herbs in to the vagina as they were not exposed to education which gives information of adverse effects of some drugs. Dry sex has been reported to be practiced in many countries among those women with low educational level as they did not know the adverse effects of the herbs (Morar, 2006).

Another notable thing is that among those with bad practices, the majority of them 15 (38.4%) were aged more than 34 years and 3(7.7%) were aged between 30-34 years **(table 25)**. This reveals that the age of the respondent can influence the practice of the individual because as one gets older, the number of deliveries increases meaning that these respondents feel the vaginal orifice is enlarged and can not hold properly during intercourse. Therefore, they resort to inserting herbs in order to tighten the vagina. On the other hand, perineal muscles become loose after delivery because women do not perform perineal exercises after deliveries (Verralls, 1993).

Marital status has an influence on the practices women would engage in. The result of this study shows that majority of respondents 14 (35.9%) out of 20 (51%) who inserted herbs were married **(table 30)**. Practising dry sex is considered to be normal by many women because women would seek to secure their marriages by not letting their men leave them for other women inserting herbs in to the vagina to promote dry sex (Sandala at., el, 2006). This study which was conducted at UTH further revealed that dry sex was practiced by many married women to increase the partner's sexual enjoyment and to tighten the vagina as a result their men would not leave them.

Majority of respondents, 23 (47.9%) among 48 (100%) who have never had a pap smear stated that there was no facility which offers a service for detection **(figure 6)**. Therefore, even if some women would be willing to have a pap smear, they would not know where to go. Currently, in Zambia, there are a few health facilities offering pap smear services (Ministry of Health, 2006).

Most participants 32 (64%) had their first child at a younger age. 12 (24%) were aged between 14-16 years and 20 (40%) were aged between 17-19 years. Fewer participants 7 (14%) had their first child when they were more than 22 years **(table 26)**. This is not a strange finding in Zambia because most of the Zambia Demographic Health Surveys (CSO , 2003), have clearly stated that childbearing starts early in Zambia. A number of epidemiological investigations have found that women having sexual relations at early ages (before the age of 16) and bear children before the age of 20 years have about twice the risk of developing cervical cancer compared to women who initiate sexual intercourse and bear children after the age of 20 years (WHO, 1992). These results will attribute to an increase in the number of patients with cervical cancer (http://www.voanews.com/englishtoafrica/). Currently, cervical cancer is considered to be the most common female tumour in Africa

5.4. IMPLICATIONS TO THE HEALTH CARE SYSTEM

5.4.1 Practice

The findings of this study have revealed that many participants were not knowledgeable about cervical cancer. This can be attributed to the fact that many participants had low educational levels. Low educational levels contribute to women not having knowledge on causes, predisposing factors and signs and symptoms of cervical cancer. Low educational levels also influence traditional practices that women engage in, which put them at a higher risk of developing cervical cancer.

This implies that health care providers at all levels of health care delivery system, give health education on cervical cancer to women in simple language which they can easily understand because of their low educational status. The health providers should allocate adequate time to explain about cervical cancer so that women could understand about the condition. Ways of preventing this condition should be explained in simple terms in order to reduce the incidences.

5.6.2 The Hospital Administration

The shortage of Medical Personnel may have an effect on the provision of proper health education on cervical cancer. One nurse or doctor can not manage to offer curative and preventive services at the given centre. This implies that the management should improve on staffing so that adequate time is allocated for health education.

This also implies that once the doctors and nurses are employed, the hospital management has the duty to ensure that these staff are maintained and retained in the institution. Lack of motivation may lead to these doctors and nurses leaving for greener pastures.

The hospital management needs to support the prevention of cervical cancer programme financially. This can be achieved by creating a cost centre for Cervical Cancer Prevention. In this cost centre all the necessary equipment and materials can be purchased for Pap smear services and other services.

Non availability of pap smear services at health facilities in the province have also contributed to an increase in the number of women having cervical cancer. This implies that the Ministry of Health should provide pap smear services at the provincial hospital which could enable women access the service.

It is in the view of the increase of cervical cancer and other cancers inclusive that the government of Zambia has constructed a Cancer hospital at UTH in Lusaka in order to treat such cases.

