"An Ethnographic Study of Cervical Cancer among women in Limuru Division, Kiambu District, Kenya"

By

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DECLARATION

I, Jane Wangare Gatune, declare that this thesis is my original work and has not been presented to any other university for the purpose of examination for a degree.

Signature

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APPROVAL

This thesis has been submitted for examination with my approval as University supervisor.

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DEDICATION

This thesis is dedicated to my family: my father, the late John Gatune, mother Agnes, brother Nathan and sisters Bilha, Leah, Mercy and Rachel. Thank you for always being there for me.

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I would like to express my sincere appreciation to all those who assisted me during my study period. Special thanks to my supervisor, Dr. Isaac Nyamongo, for his guidance, scholarly criticism and encouragement throughout the study; the academic staff, Institute of African Studies, University of Nairobi, for their advice especially in the development of the study proposal; the Tigoni Sub-District Hospital staff, especially the then Medical Officer of Health, Dr. Okumu, Matrons Grace Mungai and Anne Githogori, for logistical support; Dr. Lucy Muchiri, Department of Human Pathology, University of Nairobi, for providing advice, information and literature on the study subject; Serah Mbugua and Julie Wagura for their tireless secretarial assistance; Mr. Benard Muchoki for his professional assistance in data entry and analysis; and all the women who participated in the study, for their openness and readiness to provide useful information that forms the basis of this study.

May God bless you all.

ABSTRACT

Cervical cancer is the most common form of cancer among women in the developing countries. In Kenya, it accounts for 59% of all genital cancers of both men and women. Although it is the most preventable form of cancer, its incidence remains high, with 500,000 new cases occurring annually worldwide. About half of these women die from the disease annually, at a time when they have important social and economic responsibilities. The objective of the study was to assess knowledge, attitudes and preventive behaviour of women regarding cervical cancer. The Health Belief Model, a theoretical framework used in the analysis of health related behaviour, guided the study. It is important in explaining as well as predicting individual acceptance of health care recommendations.

The study was a descriptive, cross-sectional study, carried out in Limuru division of Kiambu district, Kenya. One hundred and sixty women (mean age of 37.9 years) who sought various services from Tigoni Sub-District Hospital were interviewed. Three Focus Group Discussions (FGDs) were conducted and five case narratives recorded.

Two-fifths (40%) of the respondents reported having heard about cervical cancer. About a third (33%) spontaneously associated cervical cancer with contraceptive use, notably use of pills and coils. Having multiple sexual partners (51.2%) and a history of STDs (61.5%) were other risk factors mentioned by respondents. Less than half (45.2%) who had heard about cervical cancer reported that it could be prevented. Various barriers to utilization of screening services were mentioned including lack of knowledge about Pap smears, lack of knowledge of where such services are offered, attitude of health service providers, ignorance, that women do not give it a thought or may be afraid or embarrassed of pelvic examination, and that Pap smear examination is expensive. A majority (87.5%) felt vulnerable, since it affects women, any of them could catch it; reported multiple sexual partners; use of FP; fate or bad luck; inability to identify and/or avoid risk factors; and unfaithfulness of their sexual partners (whether real or perceived).

An extensive knowledge base of cervical cancer and its risk factors lacks among women in Kiambu. Inadequate and misconceived knowledge of cervical cancer, and lack of awareness of services and their location may be barriers to service utilization by women. Educational campaigns need to be established. Reproductive health programmes should promote safer sexual behaviour, as well as incorporate a gender approach, specifically male involvement in reproductive health, to address gender-related problems that face women and increase their vulnerability to cervical cancer and other reproductive tract infections.

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WHO -	World Health Organization
HPV -	Human Papilloma Virus
STI -	Sexually Transmitted Infection
STD -	Sexually Transmitted Disease
KNH -	Kenyatta National Hospital
MCH -	Maternal and Child Health
FP -	Family Planning
HBM -	Health Belief Model
FGD -	Focus Group Discussion
SPSS -	Statistical Package for Social Sciences
IUCD -	Intra-Uterine Contraceptive Device
AIDS -	Acquired Immuno-Deficiency Syndrome
CHW -	Community Health Worker
PATH -	Programme for Appropriate Technology in Health

CHAPTER ONE

INTRODUCTION

1.0 INTRODUCTION

This is a descriptive, cross-sectional study, aimed at assessing the knowledge, attitudes and practices regarding cervical cancer among women living in Limuru division of Kiambu district. Cervical cancer is the most common form of cancer in women in most developing countries and the second most common form of cancer in women in the world as a whole (Miller, 1992).

Cervical cancer is almost always fatal if it is not detected and treated early. Unfortunately, in the developing world, early detection is rare, and many women die needlessly. For example, cancerous tumours are responsible for 25% of all the deaths among women in Latin America; of those deaths, almost one fifth are due to cervical cancer (WHO, 1986).

There is sustained laboratory evidence to suggest that human papilloma virus (HPV) infection of the cervix may be a cause of cervical cancer. Epidemiological studies combined with recent biotechnological assessments strongly suggest that cervical cancer is usually a result of a sexually transmitted infection (STI), and HPV appears to be the causal agent (Meheus, 1992).

The natural history of cervical cancer offers biological advantage for its control, in that since the disease normally progresses from a normal cell through varying degrees of abnormal cell changes to invasive cancer, regression towards normal cell is possible up to the stage where cancer has not invaded the cells, following treatment (Nyongo and Meheus, 1994). It is therefore possible that with proper and intensive education, information and communication, cervical cancer among women can be detected and controlled at an early stage. However, like most other incurable diseases people are not open to talking about to cervical cancer. In order to break this silence, there is need to first establish the extent of knowledge, beliefs and attitudes held by women, and their practices towards cervical cancer.

Social and cultural systems dictate for the most part that the woman puts her family first, and herself and her health last. Even when she is obviously ill she may not consider her health a priority. The cultural interpretation of the anatomy of her own body, the symptoms and their meaning may be serious barriers to seeking health care (Helman, 1990). The conceptualization of a well-woman health care delivery system as is the case in screening for pre-clinical and largely asymptomatic disease in cancer of the cervix may therefore be difficult under these circumstances.

Programmes that have been put in place for the control of cervical cancer are destined to succeed, depending on, among other factors, the level of awareness regarding cervical cancer among the target population. The population's attitude towards such programmes and willingness to utilize screening/cytological services are also to be considered.

1.1 PROBLEM STATEMENT

Cancer of the cervix is the second most common cancer in women worldwide after breast cancer and the leading cancer in women in developing countries where approximately 80% of the world's close to 500,000 new cases are found each year (Stanley et al., 1987). Worldwide, about 200,000 to 300,000 women die from the disease annually (Mati, 1998). Within the developing world, highest incidence appears to cluster in Eastern and Central Africa, the Caribbean, tropical South America and parts of Asia (Meheus, 1992). Prevention of this large number of cervical cancer incidences and deaths among women is therefore a goal worthy of urgent and serious consideration.

Cervical cancer in Kenya is a problem of major public health concern. It accounts for 59% of all documented genital cancers nationwide (Abwao et al., 1998). Although available data on invasive disease are largely based on the hospital reports, it is clear that the disease accounts for more death among women than from any other cancer (Nyongo and Meheus, 1994). The finding of an overall prevalence of abnormal cervical cytology of about three out of every hundred women screened in the rural areas, as reported by the authors, strengthens further the need for major focus on the disease in rural Kenya.

In most developing countries, a high proportion of cases of cervical cancer are diagnosed at an advanced stage. There are many reasons for this, including lack of knowledge among women of the relevance of symptoms of the disease, a fatalistic attitude towards cancer and the possibility of being cured, and lack of availability of health care especially in rural areas, combined with a low priority of women's health issues (Miller, 1992).

Despite the pausity of well-designed studies on risk factors for cervical cancer in Kenya, strong evidence points to sexual behavioural patterns and possibly sexually acquired infective agents as the main contributory factors to its high incidence (Nyongo and Meheus, 1994). In the case of sexually transmitted diseases, symptoms recognition, aetiological concepts and health beliefs may be important not only as factors influencing the seeking of timely and effective treatment but also in determining changes in sexual activity and the spread of infection. It is therefore important to establish such factors with regard to cervical cancer.

It is against this background that there was need to assess the extent of awareness of cervical cancer, the attitudes that women have towards it, and their preventive behaviour. This should be the starting point in the battle against cervical cancer, because such an assessment will lead us into knowing where to put emphasis on if we are to organize for an intervention programme.

This study was designed to answer the following questions:

1. What is the level of knowledge of women regarding cervical cancer?
2. What are the attitudes of women towards cervical cancer?
3. What is the general preventive behaviour of women towards the disease?

1.2 OBJECTIVES

The overall objective of the study was to assess the knowledge, attitudes and practice regarding cervical cancer among women in Tigoni Location, Limuru Division, Kiambu District. In specific terms, the objectives of the study were:

1. To assess knowledge regarding cervical cancer among women in Tigoni.
2. To assess attitudes of women towards the disease.
3. To assess the general preventive behaviour of women against cervical cancer.

1.3 JUSTIFICATION

Despite being the most common form of cancer in women in most developing countries and the second most common form of cancer in women in the world as a whole (Miller, 1992), cervical cancer has received considerably less attention than breast cancer (WHO, 2000). It is unclear why this is so. In 1994, Muchiri and Nzioka pointed out that we do not know what Kenyan women from various backgrounds know about cancer of the cervix, their explanatory model(s) of an illness or disease that is such a part of their reproductive self, and how they deal with it, and therefore how they would respond to an intervention programme. The picture largely has remained unchanged.

While primary prevention would be the ultimate object in the control, this will not be possible without sufficient intervention through information, education, and communication. But before this is done, it is important to know what women know about the disease, their attitudes towards it, and what they do in order to detect, prevent or even control the disease for such an intervention to be successful.

In contrast to most other cancers, which are frequent in older age groups, cervical cancer is less common among those over 50 years of age (Muir, et al, 1988). In Kenya, the peak age of cervical cancer cases is 35 - 45 years (Mati, 1994), a time when the women have a lot of family and economic responsibilities. The disease is thus an important cause of premature death, causing hardship far beyond its effects on the woman herself. Thus, investing in the prevention and treatment of cervical cancer would not only reduce mortality, but it has social and economic implications as well. It is also a disease of public health importance because the diagnosis is made late, and the scope for successful treatment at that time is very limited. Further awareness, together with treatment of early stages of cancer and pre-malignant lesions offers the best outcome and is also much cheaper than management of an advanced disease.

Given what we know about cervical cancer among women, it was important that a survey focusing on knowledge, attitudes, and practices be carried out among women in order to improve our understanding of the disease. It could give insights to intervention programmes that would be involved in the efforts of reducing morbidity and mortality due to cervical cancer. It is against this background that the study was conducted.

The findings of this study should be helpful in understanding some of the problems existing among the diverse and different target populations of women in Kenya that may affect the success of control and prevention of cervical cancer. The health care planners should find the results of this study of interest in their endeavour to provide better reproductive health care to Kenyan women.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.0 INTRODUCTION

The first part of this chapter reviews the literature on cervical cancer. It focuses on the results of findings of research done. The literature points out that there is late presentation of women with cervical cancer, a disease that can be detected many years before it becomes invasive. The second part develops a theoretical framework to be used in guiding the study. This framework is relied upon in outlining the variables to be used in the study.

2.1 LITERATURE REVIEW

2.1.1 Magnitude of the problem

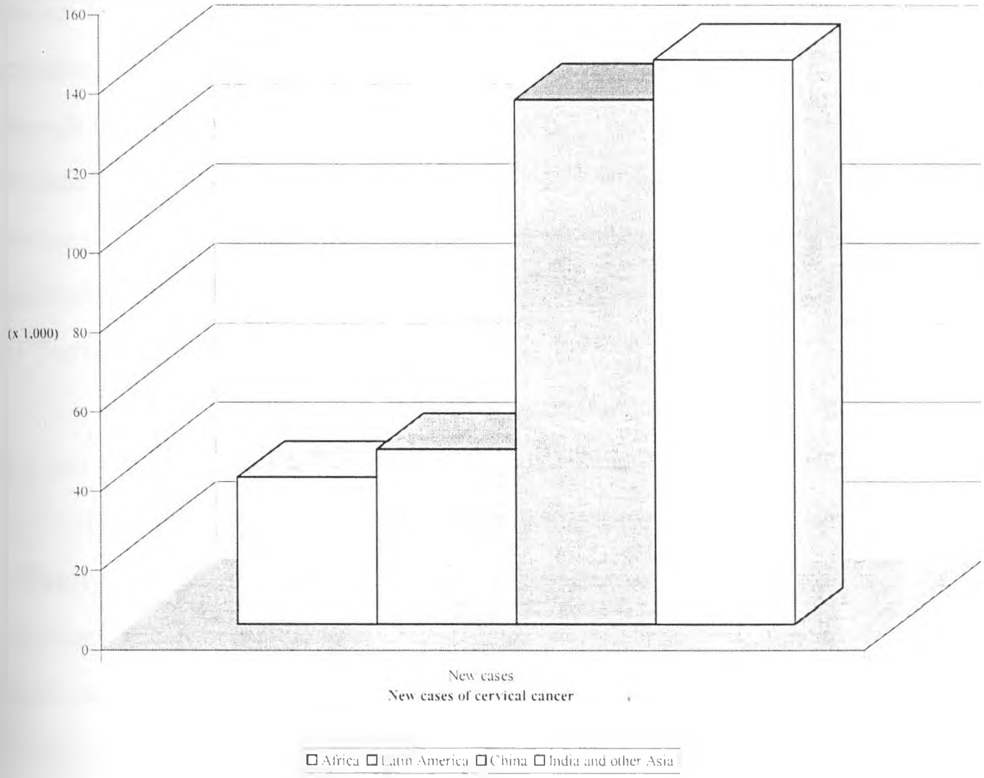
In Africa, cancer of the cervix is responsible for 70 to 80% of all cancers of the genital tract (Lowe, et al.,1981). In some sub-Saharan regions, cervical cancer may constitute as much as 35% of all malignancies in women, and reported incidence rates range between 20 to 28 per 100,000 (Howson et al., 1996). An estimation of annual new cases of cervical cancer is shown in Figure 2.1.

In Kenya, cervical cancer accounts for 59% of all documented genital cancers. The Kenyatta National Hospital Cancer Registry receives over 500 new cases of cervical cancer referred for treatment every year. Out of these, 64% of the patients are between 30 and 50 years, with an average of 42 years. Less than 12% present in Stage I, when surgery achieves the highest cure rate. (Abwao et al., 1998) New data is presented showing an overall prevalence of abnormal cytology of 2.91% in rural population in Kenya, with a very high prevalence of invasive disease of 130 per 100,000 women screened. These findings provide further evidence for the need to institute measures for early detection of cancer before it has invaded the cells (Mati, 1994).

Most data available in Africa are derived from central hospitals and this may not reflect the true situation within the country as a whole. Inadequate and non-accessible health facilities in the rural areas, coupled with taboos and cultural barriers are important factors in the inevitable under-reporting of cases. Rural women tend to shy from reporting symptoms related to the genital tract such as vaginal discharge and bleeding after sexual intercourse.

They are most reluctant to submit to pelvic examination. As a result, cancer of the cervix in Africa is diagnosed at an advanced stage and consequently it is associated with high rates of mortality (Mati, 1994). By 1978, cases of cancer of the cervix represented the majority among patients receiving radiotherapy for cancerous tumors at the Kenyatta National Hospital (Ojwang and Mati, 1978).

Figure 2.1: Estimated annual new cases of cervical cancer, by region (Adapted from Stanley et al., 1987)



2.1.2 Factors influencing the frequency of cervical cancer

The specific etiology of cervical cancer is unknown; however, the disease is strongly associated with early age at first intercourse and multiple sexual partners (both of the woman and her male partner) supporting a sexually transmitted infectious agent as the principal cause. Other factors that may have a casual role include parity, cigarette smoking and use of oral contraceptives. These risk factors also tend to be associated with the pre-invasive stages of cervical cancer (Miller, 1992). Below, I deal with the main factors that influence the frequency of cervical cancer.

a) Sexual behaviour

Various indicators of sexual activity have long been associated with cervical cancer. Early reports emphasize marital status and reproductive history. In early 1970s, the total number of sexual partners and age at first intercourse were identified as better indices of cervical cancer. Subsequently, it has been shown that the number of sexual partners is the major independent risk factor for cervical cancer, whereas age at first intercourse is a confounder (Meheus, 1992; Nyongo and Meheus 1994).

In relation to prevention, diagnosis and treatment of STDs, the biological and social gender bias is particularly common in sub-Saharan Africa. Women are put at risk of acquiring a RTI, not only through sexual intercourse with an infected partner, but also through introgenic conditions arising from poor levels of obstetric care, the lack of facilities for safe induced abortion, and the use of inappropriate procedures such as unhygienic intra-uterine device insertion. The dangers are compounded by the fact that reproductive tracts infections are often asymptomatic in women and therefore may go undiagnosed or untreated (O'Toole, 1993).

b) Contraceptive Use

The relationship between contraceptive use and cervical cancer is confounded by the difficulty in controlling for sexual behaviour. Kenya participated in the large WHO multicentre study on steroid contraception and their association with cancer, which showed a slight association between oral contraceptive use and cervical cancer, the risk being higher among women who had used the method for five or more years (WHO, 1985). Users of oral contraceptives are sexually active women who are less likely to use barrier methods and are therefore at increased risk for invasive cervical cancer. The hypothesis that cervical cancer is an STD was reinforced by the finding that women who use barrier contraceptives have a much lower risk of cervical cancer than those who do not. For example, Jewish women use a diaphragm as a contraceptive more frequently than other groups, which may explain their lower incidence for cervical cancer. The protective effect of the diaphragm could be due to reduced exposure of the cervix to infectious agents and could reflect concurrent use of spermicides, which have antiviral properties (Meheus, 1992).

Currently, the most effective defence against the transmission of incurable, viral sexually transmitted diseases other than abstinence is the use of condoms. Condom use requires acquiescence of the male partner, which the woman may feel without power to demand. Any such demand is made more problematic by the socially conditioned meanings with which condoms may be invested (O'Toole, 1993).

The female condom is an innovative barrier contraceptive that also offers potential protection against STDs. Although the female condom may play an important role in the prevention of unwanted pregnancy and STDs, as well as increasing women's bargaining power for safer sex, there are barriers to its effective use and acceptability, arising from product-related complains like the dislike for the inner ring, inconvenience, messiness and partner objection (Farr, et al, 1994). The female condom is also expensive, and many women may not be able to afford it. Since the condom is currently intended for one-time use only, it may not be cost effective and re-use may introduce conditions such as handling, cleaning and lubrication which in the end may introduce infections to the user.

c) Role of infective agents

There has been a lot of interest in the search for a sexually transmitted agent in cervical cancer due to its close link to sexual behaviour. In the 1980's HPV entered the scene, and is today considered an important agent in the sexual transmission of cervical cancer. The principle mode of transmission of genital HPV is by sexual contact (Nyongo and Meheus, 1994).

In many societies, the stigma attached to STDs is much accepted, or even expected, part of growing up for men, or an admired indicator of their number of sexual conquests. For women it may be considered to be totally reprehensible and shameful. Such attitudes can act as a barrier to women seeking health care and may contribute to delayed treatment, increased complications and further spread of infection. By combining a woman's ability to achieve and sustain a pregnancy and to produce healthy children, reproductive tract infections can have a devastating effect on her social standing both within her family and within the community. The social costs may include family disruption, abandonment and social ostracism (O'Toole, 1993).

d) Smoking

Smoking has been shown to increase the risk of cervical cancer in women even after controlling for sexual behaviour (Buckley et al,1981 in Mati, 1994). Studies have demonstrated the existence of high levels of tobacco-related carcinogens in the cervical mucus of smokers (Schiffman, 1987). Furthermore, it has been suggested that cigarette smoking could be a co-factor in the carcinogenecity of HPV (Meheus, 1992).

In the last 15 years, cigarette smoking has emerged as an important etiologic factor for both pre-invasive and invasive cancer. The excess risk for smokers is about two-fold, with the highest risk generally found in long term or heavy smokers. In Kenya, smoking among women is as yet infrequent, and it is unlikely that it has contributed significantly to the burden of cervical cancer in the country (Mati, 1994).

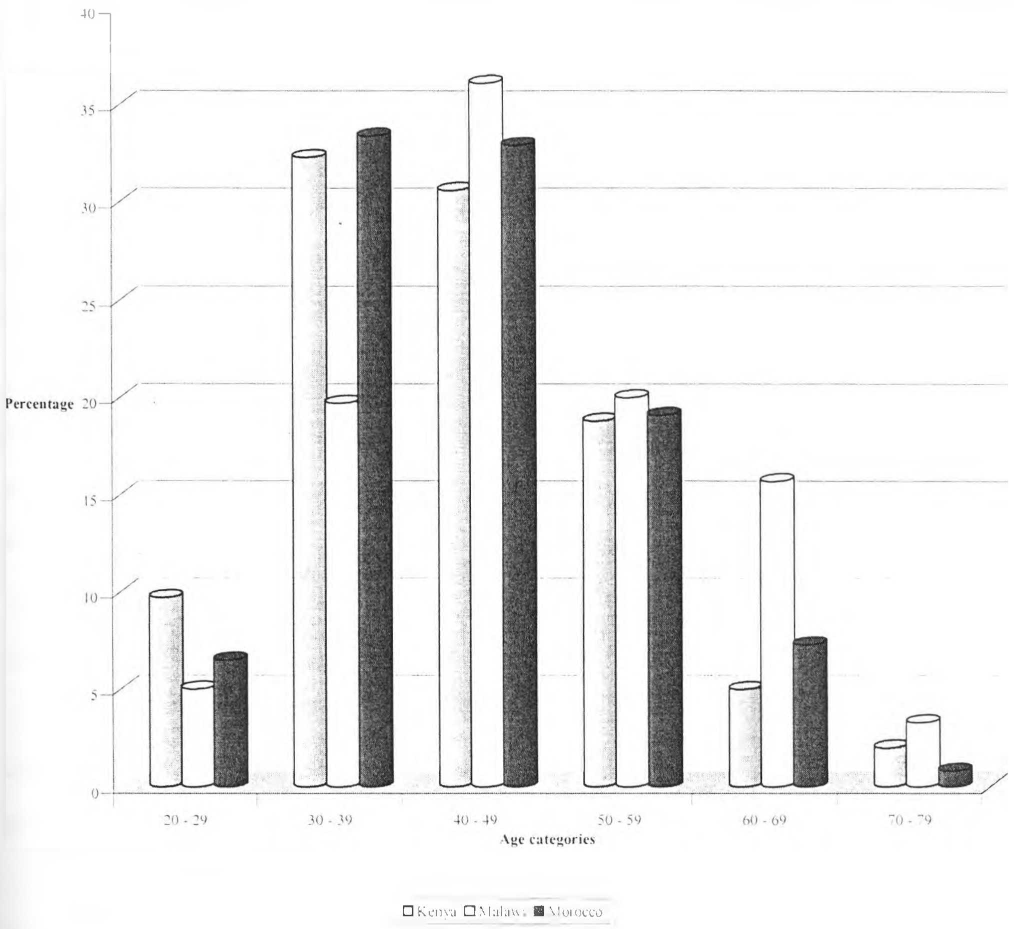
e) Marital status and parity

Cervical cancer occurs most frequently in multiparous, married women. This points towards coitus and/or pregnancy as possible stimuli to cervical cancer development. Multiparity may increase the risk of cervical cancer, this drawn from cervical trauma during parturition (Meheus, 1992). Perhaps a fundamental problem in the African context is the contraceptive effect of condoms. Where powerful social and cultural forces encourage large families, and where a woman's worth is often measured by her role as mother, women who want to bear children, maintain their position in a long-term relationship, and protect themselves from STDs often face a serious dilemma (Unlin 1992).

f) Age

According to Mati (1994), cervical cancer is uncommon under the age of thirty. It is a disease of middle age. Ojwang and Mati (1978) showed that in Kenya, the peak age cervical cancer cases is 35-45 years, with 42% of the women aged under 40 years old. They also showed that 70% of the Kenyan women were pre-menopausal. Their findings are supported by later studies in Malawi (Lowe, et al, 1981) and Morocco (El Gueddari et al (1984),)Figure 2.2). In the Malawi study, age groups that had highest distribution of cervical cancer cases are between 30 and 60, while those of the Morocco study are between 30 and 50. This clearly shows that the disease affects the middle-aged women, making this a suitable group to be studied, and among which intervention should be encouraged.

Figure 2.2: Age distributions of cervical cancer cases in some African countries



In a 1982 WHO supported study done in Machakos, Kenya, it was found that among the women with abnormal smears, there was a slight under-representation of those aged 20-29 years, and the prevalence for this age group was lower than for any other group (2.32%). The highest prevalence (2.96%) was recorded for women aged 40 years and above the prevalence being highest (4.05%) in the age group 40-44 years (Mati, 1994). The 30 - 50 years age category needs to be the intervention target, and it is for this reason that it will form an ideal population for this study.

g) Age at first coitus

Most women with cervical cancer begin sexual activity at an early age before menarche or before 18 years, due to special susceptibility or biological immaturity at this time (Myhre,1971). In Africa, young women face heavy social pressure to marry and bear children early; more than half of women give birth by age 20, a proportion that has remained substantially unchanged over the years (Rosen, et al, 1998).

h) Biosocial and environmental factors

According to Myhre (1971), relatives, particularly sisters of women with cervical cancer are more likely to have cancer of the cervix than control groups. These women not only share a common heredity, but also tend to have similar social and physical environment. Low social and economic status is associated with an increased incidence of cervical cancer.

Mortality rates for cancer of certain sites, especially the stomach and cervix are considerably higher among people with relatively poor education, housing and income. Inadequate access to medical services is probably another contributory factor (WHO, 1995). Poorer socioeconomic circumstances may translate to high-risk sexual life such as indulgence in prostitution for economic gains, and therefore sexually transmitted infections, which increase the risks of cervical cancer.

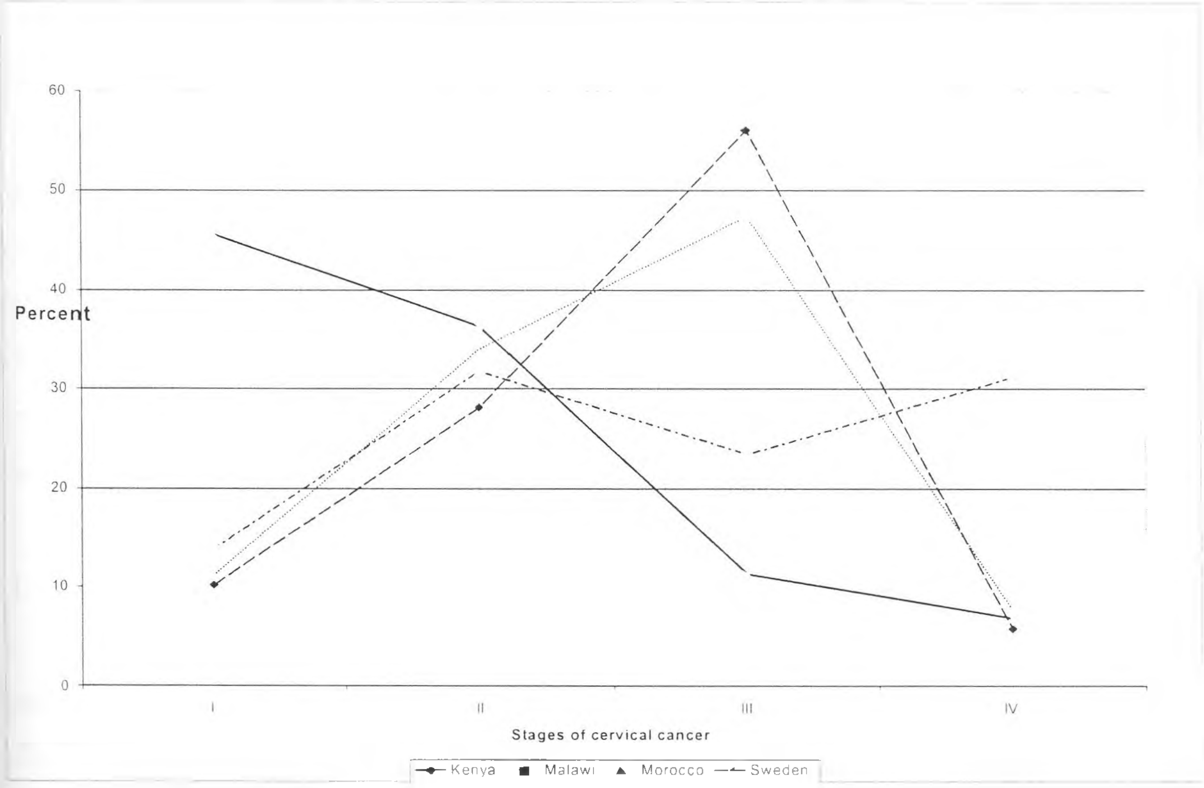
There is also higher risk of cervical cancer for populations of high density within industrial environments. Among the industries and occupations in which there is evidence of carcinogenic risks are: agriculture -through the exposure to arsenic insecticides and a variety of herbicides and pesticides; petroleum -through exposure of shale oil production; metal - through exposure of those engaged in chromium plating; and rubber - through exposure of workers to benzene. Carcinogenic agents are released into the air and into surface and ground waters as a result of dumping toxic wastes (WHO, 1995).

2.1.3 Stages, signs and symptoms of cervical cancer

Cancer of the cervix starts with a pre-invasive curable stage that normally progresses slowly over a period of ten years before it reaches an invasive stage when it is much difficult and expensive and frequently impossible to cure. Detection of the preclinical stages of cervical cancer is possible by microscopial examination of cells from the cervix and smeared on a glass slide, what is commonly known as the Pap smear (or the papanicolaou test) (WHO, 1988).

Early detection makes treatment relatively inexpensive and almost always successful and leads to a marked decline in the number of women who develop fatal invasive cancer (WHO, 1988). However, unfortunately, in the developing countries, the majority of the cases are seen late when the disease has advanced. For example, in Ojwang and Mati (1978) more than half of the cases at KNH were in stages III-IV and only 10% were seen when the disease was in stage I. These findings are reflected elsewhere in Malawi (Lowe et al., 1981) and Morocco (El Gueddari et al., 1984)

Figure 2.3: Staging of cervical cancer at the time of diagnosis (%)



Sources: Kenya – Ojwang and Mati (1978); Malawi –Lowe et al. (1981); Morocco - El Gueddari et al. (1984); Sweden - Kjellgren. (1977).

The statistics in Africa seem to indicate late diagnosis at a later stage, mostly during stage III or later. This data contrasts with that from Sweden (Fig. 2.3). In Sweden, only 18% of the women were seen at stages III-IV, the majority having been diagnosed earlier at stage I and II. Recent data from KNH shows that women still present themselves for diagnosis of cervical cancer at an advanced stage, the majority (48%) at stage III (Gichangi, 2000). Does this late presentation for diagnosis of cervical cancer point to the extent of knowledge regarding the disease among women?

There is no doubt women recognize that symptoms associated with reproductive tract infections are related to conditions which have serious detrimental effects on their health and on their ability to conceive and bear children. However, their reaction to these symptoms varies considerably and is dependent upon what is believed to be causing them (O'Toole, 1993). According to Crowther (1994), women with cervical cancer become infertile and may feel guilty that their disease came from past sexual behaviour. There may be fears of recurrent or of transmitting cancer to partners.

Jobunga (1995) reports on the early signs and symptoms of cervical cancer as bleeding which can be constant i.e. bleeding when a woman introduces her finger into the vigina while washing or during coitus; and break through bleeding i.e. per vaginal bleeding when the womb is not expecting to bleed and the woman is not on contraceptive pills. There is also increased foul smelling per vaginal discharge due to infections. The late signs and symptoms include severe anaemia due to bleeding; foul smelling discharge due to opportunistic infections; backache; urinary and focal continence due to disseminated cancer lesions to the surrounding nerves, bones and organs; mental confusion and aloguria (due to uremia and to obstruction of ureters).

2.1.4 The role of cytological screening for cervical cancer

The value of cytological screening for cancer of the cervix is now proven in developed countries where early detection, education and screening programmes have reduced the incidence of invasive cancer and thereby lowered the associated mortality. For instance, the incidence of invasive cancer in 1989 in Scandinavia was approximately half of what it was before introduction of screening, while the death rate in the period 1988-90 was about 50% of that in 1970 (Ponten et al. 1993). Although improvements in the treatment modalities occurred during the twenty-year period, early detection, education and prompt treatment of premaligant lesions must account for much of the reduction in mortality.

In 1982, with support from WHO a rural screening programme began to test the feasibility of such a service and to provide a model for future screening in rural Kenya. The target was the 'captive' population of women who attend maternal and child health and family planning clinics. These comprise a significant proportion of women in the child-bearing age. This programme was based in the Northern part of Machakos District which had a total population of about 12,000 were women in the age group 15-49 years (Mati, 1994).

A survey conducted in 1987 showed that 90% of the women in the area said that they would confidently recommended a pap smear test to their friends. Of the women who had been screened, about 90%, when questioned, knew that they had a pap test done. This indicated that the women had a good knowledge as to what was happening during the speculum examination. However, when questioned as to the real purpose of the pap test, only 35% realized that it was a test to detect cancer of the cervix. This was slightly better than 20% knowledge shown by women in the area who had never had a pap smear, but it nevertheless showed need for improved counseling (Mati, 1994). This calls for a current assessment of the levels of knowledge, attitudes and practices regarding cervical cancer.

In Kenya cytology services were introduced at the KNH in 1969. However, these services have been offered to women attending gynaecology and FP clinics only. Currently, cytological screening services are also offered at privately-run laboratories and other Maternal and Child Health, and Family Planning (MCH/FP) clinics (Rugero, 1997).

2.1.5 Perceptions regarding cervical cancer

During the Ugandan workshop held in 1995, the Association of Women Doctors learned that some of the societal perceptions of cervical carcinoma were witchcraft due to rivalry among co-wives, prostitution by women, family planning especially the loop, menses during birth, multiple births, child pregnancies leading to tears of bladder, and tears due to rape or defilement. Factors hindering patients from attending hospitals were mentioned, and they included poverty, ignorance and shyness, lack of trust in medical personnel, women being always busy in the home, digging, cooking, fetching water and firewood, plus tendering to children, and husbands preventing their wives from attending clinics, sometimes patients being asked to attend clinics too often making husbands suspicious. (Jobunga, 1995). A lot of emphasis was put on the idea of creating an awareness campaign to sensitize the women on prevention methods of cancer of the cervix.

2.2 THEORETICAL FRAMEWORK

2.2.1 Health Belief Model

Health Belief Model (HBM) is a theoretical framework used in the analysis of health-related behaviour. Formulated by Hochbaum, Leventhal, Kegeles, and Rosenstock, HBM extends the use of socio-psychological variables to the explanation of mainly, preventive health behaviour (Becker, 1974). As defined by Kasl and Cobb (1966), health behaviour is "any activity undertaken by a person who believes himself or herself to be healthy for the purpose of preventing disease or detecting disease in asymptomatic stage".

The characteristics of HBM are that in order for an individual to take action to avoid a disease, he would need to believe (1) that he or she is personally susceptible to it, (2) that the occurrence of the disease would have at least moderate severity on some components of his or her life , and (3) that taking a particular action would in fact be beneficial by reducing his or her susceptibility to the condition or, if the disease occurred, by reducing its severity, and that it would not entail overcoming important psychological barriers such as costs, convenience, pain, embarrassment.