5.4.3 Education

Despite the fact that Medical Personnel are taught on cervical cancer prevention, adequate knowledge require to be inculcated in the Medical Personnel while at school. This can only be achieved through strengthening of the component of Cervical Cancer Prevention in the training. This implies that a lot of material such as books on cervical cancer be purchased.

5.4.4 Research

Cervical cancer prevention is an important issue in the reduction of cases of patients with cervical cancer. No research has been done on knowledge and practices of women towards cervical cancer in Zambia. The practice of women on prevention of cervical cancer can not be improved without evidence based knowledge through conducting research. With the findings of this research, much attention should be given to Medical Personnel to ensure that they have adequate knowledge necessary to provide the clients and their relatives pertaining to prevention of cervical cancer. Therefore, more researches are encouraged to be done on Cervical Cancer.

5.5 CONCLUSION

The study sought to determine women's knowledge and practices towards cervical cancer at St. Francis hospital. The study has revealed that most participants had inadequate knowledge on cervical cancer. The inadequacy of knowledge is related to low educational level and cultural practices.

For the women to acquire adequate knowledge on cervical cancer, health care providers should ensure that health education on cervical cancer is provided to the women whenever they attend gynae, family planning, and children's clinics. Emphasis should focus on discouragement of bad practices such as insertion of vaginal herbs, having reduced number of children to a maximum of 4, reducing number of sexual partners, early sexual relations and early pregnancies and contracting of STIs such as human papilloma virus. Parents should be discouraged from marrying off their girl children at a tender age.

According to the annual aggregates of cancer cases for 2006 in Zambia, cervical cancer was found to be the highest among all cancers (Zambia National Cancer Registry (2007). Therefore, MoH should work towards making the pap smear services available to most health facilities so that once the women are aware of cervical cancer and how it can be detected, informed choices can be made by women on either to go for a test or not. Early detection and treatment of cervical cancer would reduce the incidences of this condition among women.

5.6 RECOMMENDATIONS

5.6.1 TO POLICY MAKERS

The MoH should ensure that the district hospitals and zonal health centres offer pap smear services to ensure that the services are readily available to all women since it was found that there is no Pap smear service in Eastern Province.

The MoH should consider training more laboratory staff who would be able to stain and read the smears once specimens are collected from the clients because as for now, there are very few laboratory staff who stain and read the pap smears in Zambia (MoH, 2006).

The MoH should lease with the Ministry of Education to include adult literacy classes in the Eastern Province so that women can have access to education to improve their articulation of issues. This will assist in their understanding of cervical cancer and its prevention.

5.6.2 TO THE DHMT

The DHMT should ensure that health care delivery centres have adequate staffing so that the staff would be able to deliver quality services to the clients and health education inclusive.

The DHMT should provide the I.E.C materials needed for health workers to teach about cervical cancer. The DHMT should also plan to carry out the study on a larger scale; including the rural areas in order to be able to generalize the findings better and improve the quality of the services provided.

5.6.3. TO THE HEALTH CARE PROVIDERS

Health care providers should make efforts to educate women about cervical cancer so that women are aware about the condition. This can be done wherever there is opportunity to meet women for example on the wards or at the clinics. Health care providers should read more about cervical cancer so that they get all the facts and be able to pass on the information to women.

There is also need for health workers to carry out more research on cervical cancer so that the findings may be used to make recommendations to policy makers and providers which in turn would assist in the decrease of cervical cancer cases.

5.7 DISSEMINATION OF STUDY FINDINGS

The researcher intends to disseminate the study findings by making copies of the report and giving a copy to each of the following; Department of Post Basic Nursing, UNZA, The Medical Library, UNZA, Ministry of Health Headquarters – Library, and St. Francis Hospital Library.

Dissemination to the community will be done through drama groups and by ensuring that the community health workers are aware about the findings who will in-turn health educate the community.

Information will also be disseminated to traditional leaders in the district through meetings.

5.8 LIMITATIONS OF THE STUDY

The limitation of the study was that it was not possible to conduct a study on a larger sample size because of inadequate financial resources and limited time in which the study was to be completed and submitted to the University of Zambia. This means that the findings cannot be generalized to the larger population of Zambia.