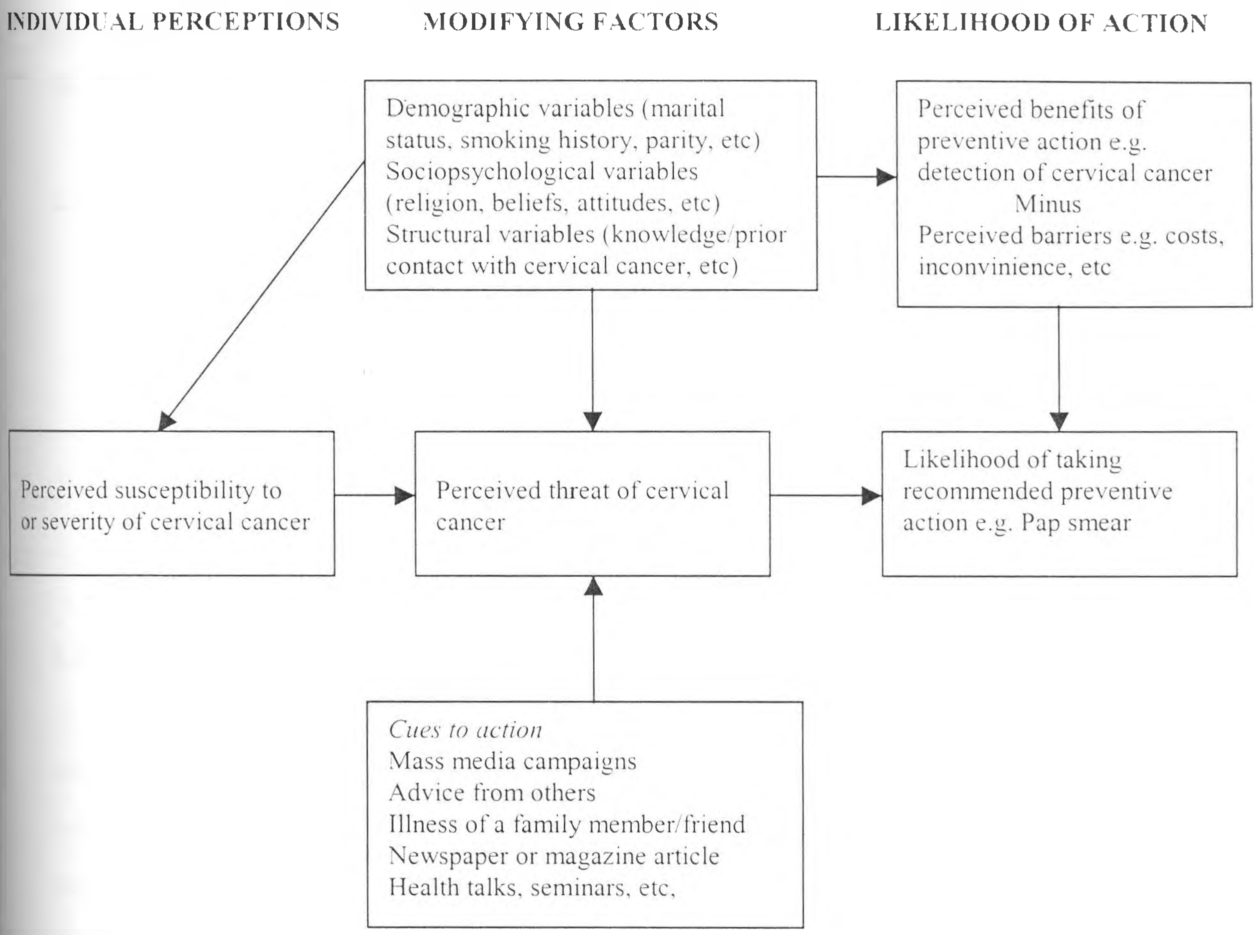
With respect to taking a test for the early detection of a disease, the same factors are deemed necessary but in addition there is also the requirement that the individual believe he or she could have the disease even in the absence of symptoms. The HBM has the ability to help in explaining and predicting individual acceptance of health and medical care recommendations and as a rubric for further research employing various health education strategies to modify health attitudes and subsequent behaviour (Becker 1974).

The acceptance of one's susceptibility to a disease that is also believed to be serious is thought to provide a force leading to action. The direction that the action takes is thought to be influenced by beliefs regarding the relative effectiveness of known available alternatives in reducing the disease threat to which the individual feels subjected. His or her behaviour is thus thought to depend on how beneficial he or she thinks that the alternative would be in his or her case. An alternative is likely to be seen as beneficial if it relates subjectively to the reduction of one's susceptibility to or seriousness of an illness.

With relatively little acceptance of susceptibility to or severity of a disease, rather intense stimuli would be needed to trigger a response. The perception of susceptibility to and severity of a particular condition would itself be motivating. The HBM assumes that motivation is a necessary condition for action. The "cue(s) to action", therefore, serve to make the individual consciously aware of his or her feelings, thus enabling him to bring them to bear upon the particular problem (Cockerham, 1986).

In relating the HBM to the study, the demographic variables such as age, and marital status have been taken into account. Other variables include parity, a history of smoking, STDs, use of contraceptives and age at first sexual intercourse. All these variables are important since they are related to cervical cancer susceptibility and occurrence. The structural variables in the study include knowledge about cervical cancer, source of this knowledge such as the electronic and print media or even prior contact with the disease; while the socio-psychological variables considered include attitudes, beliefs, customs or ideologies that tend to influence the women's mental views regarding cervical cancer. These structural and socio-psychological variables serve to condition both individual perceptions of susceptibility to or severity of cervical cancer, as well as the perceived benefits of preventive actions that may exist such as the Pap smear test. These also tend to define the perceived threat of the disease. The cues to action include mass media campaigns, interpersonal communication, advise from others, knowledge of a person who suffers from cervical cancer, newspapers, magazines and other sources such as seminars and conferences. These serve to make the individual consciously aware of her feelings, thus enabling her to bring them to bear upon the particular problem. The model is shown in Figure 2.4 below.

Figure 2.4 The Health Belief Model as predictor of preventive health behaviour.



Quah (1985) has used HBM in a survey of preventive health behaviour in a multi-ethnic society in Singapore. The study comprised of one dependent variable i.e. preventive health behaviour, and four independent variables: knowledge of disease etiology and prognosis, perceived social sanctions, perceived disruption of normal role activities and perceived personal vulnerability. Other intervening variables included perceived benefits and perceived barriers to preventive action. All these seven variables were derived from the HBM.

In addition to these HBM factors, a set of variables labeled "antecedent" or background variables were also introduced in the analysis. These were ethnicity and religious affiliation, sex, social class (measured by a combined score of income, occupation and formal education levels), age and exposure to mass media. Quah found out that the application of the HBM to the Singapore population was theoretically useful. She underscored the relevance of testing the HBM in the context of specific diseases and different ethnic groups. More importantly, she found out that by analyzing preventive health behaviours through the HBM 'lens', it was possible to detect behavioural patterns that could have remained hidden, for example, difference in salience of the various HBM factors. HBM was therefore a useful theoretical framework that was used to guide the study.

2.3 STUDY ASSUMPTIONS

It is from the Health Belief Model that the following assumptions were held: -

1. The perceived threat of cervical cancer will influence actions taken.
2. Benefits accrued from preventive action against cervical cancer will motivate women to continue taking the action.
3. Social relations may have influenced perceived threat to cervical cancer.

2.4 DEFINITION OF CONCEPTS

Knowledge – The individual's level of disease knowledge was represented by her answers to simple questions such as "what is cervical cancer? What are the risk factors associated with the disease?; Can cervical cancer be prevented, treated and cured?". The women were asked to state spontaneously what they knew about cervical cancer, then prompting followed. The answers were classified into correct or incorrect following medical criteria.

Attitudes - Mental views, reactions or feelings towards cervical cancer, elicited through scale questions read to respondents and responses recorded e.g. "do you perceive yourself as having any personal risk of cervical cancer?" "If yes/no, why?"

Practice - This refers to any active attempt undertaken by the women towards detection, prevention and control of cervical cancer. These were elicited through questions read to the respondents e.g. "have you ever heard of pap smear?"; " have you had pap smear taken in the last 5 years?"; " under what circumstances?"; "Would you recommend pap smears to a friend or relative?".

CHAPTER THREE

METHODOLOGY

3.0 INTRODUCTION

This chapter describes the specific way in which the study was executed. It includes a short profile of the study area and population, sampling procedure, methods of data collection, methods of data analysis, anticipated problems and ethical considerations.

3.1 Study design

This was a descriptive, cross-sectional study designed to assess the knowledge, attitude and practices among women regarding cervical cancer. It was carried out in Limuru division, Kiambu district, using structured questionnaires and Focus Group Discussions (FGDs). It was planned that research assistants would be hired for data collection, but due to financial constraints, the researcher had to collect data all by herself. The questionnaires were administered to one woman at a time, in the privacy of a room given by the hospital. The women were not required to give their names, and they were urged to respond to the questionnaire items truthfully and honestly. The confidentiality of their responses was assured and stressed, and to ensure this, they were asked for their consent as was stipulated in the ethical consideration section. Pretesting the survey instruments took place after the study population had been identified. It was anticipated that the study would take seven months to complete, but due to unavoidable circumstances, the study took nine months.

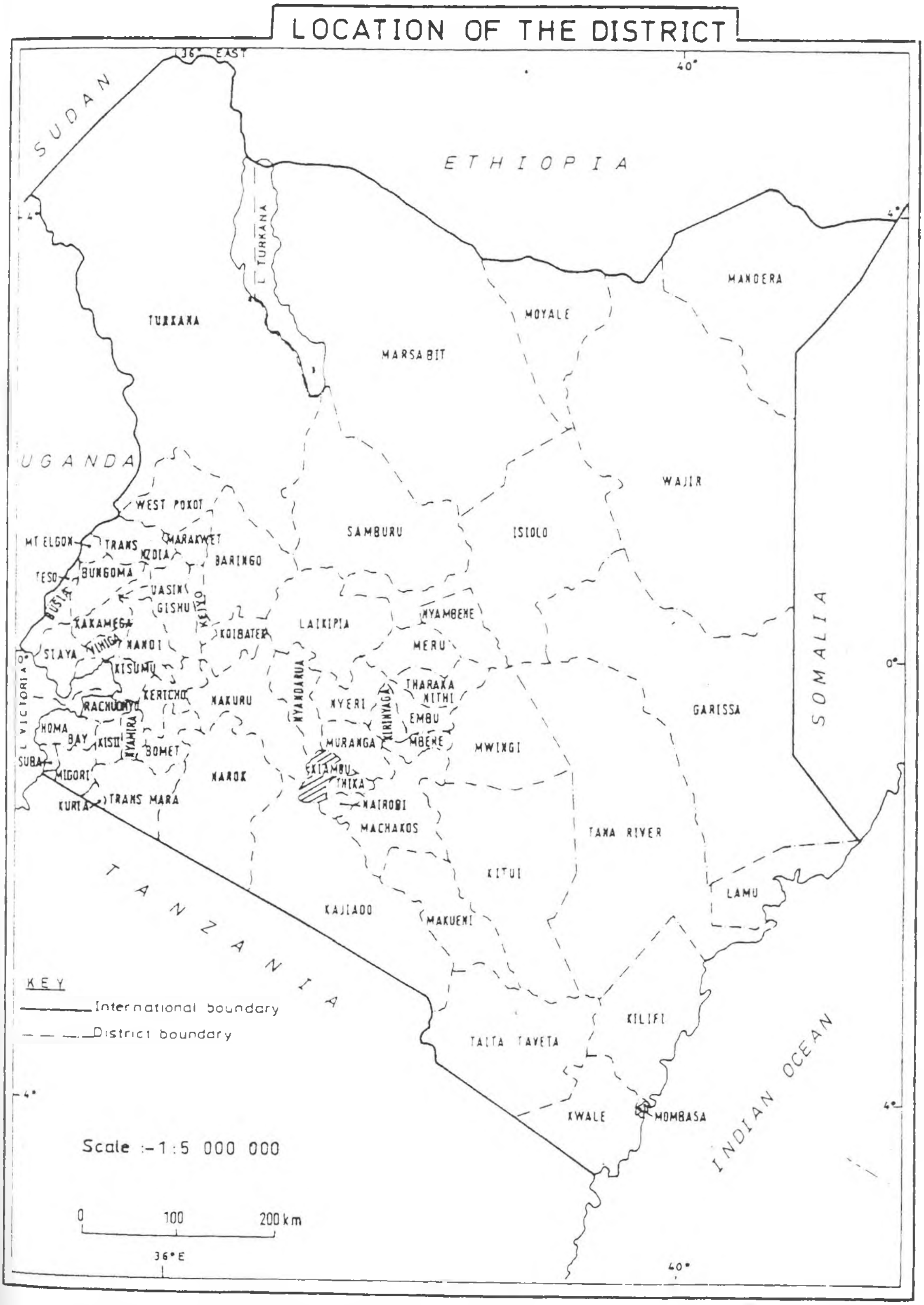
3.2 Research site

The research site of the study was the Tigoni Location, Limuru Division, Kiambu District. Specifically, the respondents were women attending the Tigoni Hospital for various purposes.

3.2.1 Location

Kiambu District is located in Central Province and has a total area of 1,324 square kilometers divided into five administrative divisions namely Kiambaa, Limuru, Githunguri, Kikuyu and Lari. There are 22 locations and 90 sub-locations in the district (GoK, 1997/2001). The shaded parts in Map 1 and 2 below show the location of Kiambu district and Limuru division respectively.

MAP 1: LOCATION OF KIAMBU DISTRICT



Adopted from Kiambu District Development Plan (GoK, 1997/2001)

MAP 2: LOCATION OF LIMURU DIVISION

Adopted from Kiambu District Development Plan (GoK, 1997/2001)

3.2.2 Population

Data from the 1999 Population and Housing Census shows that the district had a population of 744,010 people in 1999 with an estimated annual growth rate of 2.87%. The males are 369,101 while females are 374,909 (GoK, 2001).

3.2.3 Economic activities

The economic activities undertaken in the district include farming and livestock production, trade and commerce, tourism, forestry and industrial activities. Males dominate in all the sectors except unpaid family labour. Females constitute about 49.6% of the total labour force in the district. A comparatively high female population (35.2%) is actively engaged in the subsistence farm sector as unpaid family labour.

3.2.4 Health Facilities

According to the Kiambu District Development Plan (1997/2001), the district has fairly well distributed health facilities. It has 6 hospitals, 19 health centres, 37 dispensaries and 55 clinics. The health facilities are either government or non-government sponsored and maintained. In particular, Limuru Division has 2 hospitals, 2 health centres, 7 dispensaries and 10 clinics. The degree of utilization of these health facilities varies, depending on various factors such as the size of the population of the catchment area, ease of communication and services rendered. The district has some sectoral policy objectives, one of them being to intensify activities aimed at control, prevention and eradication of diseases, and to promote and develop cost-effective research aimed at promotion and protection of people's health. Based on these objectives, it was appropriate to carry out the study in the district.

3.3 Sampling procedure

The study population was intended to comprise of women aged between 30 and 50 years. This age category of women was chosen on the premise that it is the at-risk group, since cervical cancer is a disease of the middle-aged. However, in the course of data collection, two respondents aged 20 and 26 expressed a great desire to participate in the study, and the investigator found it pretty difficult to turn them away. They were recruited from the hospital when they came for various services, including visiting and bringing the sick. Simple random sampling method was used. From the out-patient departments (Gynecological, Maternal and Child Health/Family Planning and the general clinic) every third woman aged between 30 and 50 was interviewed. From the in-patient departments (general ward and paediatric ward), every second woman aged between 30 and 50 years was interviewed, as the in-patient units were not very large. A total of 160 respondents who gave their consent were recruited.

3.4 Data collection

The data collection exercise took one month to complete - from mid January to mid February 2001. In between there was a group of women who previously had taken pap tests and being diagnosed with various degrees of "abnormal/squamous cells" came for follow up clinic. With the help of the hospital matron, five of the cases were identified and they were used for case narratives. With their consent, they gave narratives of their encounters and experiences. These will be discussed in Chapters Four and Five of this report. Subjects for the study were approached as they queued for cards, and were interviewed either before or after they had been attended by the clinical officers, depending on when they started seeing patients. A separate room was used for interviews. The methods of data collection that were used are given below.

3.4.1 Quantitative data

The quantitative data was collected by use of pre-coded, semi-structured questionnaire. Since questions are phrased in order to elicit answers, every informant was exposed to the same stimuli. Data obtained thereby was easily analyzed. Additionally, even the illiterate could answer questions read to them.

3.4.2 Qualitative data

Focus Group Discussions (FGDs)

Focus group discussions were used to elicit qualitative data. This is a method of data collection that is useful especially when looking for consensus as well as divergence about the topic of discussion. FGDs were also useful in eliciting views that were not obvious from the structured questions. They also help in clarifying issues that emerge from the quantitative data collection exercise. Eligible participants in the FGDs were women aged between 30-50 years, who had not participated in the survey. Four FGDs were to be conducted, but one out of these seemed not to grasp the issue of discussion. This group was called off. About 8 – 12 women participated in each FGD.

Case narratives

Case narratives was one of the methods used in data collection. Relatively informal, open ended questions were asked. These were drawn from a list of topics that guided the questions, but these had no fixed sequence. These gave the researcher an opportunity to ask questions that demonstrated an interest in the experience and knowledge of respondents about cervical cancer, including recognition of specific signs and symptoms, selection of management practice health seeking behaviour as well as constraints to awareness and care seeking. Five women narrated their experiences. They were selected with the help of Tigoni hospital matron and before being interviewed, their permission was sought.

Free listing

This is a systematic data collection method. A small group of about 42 women were asked to provide a free list of cervical cancer risk factors. This list was processed using ANTHROPAC in order to generate a frequency distribution and an index salience that measures the relative importance of each of the risk factors in the free list. Free listing helps to elicit qualitative data from which to develop thematic categories of perceived risk factors.

3.5 Data analysis

The questionnaires for the survey were developed in english, but the translation was done in the field where necessary. The questionnaires were pre-coded before the collection of the data. A computer based data file was developed using the statistical computer package SPSS (Statistical Package for the Social Sciences) for the quantitative data. Qualitative data was analyzed thematically. The systematic data was analyzed using ANTHROPAC. Checking and entering data was carried out using the services of a data entry person hired specifically for this purpose. Data analysis started immediately following entry. Descriptive techniques of data analysis were employed.

Problems encountered in the field

The three main problems encountered were:

1. The data collection exercise was to be executed by research assistants from the local community. However, due to financial constraints, all the data was collected by the researcher. With the help of a hospital registration clerk, the focus group discussions went on as planned.

2. Majority of the participants said that they had either not heard of cervical cancer or had heard about it but could not explain anything. This meant that after filling the demographic data they were not contented by the fact that the exercise was not intended for information or education, but was only an assessment of their knowledge, attitude and practice. After insisting, the researcher had to give an overview to each of these, so as to satisfy their curiosity. This meant a little bit of time taken (more than planned) with each of the participants.
3. Two participants who were outside the age range 30 to 50 years expressed great desire to participate in the interviews. The researcher found it difficult to turn them down.

3.7 Ethical consideration

Considering the right to privacy for each individual, and the sensitive nature of the topic under investigation, confidentiality was guaranteed. A statement (below) of consent was read out to all subjects in the study, and they were asked for their informed verbal consent to participate.

Statement for consent:

> "Hello, My name is.... I am from the University of Nairobi and I am carrying out a study on cervical cancer among women. I am interested to know what you know about the disease, your attitudes towards it and whether you do anything in order to detect or prevent it. You have been randomly identified as one of our respondents in this study, and I hope that you will feel free to discuss with me. All the information that you will provide will be treated in confidence. Your name or information that may identify you as a participant shall not be given to anyone. You are not under obligation to respond to all the questions, and you may withdraw at any time during the interview should you desire to do so. Thank you".

Only those who gave their consent were interviewed. Further, specific measures were taken to ensure confidentiality during the interviews, by identifying a room in the hospital that offered privacy.

3.8 Limitations of the study:

The study population was drawn from the hospital, when they came for various services. The findings of the study do not, therefore, take into account the perspectives of the general population in the area. A community survey would be useful in eliciting views of the larger population in the community.

CHAPTER FOUR
FINDINGS

4.0 INTRODUCTION

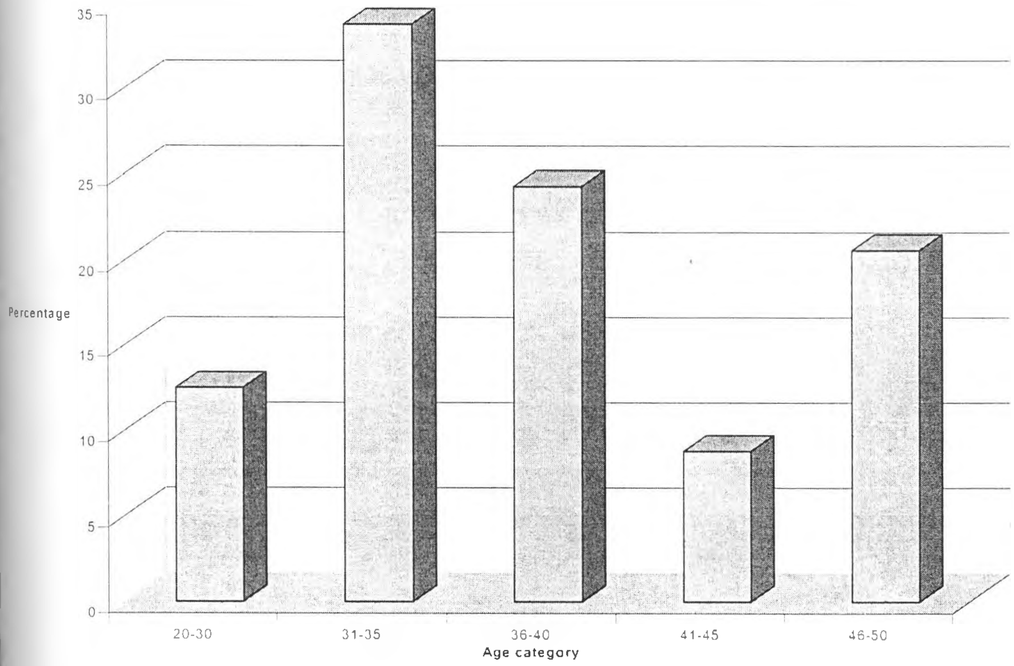
This chapter consolidates quantitative and qualitative data. In the first part of the chapter, socio-demographic characteristics of respondents are presented. The second part deals with knowledge, attitude and practice of respondents as regards cervical cancer.

4.1 DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

4.1.1 Age

A total of 160 women participated in the survey. It was anticipated that only those who were 30 years and above would be enrolled in the study. However, 2 women, one aged 20 and another 26 years expressed a strong desire to be interviewed and so the interviewer could not turn them away. Apart from these two, all the other women were between 30 and 50 years. The majority of women aged below 31-40 years, accounting for more that 50% of the respondents. Their age categories are shown in Figure 4.1.

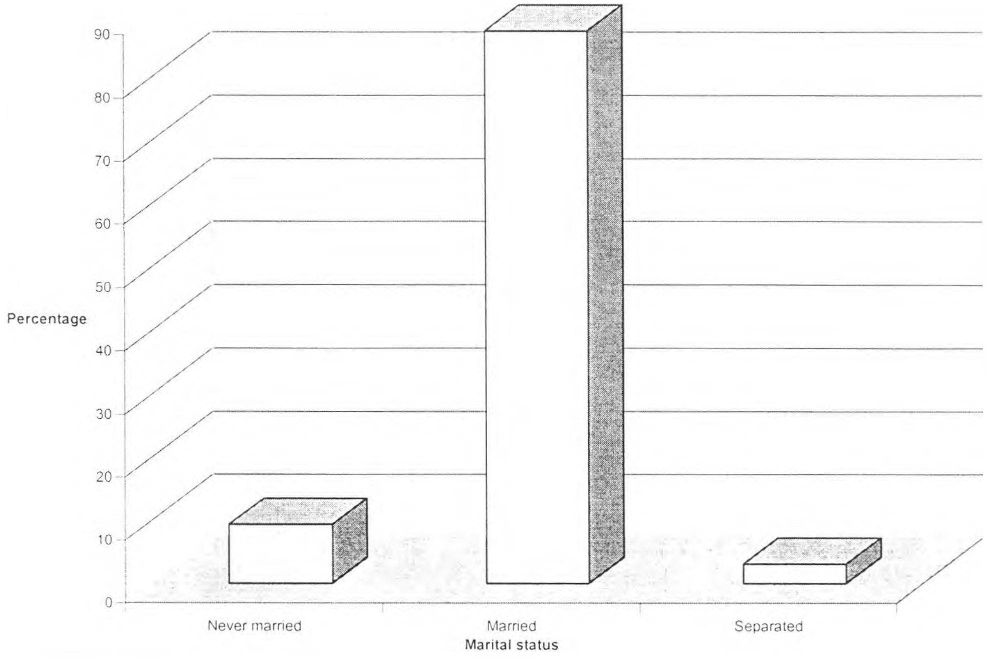
Figure 4.1: Age categories of respondents (n=160)



4.1.2 Marital status

The majority of participants were married (87.5%). This was followed by those who had never married (9.4%) and the separated (3.1%). This finding is shown in Figure 4.2 below.

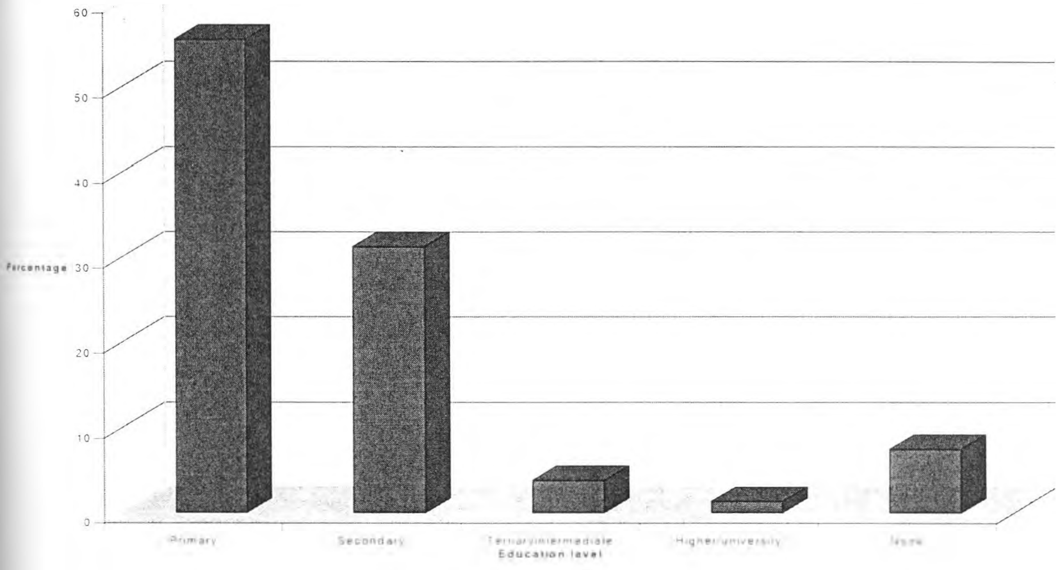
Figure 4.2: Marital status of respondents (n=160)



4.1.3 Level of education

The majority of women (55.6%) primary level of education, followed by secondary level (31.3%). Those who had no formal education ranked third (7.5%), followed by those who had tertiary/intermediate level education (3.8%). Women with university education ranked lowest (1.3%). Education level for one respondent was missing. These findings are shown in Figure 4.3 below.

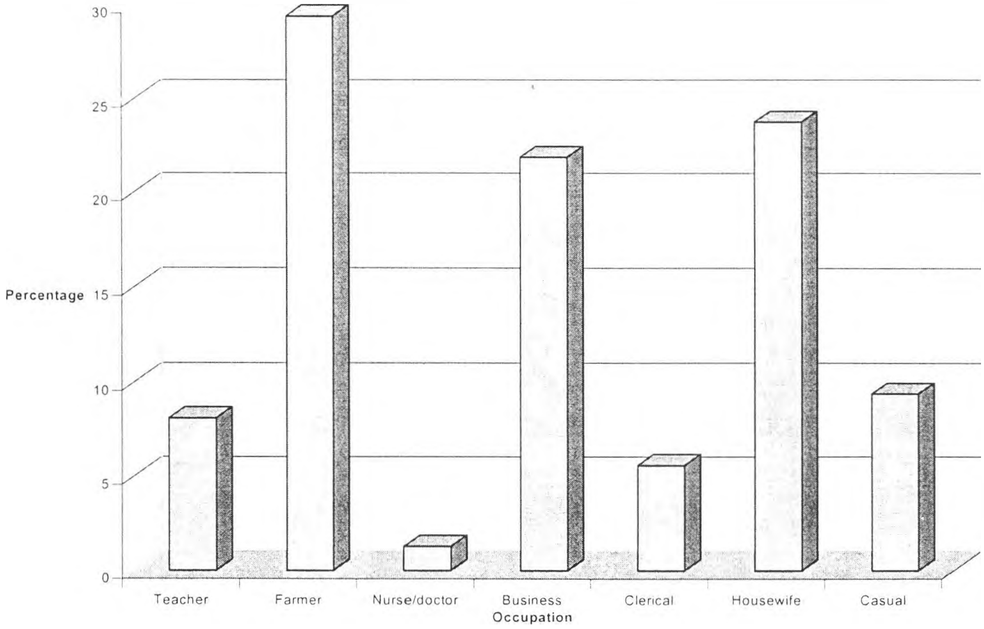
Figure 4.3: Level of education of respondents (n=160)



4.1.4 Occupation

Most respondents reported their occupation as farming (29.4%), followed housewives (23.8%) and those in business (21.9%). Casual labourers constituted 9.4% of the respondents most of whom were either working in flower or tea plantations. Teachers, those in clerical jobs and nurses constituted 8.1%, 5.6% and 1.3% respectively. One woman did not disclose her occupation. This information is shown in Figure 4.4 below.

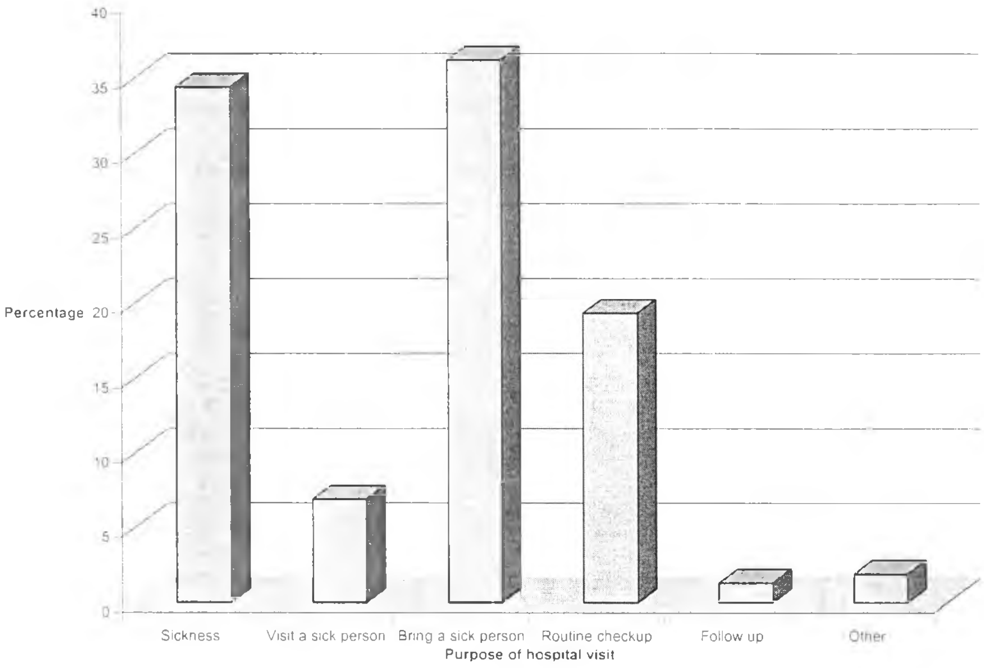
Figure 4.4: Occupation of respondents (n=160)



4.1.5 Purpose of hospital visit

Respondents were drawn from the inpatient and outpatient population. Those who came to bring or visit the sick, or had other purposes of hospital visit were also included. During the study period, the hospital in collaboration with a group from Loma Linda University, in United States of America, was also offering routine check up for women. Some of these were also interviewed. The findings are shown in Figure 4.5 below. One hospital staff in the paediatrics department was also interviewed, included under other purpose of hospital visit.

Figure4.5: Purpose of hospital visit (n=160)



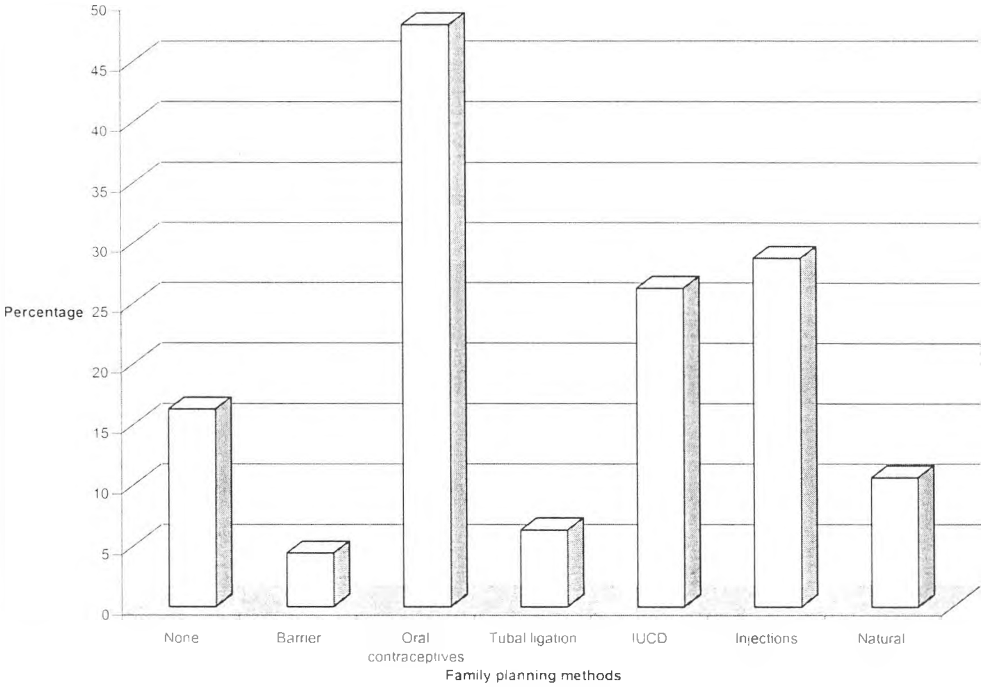
4.1.6 Pregnancy history

Most respondents (95.6%) reported having been pregnant, while 4.4% reported that they had never. Only one of those who had been pregnant reported that she didn't have any children.

4.1.7 Family planning method(s) ever used

Respondents were asked to mention all the family planning methods that they had ever used. Close to half (48.1%) reported use of oral contraceptive pills, 28.8% had used injections and 26.3% had used IUCDs (intrauterine contraceptive devices). 16.3% said that they had never used any method, while 10.6% had used the natural method. Ten women (6.3%) had undergone tubal ligation. Barriers methods ranked lowest in utilization (4.4%). This is shown in Figure 4.6 below.

Figure 4.6: Family planning methods ever used (n=160)



4.1.8 Sexual behaviour

The respondents were asked to give information on the age they had their first sexual intercourse, the number of partners that they have had ever since, and whether they or their partners had ever contracted a sexually transmitted disease(s). Close to two-fifths (42.5%) of the respondents had their first sexual intercourse at between ages 18 and 20 years while 30.6% reported having had sexual intercourse at between 15-17 years. About 11.9% had sexual experiences at ages 21-23 years, followed by 6.9% and 6.3% of women who had first sexual intercourse at between ages 12-14 and 24-27 years respectively. Three women could not remember when, or did not mention the age. This information is shown in Table 4.1 (a).

Slightly more than half (51.3%) of the respondents reported having had between 2-4 sexual partners in their lifetime. Those who reported having had a single partner were 35.6% while those with 4-6 partners constituted 8.8%. The others (3.8%) said to have more than 6 sexual partners in their lifetime. One woman could not place a tag on the number of sexual partners she ever had. Table 4.1 (b) shows this information.

A total of 31 respondents reported having had a sexually transmitted infection though eight of these did not know which one it was. Majority of the others reported syphilis (31.0%) and bacterial or fungal infection (not specific) (31.0%). Gonorrhoea was mentioned by four respondents (13.8%) and only one mentioned herpes (3.4%). Some other respondents (20.7%) did not know which disease it was. 19.4% of the respondents reported that their partners had ever suffered from STDs, while 66.9% said they had not. Others (13.7%) were either unsure or did not know whether their partners had ever contacted any STD (Figures 4.7 and 4.8).