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THE UNIVERSITY OF ZAMBIA

SCHOOL OF MEDICINE

DEPARTMENT OF POST BASIC NURSING

STRUCTURED INTERVIEW SCHEDULE

TOPIC:

A STUDY TO DETERMINE WOMEN'S KNOWLEDGE AND PRACTICES TOWARDS CANCER OF THE CERVIX AT ST. FRANCIS HOSPITAL.

DATE ....

SERIAL NO: ....

RESIDENTIAL AREA................................

Instruction to the interviewer

1. Introduce yourself to the respondent and explain the purpose of the study.

2. Assure the respondent of confidentiality and anonymity by explaining that all the information will be confidential and that her identity will be anonymous.

3. Ask questions as phrased. Only clarity where need arises without changing the meaning of the question.

4. Tick and fill responses in appropriately to all the questions immediately.

5. Thank the respondent at the end of each interview.

DEMOGRAPHIC DATA

1. What was your age on your last birthday

(a)   15-19 years

(b)   20-24 years

©   25-29 years

(d)   30-34years

(e)   Above 34 years

2. What is your marital status

(a)   Single

(b)   Married

©   Divorced

(d)   Separated

(e)   Widowed

3. What is your religious affiliation

(a)   Moslem

(b)   Christian

4. If Christian, which church do you belong to?

(a)   Pentecostal

(b)   Roman Catholic

©   Reformed Church

(d)   Jehova's Witness

(e)   New Apostolic

5. Have you ever attended school?

(a) Yes

(b) No

6. If YES to Q4, how far did you go in your education?

    (a) Primary

    (b) Secondary

    ©   College

    (d) University

7. How many children have you got?

    (a)   2

    (b)   3

    ©   4

    (d)   5 and above

8. How old were you when you had your first child?

    (a)   14 - 16 years

    (b)   17 – 19 years

    ©   20 – 22 years

    (d)   23 and above

KNOWLEDGE OF CERVICAL CANCER

9. Have you ever heard of cervical cancer?

(a) Yes

(b) No

10. If Yes to Q9, where did you hear about cervical cancer?

  (a) Hospital

  (b) Clinic

  © Mass media

  (d) Relatives/friends

  (e) Other specify……………

11. If Yes to Q9, may you explain what cervical cancer

is in your own words.

....

....

12. If Yes to Q9, do you know the predisposing factors
to cervical cancer?

(a)   Yes

(b)   No

13. If Yes to Q12, may you mention predisposing
factors.

....

....

....

....

14. If Yes to Q12, mention signs and symptoms
of the cervical cancer

....

....

....

....

15. If Yes to Q9, do you know that cervical cancer
can be detected?

(a) Yes

(b) No

©   Not sure

16. If Yes to Q15, mention one method of how it can

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be detected.

………………………………………………………………

PRACTICE TOWARDS CERVICAL CANCER

17. Is there anything that women use to maintain dryness of the vagina before sexual intercourse?

(a) Yes

(b) No

18. If yes to Q17, what is being used to be inserted?

………………………………………………………………

19. Have you also practiced insertion of herbs in to your vagina?

(a) Yes

(b) No

20. What would you do when you discover that you have the symptoms of cervical cancer?

(a) Seek traditional medicine

(b) Seek health services from health facility

© Stay at home

(d) Other (specify)……………………………

21. Do you think going for a test to detect cervix cancer is important?

   (a) Yes

   (b) No

22. If Yes to Q19, have you had any test for this condition?

   (a) Yes

   (b) No

23. If No to Q22, why have you not gone for the test?

   ....

   ....

   ....

THANK YOU VERY MUCH FOR COOPERATION.