Table 4.1 (a):Age at first sexual intercourse (n=160)

Age	Frequency	Percent
12-14	11	6.9
15-17	49	30.6
18-20	68	42.5
21-23	19	11.9
24-27	10	6.3
Unmentioned/Missing	3	1.9
Total	**160**	**100.0**

Table 4.1 (b):Number of sexual partners (lifetime) n=160

Number	Frequency	Percent
1	51	35.6
2-4	82	51.3
4-6	14	8.8
More than 6	6	3.8
Unknown	1	0.6
Total	**160**	**100**

Figure 4.7: History of ever having STD (n=160)

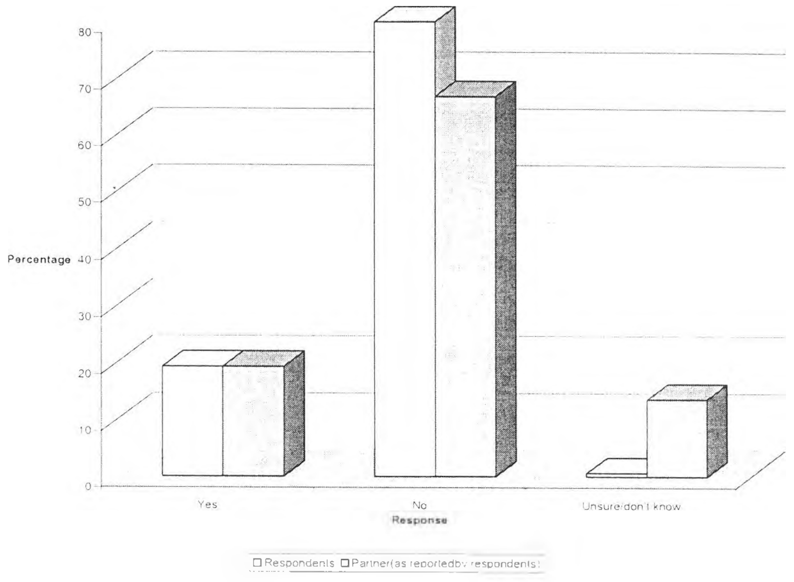
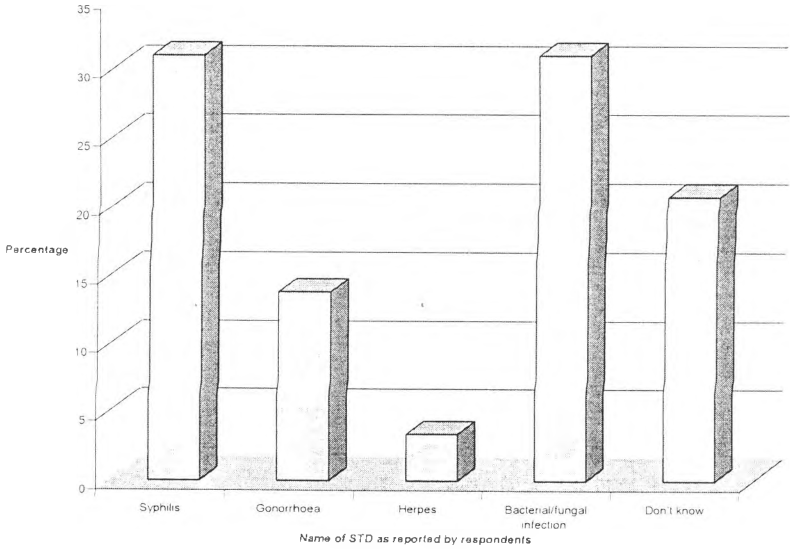


Figure 4.8 Name of STD as reported by respondents (n=31)



4.1.9 Smoking history

Only 2 women reported having a smoking history. They have since stopped. These constituted only 1.3% of the respondents.

4.2 KNOWLEDGE, ATTITUDE AND PRACTICE

4.2.1 Knowledge of cervical cancer

The second part of the questionnaire sought to elicit data on knowledge, attitude and practice regarding cancer of the cervix. All the 160 respondents were asked whether they had heard about cervical cancer. This question elicited three major responses; the first category (35%) were those who said they had never heard about the disease, these could therefore not proceed to answer the rest of the questions. The second category (25%) consisted of those women who reported that they had heard about it or had come across the topic, but were either not eager/keen to know what the disease concerns, or could not explain anything about the disease. These two categories were then moved to answer the question on which approaches would be best used to improve women's level of knowledge regarding cervical cancer. Their responses are presented later in the chapter. The third category (40%) consisted of women who explained what they knew about the disease. These were taken through the whole questionnaire. Table 4.2 shows the categories.

Table 4.2: Have you ever heard of cervical cancer? n=160

Response	Frequency	Percent
No	56	35.0
Yes, but cannot explain	40	25.0
Yes	64	40.0
Total	**160**	**100.0**

Participants in the FGDs were also asked whether they had heard about cervical cancer. Some women said that *"when you are not sick or affected by a certain disease you don't care to know about it"*. In one group discussion with women, one out of nine said she had heard about it. In the other two groups, they reported having heard about cervical cancer, albeit in bits, while in the fourth group, no one reported having heard anything about the disease. No further information on knowledge of cervical cancer was collected for this last group. One of the participants in the case narratives concurred by saying that:

> Many women do not know about cervical cancer. They do not even talk about it or anything to do with the "secret" parts of the body. Personally I had never before known anything like cervical cancer or Pap smears. I did not think it was anything for me to bother about. Many women do not talk about it because they think that they do not have the disease. All they know about is the condition where the uterus does not stay in place, or the uterine growths but not cervical cancer (N).

Cervical cancer was explained by 40% (64) respondents variously. Findings are summarized in Table 4.3 below. Nineteen of them (29.7%) associated cervical cancer with wounds or the cervix. Some mentioned that these wounds do not heal and this s what s popularly known as cancer. This response was followed by one that associated the disease with excessive/irregular bleeding from the vagina (15.6%). Eight (12.5%) women said the disease could emanate from having multiple sexual partners or having STDs/infections, a similar number pointed out that one could get the disease from complications of delivery and childbirth after which one could not conceive again. Seven respondents (11%) mentioned that the disease is accompanied by pain in the pelvis, backache and painful intercourse. A similar number said that one needed to be operated (surgically) to remove the organ. Six respondents said (9.4%) that cancer of the cervix is usually a growth in the cervix. Four respondents (6.2%) mentioned use of intrauterine contraceptive devices (IUCDs) as risk factors, and three (4.7%) rated cervical cancer as having no cure.

Other responses that were mentioned by one or two respondents but did not take much toll, associated cervical cancer with excessive sugar (diabetes), discharge, abortions, miscarriages, early sexual debut/childbirth, rotten menstrual blood, parity, and that it is a disease that can be detected early through pap smears.

Table 4.3: What is cervical cancer? (n=64)

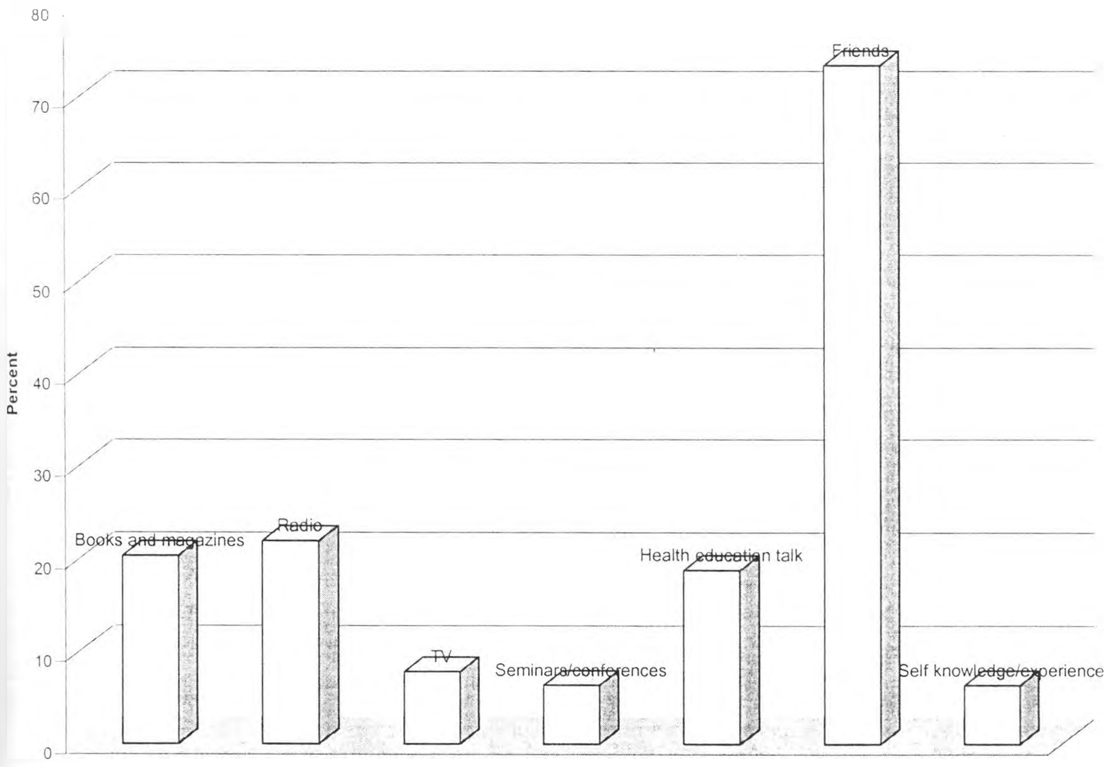
Response	**No. of times mentioned**	**Percent**
Wound on the cervix/does not heal	19	29.7
Excessive/irregular vaginal bleeding	10	15.6
Multiple sexual partners/STDs	8	12.5
Emanates from childbirth complication after which one cannot give birth	8	12.5
Needs surgery/for organ to be removed	7	11.0
Pelvic pains/backache/painful coitus	7	11.0
A growth in the cervix	6	9.4
Use of IUCDs – creating wounds	4	6.2
Cannot get cured	3	4.7
Excessive sugar in the body/diabetes	2	3.1
Discharge	2	3.1
Detected through pap smears	2	3.1
Abortions/miscarriage – not well cleaned	2	3.1
Early sexual debut/child birth	1	1.6
Curable in early stages only	1	1.6
Menstrual blood rots, blocks cervix	1	1.6
Bearing many children (8 and above)	1	1.6

Responses from the FGDs corroborated those from the survey. Participants said that *"you bleed, that is how you know you have cancer. That is how it starts"*. Only one respondent noted that the disease starts much earlier, such that bleeding means that the disease is at an advanced stage. Another respondent said that cervical cancer *"is a growth that shifts to another part of the body especially on surgery. It relocates and therefore never gets cured. You feel a lot of pain. The organ has to be removed because it rots and spreads to the whole area including the uterus"*.

4.2.2 Sources of information

The most common single source of information about cervical cancer was friends (73.4%), followed by radio (21.9%), books and magazines (20.3%) and educational talks at hospitals (18.8%). Other sources which ranked relatively low were TV, (7.8%) seminars/conferences (6.3%) and experience or knowledge with someone who had/has suffered from the disease (6.3%). This information is contained in Figure 4.9.

Figure 4.9: Source of information



During focus group discussions, it emerged that much of the information (mainly about the association between cervical cancer and contraceptive pills and coils) was obtained from friends. Only one woman reported having been given some information about cervical cancer by a doctor she had seen. Another mentioned that she had read about cervical cancer in a magazine.

4.2.3 Risk factors associated with cervical cancer

The respondents were asked to mention (spontaneously) the risk factors associated with cervical cancer, after which the rest of the unmentioned risk factors were prompted to them. If a respondent could not mention any risk factor spontaneously, the interviewer went ahead to prompt them on all the risk factors. Table 4.4 shows that 33.3% of the respondents could spontaneously associate cervical cancer with the absence of barrier contraception; implying use of pills and coils (IUCDs), followed by a history of STDs (17.9%), smoking (17.9%) and multiple sexual partners of male and female (12.8%). Parity and biological factors such as abortions, miscarriages, wounds and inheritance were also mentioned spontaneously by 10.3% of the respondents. On the whole, respondents had to be prompted, and even after this, majority of respondents did not know most of the risk factors. More specifically 76.9% and 71.8% of the respondents did not know whether infective agents and age respectively are associated with cancer of the cervix.

Table 4.4: Knowledge of risk factors associated with cancer of the cervix (percent) (n=64)

Risk factors	Spontaneous	Prompted	Prompted but unsure	Don't know
First coitus before menarche	0	46.2	15.4	38.5
Pregnancy before 22 years	0	43.6	17.9	38.5
Multiple sexual partners of female	12.8	46.2	5.1	35.6
Multiple sexual partners of male	12.8	41.0	7.7	38.5
History of STDs	17.9	43.6	5.1	33.3
Smoking	17.9	28.2	12.8	41.0
Absence of pap smear history	2.6	46.2	12.8	38.5
Absence of barrier contraception	33.3	17.9	12.8	38.5
Infective agents e.g virus	2.6	10.3	7.7	76.9
Age	2.6	12.8	7.7	71.8
Parity	10.3	41.0	7.7	41.0

Forty-two respondents were asked to provide a free list of cervical cancer risk factors. The most frequently mentioned risk factors were multiple sexual partners (41%, salience=0.225), use of contraceptives (34%, salience=0.273), STDs (27%, salience=0.228), abortion (20%, salience=0.147) and lack of proper hygiene (20%, salience=0.146). In terms of salience, use of contraceptives was highest followed by STDs and multiple sexual partners in that order. A summary of these findings is shown in Table 4.5.

Table 4.5: A free list of cervical cancer risk factors (n=42)

ASSOCIATED RISK FACTORS	FREQUENCY	PERCENTAGE	SALIENCE
Multiple sexual partners	17	41	0.225
Use of contraceptives	14	34	0.273
Sexually transmitted diseases	11	27	0.228
Abortion	8	20	0.147
Unhygienic women	8	20	0.146
Smoking	6	15	0.140
Psychological stress	5	12	0.069
Abnormal growths	4	10	0.067
Complications during childbirth	4	10	0.085
Food chemicals	4	10	0.037
Taking excess cooking fat	3	7	0.028
Bearing many children	3	7	0.055
Inherited from parents	3	7	0.033
Germs	2	5	0.037
Early sexual intercourse/childbirth	2	5	0.034
Retention of menstrual blood	2	5	0.030
Overdose of drugs e.g. malariaquin	1	2	0.008
Lack of exercise	1	2	0.018
Being hit in the pelvic area	1	2	0.018
Using illicit drugs	1	2	0.012
Alcohol	1	2	0.016
Rough sex – when a man hurts you	1	2	0.006
Evil forces (ngoma)	1	2	0.024
Taking excessive sugar	1	2	0.024
Blood disease/infection	1	2	0.012
X-ray radiations	1	2	0.006

The participants in the FGDs were also asked what they thought to be the risk factors associated with cancer of the cervix. Most women said that they had heard people saying that *"if you practice Family Planning, especially using pills, you get it"*. They reported that one can also get the disease from using coils especially when they are improperly inserted or under unhygienic conditions. They associated this with infections emanating from use of IUCDs. One participant reported that *"coils create wounds"*. At that point, another participant narrated her experience – *"At one time I used coils. Then when I touched my breasts, I could feel lumps. So I went to the doctor and she referred me to Kiambu hospital. I* *went there immediately, and I was told not to use the coil. So I think coils bring cancers".* Still, another narrated that *" I was very close to a girl who was using a coil and she started bleeding. She had to remove it. She still continued bleeding – up to date. But I don't know whether this is cancer of the cervix".* Regarding the other FP methods, some participants said that they do not know much about injections in relation to cervical cancer.

Participants did not have factual information regarding association between family planning and cervical cancer. Most of them reported "overhearing" from others. Some said that even though they did not know of the association, they *thought "it is better to have as many children as possible instead of using FP".* One participant implicated this association by reporting there were no cancers long ago simply because there were no family planning (modern) methods. But with the introduction of the methods around 1965, we started hearing of cancer. She said that their parents did not use family planning and so they had no health problems. Another one explained vividly the association that *"contraceptive pills are never absorbed in the body. They accumulate into the womb. They end up eating the organs there and leave wounds. This is what cancer is".*

Some participants felt that cervical cancer is also associated with high parity - *"like a woman having eight or more children, can cause cancer of the cervix as the birth canal becomes weak".* On the other hand, there are those who were of the opinion that *"though you get so many children, you cannot get cervical cancer. All that happens is that the uterus softens, it can also tear. But that is not cancer".*

One participant reported hearing that *"fibroids in the uterus can cause cancer".* Another participant differed with this standpoint, stating that *"I don't think this can affect the cervix. Only FP can lead to cervical cancer, nothing else".* Only one participant said that germs can cause the cancer of the cervix – *"only scientist can tell us. They know these germs".*

The issue of cancers being inherited was also discussed. One woman reported that all cancers are inherited, but another differed with her, saying that *"this particular one (cancer of the cervix) is not inherited, because if you investigate, there was no FP a long time ago and so there was no cancer. Our grandmothers did not pass it to us because it was not there. So, we can only say that family planning causes cervical cancer".* The participants resolved that they could not tell whether one can inherit the disease or not since they did not know the exact cause. During the case narrative interviews, one respondent mentioned that:

> Women think that contraceptive pills cause cervical cancer but I think that this is not the case because when I was referred to Kenyatta National Hospital for radiotherapy, there were many other women with similar problems, others were elderly and others young yet they told me that they have never used contraceptive pills. Though I do not have any suspect cause for cervical cancer, I do not think that these pills cause it.(SW)

Another one added

> Women do not know what causes it. Even me – I don't know. What causes it? Can it come through sexual intercourse? I only know about breast cancer – when you don't breastfeed or you have lumps that are painful.(BM)

4.2.4 Prevention, treatment, transmission and cure of cervical cancer

After mentioning the risk factors that are associated with cervical cancer, the survey respondents were asked whether the disease can be treated, prevented, transmitted or cured. About 75% of the respondents said that cancer of the cervix can be treated; 45.2% of the respondents said that it can be prevented; 11.3% reported that the disease is contagious, and 50% respondents said that it is curable. (Table 4.6).

Table 4.6: Cervical cancer treatment, prevention, transmission and cure (n=64)

Question	Yes(%)	No(%)	Unsure(%)	Don't know(%)
Can cervical cancer be treated?	74.2	17.7	1.6	6.5
Can cervical cancer be prevented?	45.2	21.0	9.7	24.2
Is cervical cancer contagious?	11.3	38.7	6.5	43.5
Can cervical cancer be cured?	50.0	43.5	3.2	1.6

Treatment

Respondents who said that cancer of the cervix can be treated were asked to cite ways that this was possible. However, there were those who, despite answering 'yes' to the above, did not cite a single way of treating, or did not know these ways. This information is shown in Tables 4.7.

Table 4.7: How is cervical cancer treated? (n=47)

Response	Frequency	Percent
Removing organ through surgery	9	19.5
When it has not advanced (not specified)	8	17.3
Taking medication/drugs	7	15.2
Radiotherapy	6	13.0
Don't know	9	19.5

About treatment of cervical cancer, one woman in the FGDs pointed out that *"there are women who go for surgery and they get cured. Some are told to go for radiotherapy. But you never know. The only treatment is by removing the uterus. You either get cured or you don't. I have seen some women getting cured, but some just die. It is all by luck"*.

There was a strong standpoint taken by the participants, that even when one is treated, *"it never goes completely – it recurs or shifts to another place. It is quite obvious that you have to die"*. One participant stressed that *"this happens to all cancers (shifting from one place to another) once you try to treat it"*. It was generally agreed that many women go for treatment of diseases only when it is detected, *"that is when they think of being examined"*.

Prevention:

Various ways of preventing cervical cancer were mentioned. Table 4.8 shows that majority of the respondents (60.7%) mentioned controlling sexual behaviour, remaining faithful to one partner in order to avoid STDs. This number was followed by 21.4% of the respondents who said that going for check-up would prevent the disease. Other responses were stopping cigarette smoking (14.3%), stopping the use of Fp especially coils and pills (14.3%), avoiding abortion (7.1%), and good dietary habits (7.1%). The following responses were mentioned by 3.5% each: good general hygiene, faith in God or divine intervention, having gentle sex, and others did not know.

Table 4.8 Ways of preventing cervical cancer (n=28)

Response	Frequency	Percent
Control sexual behaviour avoid STDs/faithfulness	17	60.7
Go for check-up	6	21.4
Stop smoking	4	14.3
Stop FP, especially coils and pills/use natural FP	4	14.3
Stop abortion	2	7.1
Good dietary habits	2	7.1
General hygiene	1	3.5
Faith in God, divine intervention	1	3.5
Gentle sex	1	3.5
Don't know	1	3.5

Some participants in the FGDs stated that the only way to prevent the cancer is by *"stopping the use of family planning. You can get as many children as you can, but never use pills. Those who do not use family planning do not have health problems like we do. They do not come here to queue with us at the hospital"*.

There was a general agreement that for any disease to be prevented, people should first and foremost know what causes it. As for the cancer of the cervix, FGD participants strongly agreed with one of them who said *"since we don't know the causes we also don't know whether it is preventable. What causes it? Once you know the cause, you can try and avoid. Like AIDS we know how to avoid. We all know what causes it"* Another participant reported *"we cannot prevent it because we do not know the risk factors. We also do not know the germs that cause it. All we know is that you should stop using FP pills"*. They also added that those who get many children are cases to have cervical cancer. *"People should stop using FP. Women should use all the eggs that God gave them"*.

Transmission

Only two ways of transmitting cervical cancer were reported, these being inheritance and through having multiple sexual partners. Table 4.9 shows this information. There was a general agreement in the FGDs that all cancers are not contagious, *"whether it is in the mouth or on the hand"*.

Table 4.9 How is cervical cancer transmitted? (n = 7)

Response	Frequency	Percent
Through inheritance	2	28.6
Through sex/multiple partners	5	71.4

Cure

Various ways of curing cervical cancer were mentioned. These are removing the uterus or cervix, treating early before the cancer has spread, taking medication among others (Table 4.10).

Table 4.10 How can cervical cancer be cured? (n=32)

Response	Frequency	Percent
Remove the uterus/cervix	13	40.6
Early treatment	5	15.6
Taking drugs/medication	4	12.5
Radiotherapy	4	12.5
Don't know	4	12.5
Have one sexual partner	1	3.1
Divine healing	1	3.1

Some participants in the discussions felt that even after surgery and radiotherapy, cancer of the cervix is not curable. One woman narrated her story *"I have a neighbor who is 50 years old. She had cancer of the cervix. It had extended to the other organs – what do you call them - the ovaries. Even after surgery, when her uterus was removed, she did not get well she died".*

Some participants emphasized that cancer of the cervix is not curable, that it recurs every now and then even when it is removed. *" I know a woman who has breast cancer. Every time she goes for surgery, it shifts to another place; right now as we are talking it has shifted to the armpit".* Only one woman had a different opinion – *"I have also heard about the same but I also think that once those cancer cells are detected in advance, they will not spread. I think that it is curable".* Another added *that "one can stay a while before detection - even 4 years"*, and another was quick to answer that once it is detected one should go for surgery very quickly, otherwise it will spread further.

4.2.5 Knowledge of pap smears

Respondents who reported having heard about cervical cancer were asked whether they knew what a Pap smear is. Slightly more than half the respondents (53.1%) reported that they had heard of pap smears, majority of them (52.9%) saying correctly that it is an examination where by a specimen/mucus is removed from the cervix to check for cancerous cells. About 38.2% reported that pap smears test for any diseases or problems of the reproductive tract. Three respondents (8.9%) could not explain what pap smear is despite the fact that they had heard about it.

The respondents in the FGDs were also asked whether they had heard about pap smears, the majority of them reported not to have heard. They also reported that *"it is not possible to use something that you don't know anything about and has not heard about".* They expressed the need to be informed of its importance, and be told where services can be offered.

In the survey, respondents who said they had heard about pap smears were also asked to say which group the women should take the test, at what age and how often. They were also asked whether they would recommend pap smear to a friend or relative and to give reasons for their answer. Ninety-seven percent said that they would recommend pap smears, for the reason that a woman would know in advance whether or not the have cancer (96.8%) or to prevent the disease (3.2%). Only one respondent (3%) said that she would not recommend pap smears for the reason that women should go for it only when they have problems of the reproductive tract. One respondent was unsure. Table 4.11 summarizes this information.

Table 4.11 Knowledge, attitudes and perceptions towards Pap smears (n=34)

Which group of women should take pap smears?		
Response	**Frequency**	**Percentage**
All women of reproductive age	18	52.9
Married women with children	6	17.6
Women with multiple partners	4	11.8
Don't know	3	8.8
All women using FP	2	5.9
Only those with reproductive problems	1	2.9
At what age should women take pap smear		
18-21	11	32.3
General reproductive age (no specifics)	8	23.5
14-17	6	17.6
30-33	6	17.6
22-25	1	2.9
34-37	1	2.9
38-40	1	2.9
26-29	0	0
How often should pap smears be taken		
Every 1-2 years	14	41.2
Don't know	8	23.5
Unsure	8	23.5
Every 4-6 months	4	11.8
Would you recommend pap smears?		
Yes	32	94.2
No	1	2.9
Unsure	1	2.9
If yes why would you recommend pap smear?		
To know in advance whether you have cancer	30	93.8
To prevent cancer	1	3.1
Don't know	1	3.1
Why wouldn't you recommend pap smear? (n=1)		
Women should go only when they have reproductive health problems	1	100

4.2.6 Pap smear examination

Respondents who indicated that they had heard about pap smears (34 women) were asked whether they had taken the exam within 5 years before the study, and under what circumstances. 67.9% indicated that they had taken pap smears, while 8 said they had not (23.5%). Three respondents (8.9%) were not sure since when they went for examination (that was similar to pap smear) were not told what was happening. Those who went for pap sears did so under various circumstances (34.8%) under personal choice, and majority (65.2%) following a doctor's advice.

Among the few that had heard about pap smears in the FGDs, one reported that she was advised to go for the test by a doctor after birth of her child, but since then, she has not had time to go. She had complained of painful sexual intercourse.

On preventive health seeking behaviour, respondents were asked whether any of them had gone for a screening test like a pap smear One responded in the FGDs exclaimed *"Why should you go for a test if you are not sick?"* Others added that *"even if we went for such a test, we do not want to be told that we have cancer. Haven't you heard about what people are doing when they have been told that they have AIDS? They go spreading the disease. Some go mad. It is better not to know what you are suffering from"*.

One participant narrated her experience during the case narrative interview:

> I heard from fellow women in the community about a team of doctors who were coming to this hospital to check on diseases that affect women. I had Pap smear taken and the doctor told me that it was not clear and so they sent me for something called colposcopy. I was then informed that I had a few cells in the cervix that would develop to cancer. I was terribly scared when I heard that, but the doctor assured me that it was not very advanced. He told me that it was at Stage II. I was very afraid because I did not even have the symptoms, I was only coming for a check up.(SW)

Of those who said that they had gone for pap smears at one point or another, 17.4% said that they did not go back for the results and/or they did not know, 74% that was negative for cancer, and 4.3% that growths/abnormal cells were found. Asked whether they went for follow up after the examination 52% said they had, while 48% had not, for the following reasons 18% said that referrals were not allowed the facility where they had gone for the succeeding examinations 45% were told that they had no disease, 36% had only gone recently and therefore the return date had not passed. Only one respondent reported lack of money as a reason why she did not go back for another pap test (Table 4.12).

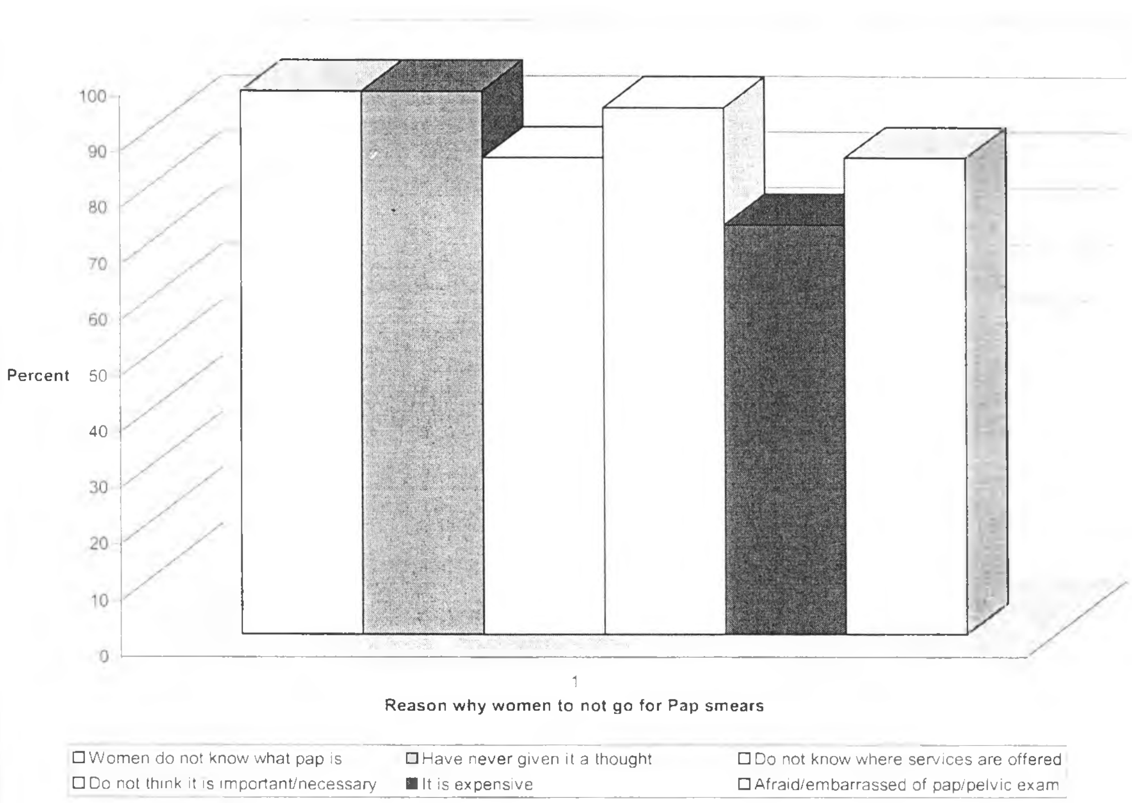
Table 4.12 Responses from respondents who had heard about Pap smear test (n=34)

Have you had pap smear in the last 5 years?		
Response	**Frequency**	**Percent**
Yes	23	67.9
No	8	23.5
Unsure	3	8.9
Under what circumstances		
Personal choice	8	34.8
Doctor's advice	15	65.2
What were the results?		
Did not go back/don't know	4	17.4
Negative for cancer	17	74.0
Found to have growth	1	4.3
Unreported	1	4.3
Did you make follow up?		
Yes	12	52
No	11	48
If no, why?		
Referral were not allowed	2	18
I was told I had no disease (negative)	5	45
I was there recently/follow up not due	4	36
Lack of money	1	1

4.2.7 Reasons for lack of utilization of screening services

Respondents who had knowledge of pap smears were asked why women do not go for pap smear examinations. Various statements were read to the respondents, they had to agree or disagree with these. Results are shown in Figure 4.10 below.

Figure 4.10: Reasons why women do not go for pap smear



Participants were asked to give reasons why women do not submit to screening procedures such as pap smears. Most said that they do not know what it is, and *that "We do not even know where such services are offered"*. One participant reported that *"even if you knew where to go for test, some doctors ignore. They wonder whether you have so much money to waste on some disease that might not even be there. Some wonder, if you are not in pain why is it that you need a test?"*

Other participants in the FGDs felt that another hindering factor is ignorance. One woman confessed *"like myself, I have to confess I heard about a test like that (pap smears) being announced in church. But I had so many other things I needed to do, I did not bother"*. Another added *"I also heard about the same, but I am always unlucky – I get information when it is already too late. I think we should be informed of such things in advance so that we prepare ourselves adequately in terms of money and time"*.

Issues of privacy emerged as a barrier to utilization of Pap smear services, as reported by respondents in the case narrative interviews:

> Many women are closed up even when they are sick. They will not tell you about their disease. Another thing is that women do not go to the hospital on their own

> volition, they wait until they are sick. It is good to announce in radios because some women do not even know about cancer of the cervix.(AN)
>
> Many women do not go for pap smears because they don't even know about it. Those that go for screening are advised to do so at the FP clinics. Here in the rural area, people do not know much, but in towns, there are many clinics. Women here take things lightly. I told several women – about four of them that we go for tests, but they do not want to be examined down there. I think they are not shy, only that they do not want to be examined in their private parts.(JG)
>
> Many women think that this test is not very necessary, especially if you do not have any symptoms of a disease that could affect that part of the body. When I told some of my friends to go for the test, they refused, fearing that they would be checked for AIDS. They regretted later when the doctors had already left. (SW)

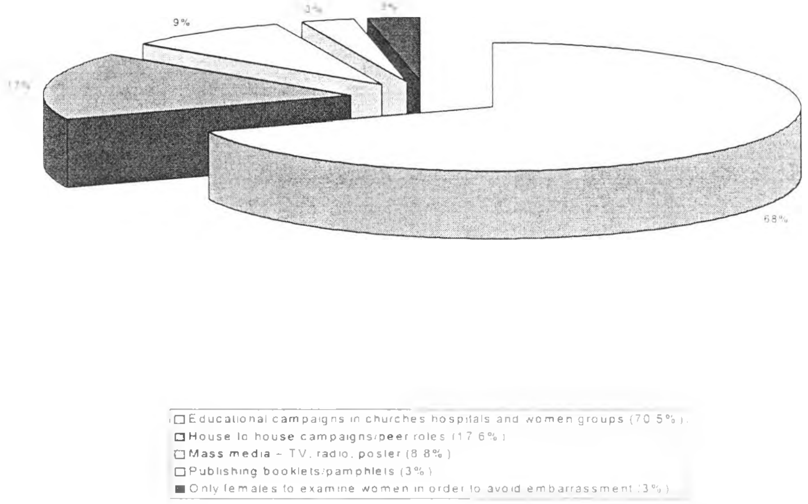
4.2.8 Location of screening services

The preferred location for screening services for the majority (94%) of the respondents was health facilities. Other propositions were churches and community centres (6%).

4.2.9 Encouraging women for screening services

Respondents were asked to suggest ways through which women should be encourage to submit to pap smear exam. Figure 4.11 shows that most (70.5%) respondents preferred education campaign wherever women may be found, but mostly in churches, hospitals and in women groups.

Figure 4.11: Encouraging women to submit to Pap smears



The FGD participants were asked to discuss ways through which women would be encouraged to submit to screening services. Some respondents said that a woman may be shy to tell their problems. One participant referred to a case she had narrated before *"like the 70 year old woman with bleeding. She had kept it to herself for two months. She was not able to tell anyone, but one day she told her daughter who took her to hospital where she was diagnosed with cancer. She died later"*. Another constraint that was mentioned was the fact that women do not know what pap smear is – *"We don't' know what it is"* and ignorance *"some who know about it do not care – they ignore it"*. Another problem is that even those afflicted by the disease do not appear to have any information about the disease, as one participants narrates:

> I made my first visit to the clinic in December 1999. It was announced in Limuru churches of some doctors who would come to check women. My pap smear was taken and I was told that it was not clear. I was asked to make a follow up visit. A t that point, I did not think that anything major had happened to me, but I was given many medicines to take, and I made many other follow ups. Even after all this, I have never been told what my problem is (BM).

Another recurring statement in the discussions was that *"when you don't have any health problems, there is no need of going to the hospital"*. It was also mentioned that some women feel shy/embarrassed, but some of the participants disagreed with this notion. One of them put it thus: *"You should not feel shy – how did you give birth? Everyone has to see what you are hiding"* . From one respondent in the case narrative interview, there is a clear need to present oneself for examination even though one does not feel sick:

> It is good to encourage women to have Pap smears, even though some will not be found to have cancer, they will be told if they have any other disease.(AN)

4.2.10 Knowledge of someone with cervical cancer

Respondents were asked whether they knew someone who had/has suffered from cancer of the cervix. Out of 64 respondents 51 (74.1%) said they did, while the rest (25.9%) did not. Those who knew were asked of their relationship with the sufferers. 76% of respondents said these were friends, colleagues or neigbours. Those who had relatives suffering from the disease were (22.0%) while one respondent knew a client of hers who had the disease (2.0%)

It emerged that some participants in the FGDs had seen and heard reports of those afflicted by the disease. One participant had knowledge of a woman who died of cancer of the cervix. She reported that the patient had gone to hospital and had surgery, but she died because they said it had spread further. According to the participant, *"she was bleeding excessively – the bleeding could not stop"*. Another respondent intercepted that she also heard about a 70 year old woman who had the same problem. She explained that this elderly woman was very worried because she had already reached menopause, so she could not explain it to anyone. She was very shy and she died eventually even after seeking medical treatment. The respondent added that *"all that people know about this disease is that you have to die even if you go to hospital"*

The study also sought the relationship of respondents to people they knew that had cervical cancer. 76% of respondents who sad they knew someone with cervical cancer said that these were neighbours, friends or colleagues. 22% and 2% said that they knew of their relatives and clients respectively, who had suffered from cervical cancer.