Appendix: ii

WORK SCHEDULE

TASK TO BE PERFORMED	DATES	RESPONSIBLE PERSON	PERSON/ S REQUIR
Finalize and hand in Proposal	01.06.2007 30.07.2007	Researcher	8 Weeks
Literature Review	Continuous	Researcher	-
Obtaining permission to conduct the study	20.08.2007– 27.08.2007	Researcher	1 Week
Field testing of tools/Pilot Study	27.08.2007 29.08.2007	Researcher	3 days
Data collection	03.09.2007 14.09.2007	Researcher	2 Weeks
Data analysis	17.09.2007 12.10.2007	Researcher	4 Weeks
Report writing submission	15.10.2007 09.11.2007	Researcher	4 Weeks
Dissemination of findings	01.03.2007– 30.03.200	Researcher	4 Weeks
Monitoring and evaluation	Continuous	Researcher Supervising lecturer	

Appendix iii: GANTT CHART

TASK PERFORMED	RESPONSIBLE PERSON	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR
Finalize research prop	Researcher	←	→								
Literature review	Researcher	←									→
Pilot study	Researcher			←	→						
Data collection	Researcher				←	→					
Data analysis	Researcher					←	→				
Report writing	Researcher						←	→			
Submission of draft re	Researcher								←	→	
Submission of res report	Researcher									←	→
Dissemination of resu	Researcher										← →
Monitoring and evalua	I Researcher	←									→

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Appendix: iv

BUDGET

SER. No.	ITEM DESCRIPTION	UNIT COST	QUANTITY	TOTAL COST
1	**Stationery Requireme**			
	Scientific calculator	50,000.00	1	50,000.00
	Reams of Typing Pape	20, 000.00	2	60, 000.00
	Pens	500.00	10	5, 000.00
	Stapler	30, 000.00	1	30, 000.00
	Filing Clips	2, 500.00	4	10, 000.00
	Flip chart	70,000.00	1	70,000.00
	Spirals and	7,000.00	2	14,000.00
	transparencies	2, 500.00	5	10, 00.00
	Folders	5, 000.00	2	10, 000.00
	Markers	7, 500.00	2	15, 000.00
	Note Books	50, 000.00	1	50, 000.00
	Research Bags			
	SUB-TOTAL			**329, 000.00**
	Field work and **Transport Expenses**			
	Transport	20,000.00	14 days	280, 000.00
	Meal Allowance	20, 000.00	14 days	280, 000.00
	SUB-TOTAL			**560, 000.00**
	Secretarial Services -Typing			

	Interview Schedules	2, 500.00	10 pages	25, 000.00
	and Photocopying	500.00 x	250 pages	125, 000.00
	-Research Proposal	2,500 00	100	250,000.00
	Typing	2, 500.00	150 pages	375, 000.00
	-Report Typing	50, 000.00	4 copies	500, 000.00
	-Binding the Report	75,000.00	4 copies	300,000.00
	SUB-TOTAL			**1,575,000.00**
4	Total Contingency (10%)			**157,500.00**
	GRAND TOTAL			**1,600,500.00**

Appendix: v

JUSTIFICATION OF BUDGET

Stationery

The reams of paper were used for drafting the research proposal, interview schedules, draft research reports and printing the final reports.

The diskettes were used for storage of data. The pens and pencils were used for writing while the correction fluid and eraser were used for correcting any mistakes. The spirals and transparencies were used for binding the research proposals and the draft research reports. The flip chart was used for drawing up the data master sheets as well as dissemination of information.

Secretarial Services

Secretarial services were used for Typing, printing and photocopying the research proposal and the research report with the appendices. Binding of the research proposal and research report was done.

Field Expenses

Lunch allowance was needed to be paid to the investigator while collecting the data. 10% of the total budget is for the unseen circumstances and for possible inflation. Transport allowance was required because the investigator was far from the hospital.
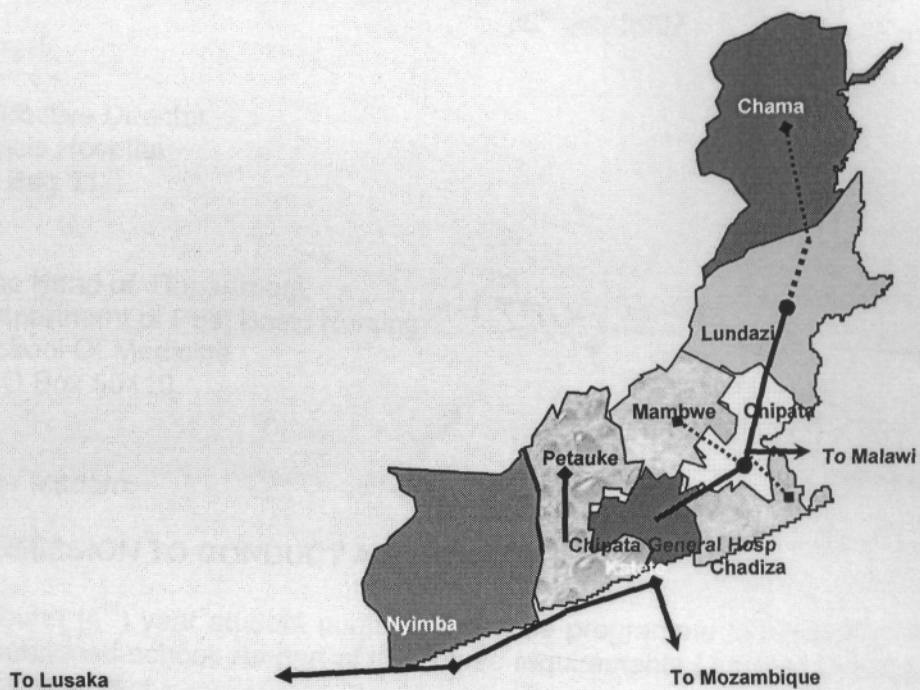
CERVICAL CANCER INCIDENCE BY COUNTRY, 2002
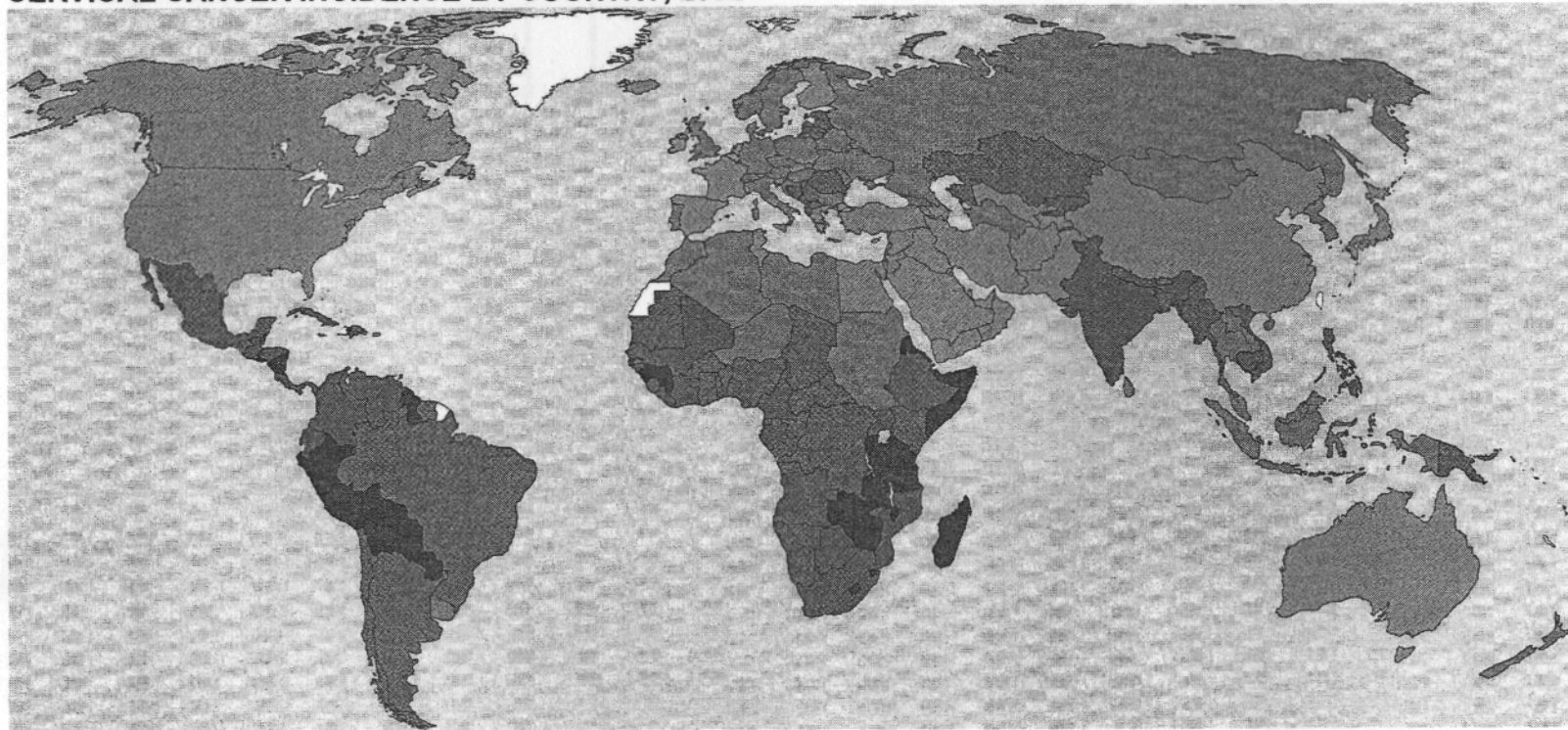
Rate (new cases per 100, 000 women)