4.2.11 Perception of personal risk of contracting cervical cancer

To assess the attitude or mental views of the respondents regarding cervical cancer, they were asked whether they perceived themselves as having any personal risk of the disease, and to give reasons for their answers. This question was asked to only those who said that they had heard and could explain something about cervical cancer. About 87.5% reported perceiving themselves at risk. Reasons for their answers are shown in Table 4.13. Eight respondents said that they were not sure that they were at risk of contracting the disease.

Table 4.13 Perceptions regarding personal risk of contracting cervical cancer (Number of times mentioned)

Why do you perceive yourself as having a personal risk (s) to cervical cancer?	
Anyone can get sick	11
I use family planning IUCD/pills	10
I am a woman/it is a disease for any woman	9
Don't know whether my partner is faithful	8
I don't know what causes it/risk factors	6
Bad luck	3
No specific reason cited	3
No one knows what happens in the body	3
People around me smoke	1
I have many sexual partners	1
Why don't you perceive yourself as having any personal risk towards cervical cancer?	
I am faithful to my partner	7
I have no symptoms	2
I don't use contraceptives	2
I have faith in God	2
I am old enough	1
I do not smoke	1

Respondents were also asked to mention beliefs and/or practices or perceptions regarding cervical cancer, which would hinder women from perceiving themselves at risk of the disease. A wide range of responses was elicited, as shown in Table 4.14 below.

Table 4.14: Beliefs, practices and perceptions that may hinder women from perceiving themselves at risk of cervical cancer.

Response	**Frequency**
Cervical cancer like all other cancers, has no medicine or cure. You have to die.	11
When she has no pains or health problems, they don't bother going to hospitals	6
Cancer is like AIDS or Ebola it has no cure	2
Cervical cancer is just like AIDS since it comes through sexual contact.	2
Women are not open especially to tell problems related to their reproductive health	2
Since there is no stigma attached to it women do not care whether they catch it.	2
It is a curse therefore it cannot be cured	2
Pap smears have side effects – these can also cause cancer when they keep inserting the speculum; they also test for AIDS.	2
Cervical cancer cannot occur to me: I take herbal medicine; I have faith in God.	2
It will clear even without going to hospital .	2
Fear of pelvic examination and surgery.	2
We do not want to know whether or not we have a disease	2
I am faithful, partner is faithful	2
Since cancer is inherited from parents, there is nothing one can do about it once you get it.	1
The disease does not run in my family so I don't have chances of catching it.	1

Perceptions or attitudes about cancer of the cervix was assessed, with some respondents in the FGDs said that there are no special beliefs about the disease *"it is just like any other disease"*. Another respondent added that *"people know that it is a disease. They know it is not a curse and they do not care about witchcraft. They know that germs and not witchcraft cause diseases"*. There is one respondent who felt that *"in other communities like Luo, they attribute every tragedy to witchcraft. Even road accidents. They go to witches. But we (Kikuyu) do not believe in witchcraft"*. There are others who said that they heard that cancers – whether it is on the breast, head or anywhere else, run in families – *"It is inherited, and so there s nothing you can do about it"*.

Respondents were asked whether they thought cervical cancer is different from AIDS. They affirmed, saying that one can be tested for cervical cancer and go for treatment. At that point, one participant thought that even when one is told that cervical cancer is curable, *"the fact remains that once you know you have cancer, you get mentally disturbed – just like when you are told that you have AIDS"*.

One respondent reported that some doctors will not tell one what disease they have. Another respondent differed with this stand, stating that *"doctors are not hiding anything from us anymore. Even when you have AIDS, they will tell you to your face. They have to tell you"*.

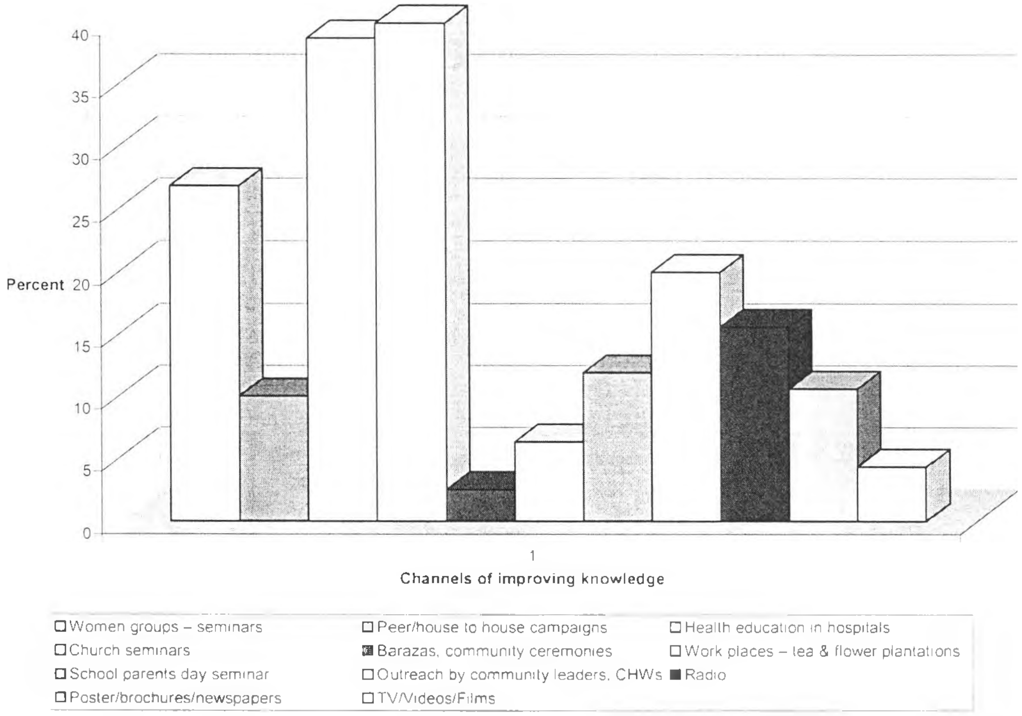
From case narratives, reactions/perceptions of relatives or close kin were also noted. As one respondent narrates:

> When I told my husband, he was also scared, but when I talked about it with a colleague of mine, all she said was that we would pray about it. I had to go and tell my mother about it and she was indeed very afraid. When I told her that the condition was not serious and that I would be well if the doctor treated me, she said that whatever method of treatment, I should not accept surgery because cancers relocate elsewhere in the body when one gets a surgical operation. I pretended to take her advice but inside me, I had decided to follow the doctor's instructions. I still go for follow up.(SN)

4.2.12 Preferred approaches to improve level of knowledge regarding cervical cancer

All the respondents in the survey regardless of whether they knew about cancer of the cervix or not, were asked to suggest ways through which level of knowledge regarding the disease would be raised/improved. Each respondent was asked to mention as many approaches as possible. The most preferred approaches were mentioned as seminars in church, health education in hospitals, seminars for women groups, education outreach by community leaders or community health workers (CHWs) and radio, in that order. Baraza ranked lowest, as most respondents said that not many women attend them. TV/video/films were also relatively lowly ranked as the respondents said that very few people have these in their houses (Figure 4.12).

Figure 4.12: Ways to improve level of knowledge regarding cervical cancer n=160



In all the FGDs, respondents agreed that many women do not know much about cervical cancer., nor pap smears. It was said that it would be good to raise awareness and teach women of the importance of the test. They also wanted the hospitals to offer these checkups. Others thought that if community leaders or a few people are taught about this disease, they can sensitize others, while others were of the opinion that women can be asked to meet after the church service, and if experts are invited to talk about the subject, women will attend the meetings – *"we can hold seminars like what we do in church about AIDS"*. Majority felt that many women are found in churches and therefore this can be a viable way of educating women. Still, there are some respondents who felt that people should be informed in their homes and then they can also inform others (peer roles). They reported that women have social groups and these can be good channels of through which women can be educated. Schools were also proposed – *"schools have organised AIDS talks on parents day. We can do the same";* as well as hospitals where they suggested that health facilities should offer mandatory health talks and examination to women coming for FP or bringing their children. They also said that radio programmes and booklets can be ways of educating women about cancer of the cervix. There was a suggestion that even men should be involved in the education *"so that they inform their wives. We should not teach women alone"*.

Those interviewed for their narratives concurred, saying that

> Hospitals should set up health education talks about the disease and invite women to sessions. People know so much about AIDS – they hear about it over the radios. The same could be done for cervical cancer.(SW)

Another one added to this giving her experience that

> When I was informed that I had the disease, I decided to put more efforts to know more about it. I now know that early sex and having multiple partners are factors associated with the disease. There should be vigorous campaigns in the community informing women about the disease. When you want to know about AIDS, everyone has information about it, yet nothing is known about cervical cancer. Seminars should be put in place.(SN)

It is clear from these findings that women in Kiambu have varying perceptions regarding cervical cancer. Their knowledge, attitudes and practices vary widely. In the next chapter, I discuss the implications of these findings and make conclusions and recommendations.

CHAPTER FIVE

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.0 INTRODUCTION

The study sought to assess knowledge, attitudes and practice of women in Kiambu District regarding cervical cancer. In this chapter, the major issues emanating from the findings of the study are discussed. Based on the findings, conclusions and recommendations have also been made.

5.1 DISCUSSION

5.1.1 Knowledge of cervical cancer, risk factors, prevention, treatment and cure

a) Definition of cervical cancer and its of risk factors

Basic questions regarding cervical cancer risk factors, prevention, treatment, cure and Pap smears were asked to assess respondents' knowledge about the disease. Most respondents did not have a precise description of cervical cancer. The description they gave applied more accurately to symptoms of the disease rather than the disease itself. These included irregular and excessive vaginal bleeding, vaginal discharge, pelvic pains, and painful intercourse. Some described it as wounds that do not heal. Similar findings are documented by Boonmongkon and others (2001). In their study in North East Thailand, they document women's views of cervical cancer. Women gave views that a wound in the cervix often bleeds and does not heal, and the woman gets cancer. Ajayi et al (1998) in a study on knowledge and attitude of general outpatient attendants in Nigeria to cervical cancer also recorded that over half of the respondents had no knowledge of the description of cervical cancer, its clinical presentation or causes.

Association between cervical cancer and contraceptive use was eminent in the study, and although mentioned by many respondents in the study, it is apparent that they did not have factual information regarding the association between FP and cervical cancer. This was also the case in one study done in Thailand, that an IUCD left inside the body of a woman causes a wound/ulcer which becomes infected, discharge increases, and the wound does not heal. (Boonmongkon et al. 2001).

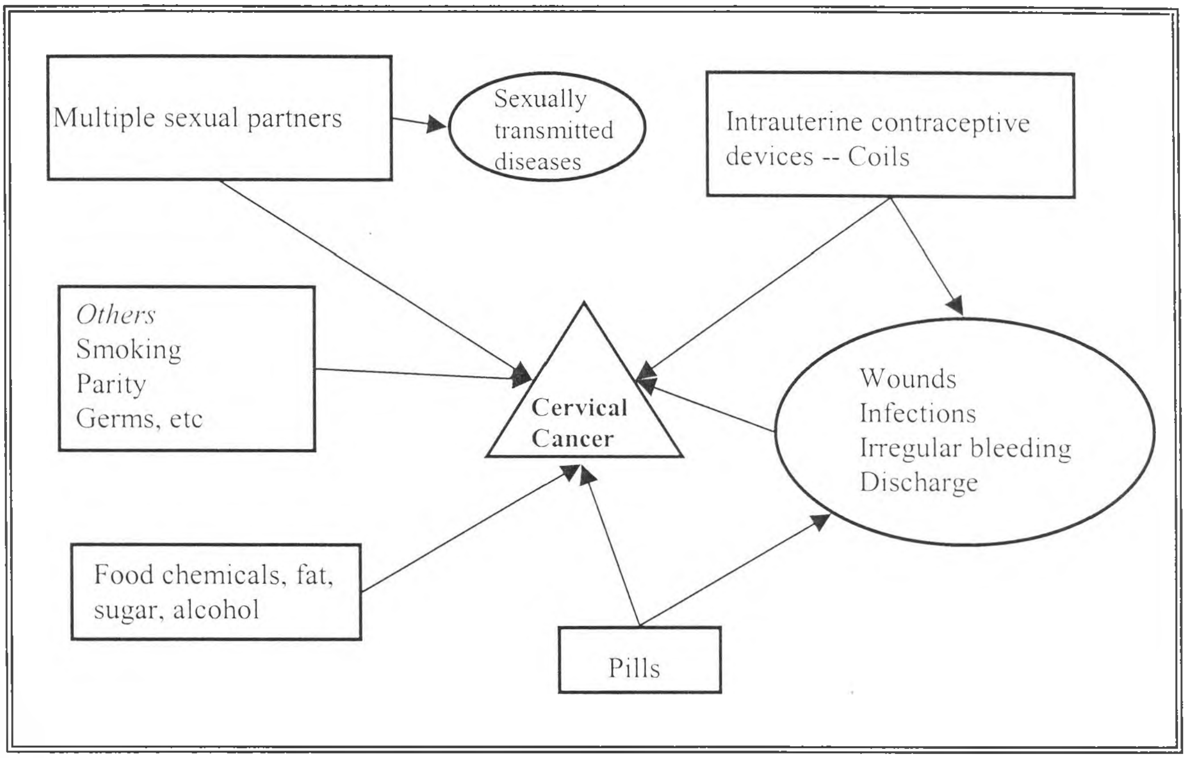
The association between cervical cancer and contraceptives is a debate that is yet to be concluded. This has been confounded by the difficulty in controlling for sexual behaviour. It has been noted elsewhere (Meheus, 1992) that users of oral contraceptives are sexually active women who are less likely to use barrier methods and are therefore at increased risk for invasive cervical cancer. Meheus explains that Jewish women use a diaphragm as a contraceptive more frequently than other groups, which may explain their lower incidence for cervical cancer.

Gender roles, particularly the unequal power wielded by men and women, influence the extent to which women can make decisions about their health and quality of life. In many societies, women's autonomy is limited, so that major family decisions, including whether to use contraception and how many children to have, are the principal domain of husbands (Population Reference Bureau, 2000). To this extent, women in societies where the male interests rule may be at the loosing end, with poor negotiating power on their own sexuality, and may therefore be exposed to infections if their partners do not consent to the use of condoms either as a contraceptive method or as a measure against sexually transmitted infections.

Having multiple sexual partners and a history of STDs were risk factors frequently mentioned by respondents. A significantly high proportion of respondents also free-listed these. A similar concept is recorded in Thailand, that the husband has extramarital sex with a woman who is not clean and transfers germs to his wife who gets an STD, and this could cause cervical cancer (Boonmongkon et al. 2001).

From their responses, it is clear that women in Kiambu have a multiple causal folk model for cervical cancer, illustrated in Figure 5.1. The Figure shows that there are direct and indirect causes of cervical cancer. As expressed variously by respondents, some considered STDs as indirect causes of cervical cancer, this having emanated from having multiple sexual partners. Some thought that having multiple sexual partners in itself is the cause of cervical cancer, not mentioning the acquisition of STDs. The same trend was noted for use of contraceptives as a risk factor. Some respondents attributed use of coils and pills as direct causes of cervical cancer, in that coils create wounds that do not heal, while pills are never absorbed into the body; they form a hard "stone-like" mass that "eats" up the uterus and other reproductive organs. This is the folk explanation of cancer. Other respondents implied the association indirectly, such that coils create about infections, while use of pills cause irregular bleeding and discharge, all these resulting to cervical cancer. Other direct causes of cervical cancer were mentioned as cigarette smoking, high parity, germs, consumption of food with high levels of fat and sugar, consumption of alcohol, and artificial food chemicals.

Figure 5.1: Folk causal model of cervical cancer



Key: ☐ = Direct cause ○ = Indirect causes △ = End result (cervical cancer)

b) Prevention

It is apparent that ways of preventing cervical cancer were directly linked to what the respondents thought were the causes. For Example in the FGDs, one participant noted that the only way to prevent the cancer is by *"stopping the use of family planning. You can get as many children as you can, but never use pills. Those who do not use family planning do not have health problems like we do. They do not come to queue with us at the hospital"*. Grimes and Economy (1995) conclude that avoiding cigarette smoking may protect against cervical cancer. They also noted that in assessing the association of long term use of oral contraceptives it is difficult to control for sexual behaviour.

Bishop and others (1995) in their study of cervical cancer in Kenya and Sierra Leone also reported that women in either country were not aware that early diagnosis and treatment when a woman is still at the asymptomatic stage greatly improve the probability of successful cure and prevention of cancer. In general, women sought help only when they experienced severe pain and/or bleeding and could no longer work, by which time the cancer was often untreatable.

While limiting the number of one's sexual partners or having a single faithful partner; and shunning the use of pills and coils as contraceptive methods were presented as choices to reduce the risk of getting cervical cancer, the role of condoms as a protective barrier was not readily identified. Grimes and Economy (1995) have concluded that the use of barrier methods of contraception (diaphragm, condoms, foam, spermicides and contraceptive jelly) protects against cervical cancer. Participants in the FGDs, revealed that women may not be in a position to demand for use of condoms - *"men won't agree to use condoms. They say that they do not enjoy sex with condoms. They say it is like eating a sweet without unwrapping it"*. This concurs with findings from O'Toole (1993) in West Africa where it is reported that condom use requires acquiescence of the male partner, which the woman may feel without power to demand.

There was a general agreement that for any disease to be prevented, people should first and foremost know what causes it. This calls for vigorous health education campaigns regarding cervical cancer. In a reproductive health needs assessment in eight districts in Kenya carried out by Population Council, Catholic Diocese of Nakuru and United Nations Population Fund (UNFPA) it emerged that although women suffer from breast cancer and cancer of the cervix, they did not know cancer signs and symptoms, and that a routine medical check up was not really a priority. In one group of women, the participants claimed that they had not had any health talks on cancers affecting women. They noted that health talks are usually dominated by information about family planning. It was further noted that this benefited women who are of childbearing age as they are the ones who frequent clinics. Often by the time women present themselves, the disease is at an advanced stage. (Muia et al. 2001).

c) Treatment and cure

Although three quarters of respondents knew that cervical cancer can be treated, only 50% of these said that it is completely curable and that those with cervical cancer do not necessarily die from the disease especially when they submit to health care when the disease has not advanced. That only this number knew cervical cancer to be curable is unfortunate, and may reflect misinformation circulating within their various sources of information. It should be beneficial for health education efforts to reinforce the understanding that cervical cancer is preventable and curable when it has not advanced so that people will fully appreciate the importance of screening. Death resulting from cervical cancer is particularly tragic because this type of cancer develops slowly and has a detectable precursor condition, carcinoma in situ (CIS) which is treatable (PATH, 1997).