| | <10.0 | | 10.1-20.0 | | 20.1-30.0 | | 30.1-40.0 | | >40.0 | | No data |

SOURCE: ACCP 2004.

KEY

→ **Tarred roads ending in districts**

●—— **Tarred roads ending Provincial HQ**

┄┄┄→ **Un tarred Roads ending in Districts**

Appendix ix

University Of Zambia
School Of Medicine
Department of Post Basic Nursing
P.O Box 50110
Lusaka

30th July,2007

The Executive Director
St. Francis Hospital
Private Bag 11
Katete.

Ufs: The Head of Department
      Department of Post Basic Nursing
      School Of Medicine
      P.O Box 50110.

Grugoine

UNIVERSITY OF ZAMBIA
DEPT OF POST BASIC NURSING
SCHOOL OF MEDICINE
LUSAKA
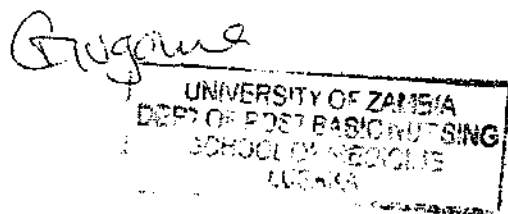
Dear Sir / Madam,

RE: PERMISSION TO CONDUCT A RESEARCH STUDY

I am a fourth (4th) year student pursuing a degree programme in Nursing at the above mentioned school. As part of the course requirements I have to undertake the research project.

As part of fulfilment of the award of the Bachelor of Science Degree in Nursing, I am required to carry out a research study. My topic of study is **"To determine women's knowledge and practices towards cancer of the cervix"**.

I therefore request for permission to interview some women who attend Gynae and Family Planning clinics in the month of September, 2007.

Your assistance will highly be appreciated.

Yours truly,

Mbewe

Agnes Mbewe.

*Agreed
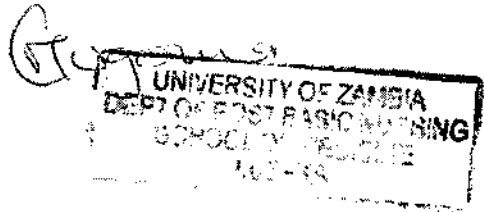- please show to Dr Kankulu
(1 copy)
@wakgela
Supervisor*

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University Of Zambia
School Of Medicine
Department of Post Basic Nursing
P.O Box 50110
Lusaka

30th July, 2007.

The Execute Director
The University Teaching Hospital
P/B RW 1X
Lusaka.

UFS: The Head of Department
Department of Post Basic Nursing
School Of Medicine
P.O Box 50110.

Dear Sir / Madam,

RE: PERMISSION TO UNDERTAKE A PILOT STUDY

I am a fourth (4th) year student at the above mentioned School pursuing a degree programme in Nursing. In partial fulfilment of the course, Iam required to carry out a research project. My topic of study is *"To determine women's and practices towards cervical cancer".*

I therefore request for permission to interview five (5) women at the Gynae clinic as part of the pilot study to test the reliability and validity of the structured interview schedule on 21st August, 2007.

Your assistance will highly be appreciated.

Yours Faithfully,

Agnes Mbewe