5.1.2 Preventive health behaviour

Although cervical cancer is a disease of the middle age, respondents felt that all women of reproductive age, as long as they are sexually active, should be screened regularly. PATH (1997) has suggested that programmes increase awareness of cervical cancer and preventive health seeking behaviour among high risk women. They noted that 30-50 is a reasonable age group for the new cervical cancer control programmes with limited resources. Additionally, programmes should strive to screen all women aged 30-50 at least once before expanding services to other age groups on decreasing the interval between screening.

Various barriers to utilization of screening services were mentioned by respondents. These include lack of knowledge about Pap smears; lack of knowledge of where such services are offered; and attitude of health service providers. Bishop et al. (1995) in their study of women's and providers' perspectives of cervical cancer in Kenya and Sierra Leone also documented similar findings, that few women in either country were familiar with screening or understood that there are no discernible symptoms in the precancerous stage where treatment is most effective. They reported that those who access to screening facilities usually found the cost beyond their means. Women were also deterred by insensitive providers and poor counselling.

Experience gained by some participants in case narrative interview points that women do not go for check up even when it is free. They do not think it is necessary. Other barriers as noted in the survey are that women do not give it a thought, they may be afraid or embarrassed of pelvic examination, and that the test is expensive. All these reasons were pointed out by over 75% of the respondents who reported having knowledge of Pap smears. Lazcaro-Ponce, E.C. et al (1999) in their study on barriers to early detection of cervico-uterine cancer in Mexico found out that barriers to the Pap test included lack of knowledge about cervical cancer etiology, lack of knowing of the Pap test, the perception that cancer is an inevitably fatal disease, problems in client-provider relationship, giving priority to unmet needs related to extreme poverty, opposition by male partners, rejection of pelvic examination, long waits for sample collection and results, and perceived high costs for care. They suggested multiple communication strategies to be used to promote the use of Pap tests, including promotion during contacts between health providers and women, distribution of information, by radio, posters and pamphlets; promotion through community groups, and incorporating cervical cancer prevention promotion into existing health programmes.

Similar findings are documented by Fylan (1998) in a review of women's attitudes, knowledge and behaviour regarding screening for cervical cancer. One of the objectives of this study was to examine reasons for women's non-participation in screening programmes. Reasons included administration failures, unavailability of female screeners, inconvenient clinic times, lack of awareness of the test's indications and benefits, considering oneself not to be at risk of cervical cancer, fear of embarrassment, pain or detection of cancer.

There are other factors that influence utilization of screening services, that may not have been mentioned but play a significant role. These may be beyond the women themselves and may include adverse social conditions such as poverty, poor access to education and health care, reduced sexual and reproductive choices for women in a male-dominated society, high prevalence and campaigns against other diseases such as AIDS distracting or altogether barring attention from cervical cancer. Clearly, most of these problems are not easily remediable; but cervical cancer prevention campaigns in Kenya need to take these issues into account.

5.1.3 Perceptions of illness, risk and vulnerability

Most respondents felt at risk of cervical cancer, with participants saying that it is very difficult to "tame" men. This finding is concurs with Rutenberg and others (2000) who noted that women in Zambia described their personal risk of getting STDs including HIV/AIDS in indirect ways. They tended to say they trusted their husbands but at the same time expressed uncertainty about whether they were right to trust that extramarital behaviour was not occurring.

5.1.4 Ways of educating /encouraging preventive health behaviour among women

All respondents supported educating women about cervical cancer and its prevention, with a majority (70.5%) preferring such education to be executed where women are mostly found, notably in churches, hospitals and women groups/networks. Social networks can be especially important vehicle for mobilizing women to discuss cervical cancer and how to reduce their risk to the disease, raising awareness and reinforcing prevention efforts. Such networks, therefore, provide a supportive, non-threatening environment where women can talk candidly. Interventions that may be put in place should adopt a participatory approach, and make use of such networks of women.

PATH (2000) in their prevention fact sheet have recommended that combining appropriate services with community-based education and support programmes will help ensure the impact of cervical cancer prevention programmes. To ensure that programmes address women's needs and concerns, those at risk of cervical cancer should be involved in developing, implementing and evaluating programmes interventions and informational messages. Involving women in these ways helps programmes to provide women with persuasive information from their preferred sources and at their preferred delivery sites. Lack of awareness about cervical cancer is a key barrier to women seeking cervical cancer screening. Women may prefer to receive information in certain places: local women's groups and community centres, churches, family planning and reproductive health centres and hospitals.

Shepherd et al (1999) in their study on interventions for encouraging sexual lifestyles and behaviours intended to prevent cervical cancer reviewed the effectiveness of health education in promoting sexual reduction among women in order to reduce transmission of HPV. It was revealed that educational interventions targeting socially and economically disadvantaged women in which information provision is complemented by sexual negotiation skill development can encourage at least short-term sexual risk reduction behaviour. This has potential to reduce the transmission of HPV, and, as a result, the incidence of cervical cancer.

5.1.5 Emerging issues

After giving an overview of the disease, and that there is increased need for use of condoms as protection against STDs, including cervical cancer, participants expressed concern over condom use, stating that *"men won't use condoms. They say that they do not enjoy sex with condoms. They say it is like eating a sweet without unwrapping it".* They felt that men have a role to play in eradicating the disease as *"a woman could be very faithful and follow all these things but the men cannot be tamed. They bring the diseases to us".* Asked where the men can be educated, one suggested that hospitals can organize for education, but one reiterated that *"Men do not go to hospitals, and very few of them go to church. How will they be informed, since they spend all their time taking alcohol?"*

Another issue was that men are not cooperative: *"You see, even when you don't use pills or you don't want to use them, you will use the natural method - that one of counting safe days. Yet when a man comes to you for sex and he is drunk, they don't care whether you are* *on safe days or not. Men are the problem. For us to prevent this disease, even men should be informed. Don't just target women".*

Inclusion of men in cervical cancer prevention efforts is a crucial factor. In a hospital-based study in Kenya, more than 90% of women surveyed said they desired men's participation in areas of reproductive health. Women recognize that involving men in a supportive way in reproductive health can make things easier for them and can result in better health for them and their children (Muia et al. 2000).

Other studies have also documented the importance of integrating men into reproductive health. Blanc (2001) notes that qualitative studies can often reveal insights that are not captured by survey data. For instance, in a case study of the ReproSalud project in Peru and a qualitative assessment of the project explain that although men were not initially included in project activities, women insisted that they should participate, partly to stimulate discussion of reproductive and sexual health issues and also to ensure that men understood how this behaviour affects the health of women and families. Workshops were held subsequently for men that included discussion on sexuality, alcoholism, violence and communication.

The issue of sexual power relationships also emerges from this study. Even in the context of raising knowledge and awareness of cervical cancer, unequal power yielded by men and women has consequences in reproductive health and may act as an important constraint to decision making. As Blanc (2001) reports, gender-based violence, perhaps the most compelling manifestation of unequal power in sexual relationships, has a multitude of negative effects on women's sexual and reproductive health. Women's vulnerability to HIV/AIDS and other STDs is strongly influenced by gender-based power inequalities in several ways. Because women are often expected to be ignorant about sex and passive in sexual interactions, it is difficult for them to be adequately informed about risk-reduction strategies. Even among women who are informed, unequal power within sexual relationships reduces their ability to negotiate protection from disease, to express their concerns about sexual fidelity and to say "no" to sex. Also, women's economic dependence on men reinforces their vulnerability to disease by increasing the likelihood that they will exchange sex for money or favours.

5.2 CONCLUSIONS

The study reveals that the majority of respondents were not able to identify the major risk factors from a given list spontaneously. An overall mean of 22% correct answers on knowledge questions regarding cervical cancer risk factors suggests that an extensive knowledge base lacks among the women. The current knowledge level is inadequate and clouded with non-factual, inaccurate and incomplete information. This could owe to their source of information – friends, as it was most popular, with over 70% of respondents subscribing to it.

Depending on their level of knowledge and sophistication, family and/or friends may be a source of useful information or a source of myths, prejudices and misinformation. Multiple communication strategies should be used to promote the use of Pap tests and other cervical cancer screening technology, for example health education during contact between health providers and women, by radio, posters and pamphlets; through community groups, and incorporating cervical cancer prevention promotion into existing health programmes. It should be possible and a lot easier to educate women about cervical cancer and its prevention strategies since some of them have some idea about the problem. Such health education should aim at reinforcing what little they already know about the disease, correcting misconceptions and adding new knowledge.

The study elicited different attitudes held by women regarding cervical cancer. It is apparent that attitudes negatively or positively influence their utilization as well as appreciation of susceptibility of the disease. The population will need to be aware of the importance of having regular Pap smears, and that cervical cancer screening is not only of value in terms of lives saved but also a cost-effective public health intervention.

Knowledge of cervical cancer risk factors did not readily translate into appreciation of personal risk of cervical cancer or utilization of Pap smear services for some respondents. Inadequate and misconceived knowledge of cervical cancer, and lack of awareness of services and where they are located may be barriers to service utilization by women. It is worth noting that some respondents strongly expressed unwillingness to go for screening in order to ascertain whether they have cervical cancer or not.

As also noted by HBM, it is true of this study that negative attitudes towards a preventive health action like Pap smear serve as barriers to screening efforts and arouse conflicting motives of avoidance. It therefore does without saying that with relatively little acceptance of susceptibility to a disease, rather intense stimuli would be needed to trigger a response. All the assumptions set in the study proved to be true, that perceived threat of cervical cancer influenced action taken, and that benefits accrued from screening act as motivation to undertake it.

5.3 RECOMMENDATIONS

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

1. Massive educational campaigns need to be established, to inform the women of the basic facts about cervical cancer. Cervical cancer projects should first focus on educating women about the disease, showing the importance of screening. This seems to be a major barrier to utilization of screening services. Health education can be undertaken by reproductive health programmes, health workers as well as the mass media.
2. Integrated reproductive health programmes that address women's health concerns comprehensively should be put in place. Nevertheless, in situations where screening of cervical cancer is integrated with Family Planning programmes, such programmes should help clients ascertain their own risk of infection by frankly discussing the risk factors of cervical cancer in relation to Family Planning, with the aim of promoting safer sexual behaviour in order to avoid HPV infection. These programmes can be important sources of information about cervical cancer. This can be undertaken by private as well as public reproductive health projects at programme level, and by the Ministry of Health at policy level.
3. A gender approach to reproductive health should be adopted in order to address gender-related problems that face women and increase their vulnerability to cervical cancer and other reproductive tract infections, including HIV/AIDS. This can be facilitated by the government, through the Ministry of Health, and also adopted by all reproductive health projects.
4. Future research should focus on the feasibility of expanding the already existing screening services at a low cost. It should also look into possible ways of involving health care providers and clients in programme design in order to identify and address bottlenecks to effective service delivery as well as ensure that their perspectives are considered and their needs met.

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APPENDICES

APPENDIX 1: QUESTIONNAIRE

KNOWLEDGE, ATTITUDES AND PRACTICES: AN ETHNOGRAPHIC STUDY OF CERVICAL CANCER AMONG WOMEN IN TIGONI LOCATION, LIMURU DIVISION, KIAMBU DISTRICT.

Questionnaire Number: [__][__][__]
Name (Optional)___________________

Sub-location: ______________________

Village: __________________________

Interviewer: _______________________

Date: _____________________________

Statement for consent:

> "Hello, My name is.... I am from the University of Nairobi and I am carrying out a study on cervical cancer among women. I am interested to know what you know about the disease, your attitudes towards it and whether you do anything in order to detect, prevent or control it. You have been randomly identified as one of our respondents in this study, and I hope that you will feel free to discuss with me. All the information that you will provide will be treated in confidence. Your name or information that may identify you as a participant shall not be given to anyone. You are not under obligation to respond to all the questions, and you may withdraw at any time during the interview should you desire to do so. Thank you".

PART A - PERSONAL DATA

1. **What is your age?** [____] Years

2. **What is your marital status?**
   1) Never married [__]
   2) Married [__]
   3) Separated [__]
   4) Divorced [__]
   5) Cohabiting [__]

3. **What is the highest level of education you have completed?**
   1) None [__]
   2) Secondary [__]
   3) Tertiary (Intermediate college) [__]
   4) Higher /University [__]

4. **What is your occupation?**
   (1) Teacher [__]
   (2) Farmer [__]
   (3) Nurse/doctor [__]
   (4) Business [__]
   (5) Clerical [__]
   (6) Housewife [__]
   (7) Other *(specify)* ________________________________

5. **What was the purpose of your hospital visit today?**

1) Sickness ☐
2) Visit a sick person ☐
3) Bring a sick person ☐
4) Routine check up ☐
5) Follow up ☐
6) Other *(specify)*______________________________

6. **(a) Have you ever been pregnant?**

1) Yes ☐ *(Go to (b)*
2) No ☐ *(Go to Q. 7)*

(b) How many children do you have? ______________

7. **Which family planning methods have you ever used?**

1) None ☐
2) Barrier ☐
3) Oral contraceptives ☐
4) Tubal ligation ☐
5) IUCD ☐
6) Injections ☐
7) Natural ☐
8) Others *(specify)* ______________________________

8. **How many sexual partners have you had since you had sexual intercourse for the first time?**

1) 1 ☐
2) 2-4 ☐
3) 4-6 ☐
4) More than 6 ☐

9. **At what age did you have your first sexual intercourse?** [__ __]

10. **(a) Have you ever had a sexually transmitted disease / infection?**

1) Yes ☐
2) No ☐ (Go to Q. 11)
98) Unsure ☐
99) Don't Know ☐

(b) How long ago? ☐☐ Months ☐☐ Years

(c) What was the name of the disease?______________________________

11. **Has any of your partners ever had a sexually transmitted disease/infection?**

1) Yes ☐
2) No ☐

12. **(a) Have you ever smoked?**

(1) In the past
(2) Currently smoking (Ask b)
(3) Never (Go to Q. 13)

(b) How Many cigarettes do you smoke per day?

(1) Less than 1 ☐
(2) 1 – 2 ☐
(3) 3– 10 ☐
(4) 10 – 20 ☐
(5) More than 20 ☐

PART B – KNOWLEDGE, ATTITUDE AND PRACTICE

Knowledge

13. **What is cervical cancer?**

____
____
____

14. **Where did you get this information?**

1) Books and magazines ☐
2) Radio ☐
3) Television ☐
4) Seminar conference ☐
5) Health education talk ☐
6) Friends ☐
7) Others *(specify)* ____________________________

15. **Please tell me what risk factors are associated with cancer of the cervix.**
(For persons approached for free-listing only, list the factors in the order they are mentioned)

1. ____________________________
2. ____________________________
3. ____________________________
4. ____________________________
5. ____________________________
6. ____________________________
7. ____________________________
8. ____________________________
9. ____________________________
10. ____________________________

16. **What do you think are the risk factors associated with cervical cancer?**
(Tick as many as mentioned spontaneously then probe)

Risk Factor	**Spontaneous**	**Prompted**	**Prompted but Unsure**	**Don't Know**
Early /first coitus before menarche / 18 years				
Early /first pregnancy before 22 years				
Multiple sexual partners of the woman				
Male partner with many sexual partners				
History of STDs				
Smoking				
Absence of pap smear history				
Absence of barrier contraception				
Infective agents e.g. Virus – HPV				
Age *(specify)* ________				
Parity *(specify)* ________				
Social factors *(specify)* ________				
Environmental factors *(specify)* ________				
Others*(specify)* ________				

17. Can cervical cancer be treated?

1) Yes ☐ *(How?)* 1. ____________________
2) No ☐ 2. ____________________
98) Unsure ☐ 3. ____________________
99) Don't know ☐ 4. ____________________

18. Can cervical cancer be prevented?

1) Yes ☐ *(How?)* 1. ____________________
2) No ☐ 2. ____________________
98) Unsure ☐ 3. ____________________
Don't know ☐ 4. ____________________

19. Is cervical cancer contagious?

1) Yes ☐ *(How?)* 1. ____________________
2) No ☐ 2. ____________________
Unsure ☐ 3. ____________________
Don't know ☐ 4. ____________________

20. Can cervical lesions be cured?

1) Yes ☐ *(How?)* 1. ____________________
2) No ☐ 2. ____________________
Unsure ☐ 3. ____________________
Don't know ☐ 4. ____________________

21. a) Have you heard of Pap smear?

1) Yes ☐ *(Ask b - f)*
2) No ☐ (Go to Q. 22)
3) 98) Unsure ☐ (Go to Q. 22)

b) What is it? ____

c) Which group of women should take pap smear tests? ____________________

d) At what age? ____

e) How often?

1) Every 6 months ☐
2) Every 1 – 2 years ☐
3) Every 10 years ☐
4) Once in a lifetime ☐
5) Don't know ☐

f) Would you recommend Pap smear to a friend or relative?

1) Yes ☐ *(Why?)* ____________________________________
2) No ☐ *(Why?)* ____________________________________

22. (a) Do you know of anyone who suffers / suffered from cervical cancer?

1) Yes ☐
2) No ☐ *(Go to Q. 23)*

(b) How is she related to you? ____________________________________

23. What approaches may be used to improve women's level of knowledge regarding cervical cancer?

____

Attitudes

24. Do you perceive yourself as having any personal risk of cervical cancer?

1) Yes [__] *(Why?)* ______________________________
2) No [__] *(Why?)* ______________________________

25. What is your view / feeling towards these risks?

____
____

26. What sociocultural beliefs or practices hinder women from perceiving themselves to be at risk of cervical cancer?

____
____
____

Practice

(For those women who have heard about pap smear)

27.(a) Have you had pap smear within the last 5 years?

1) Yes [__] *(Ask b - c)*
2) No [__]
3) Unsure [__]
4) Don't know [__]

(b) Under what circumstances?

(1) Personal choice [__]
(2) Doctor's advice [__]
(3) Friend's advice [__]
(4) Other *(specify)* ______________________________

(c) What were the results? ______________________________

(d) Did you go for further follow-up?

1) Yes [__]
2) No [__] *(Why?)* ______________________________

28. Why do women decline having pap smears? (Prompt)

Reason	Yes	No
Do not know what pap smear is		
Have never given it a thought		
Do not know where services are offered		
Do not think it is important / necessary		
It is expensive		
Afraid or embarrassed of pap smear/ pelvic examinations		

29. Which facilities should offer screening services? Specifically, who should carry out the test?

____
____

30. What should be done to encourage women to have pap smears?

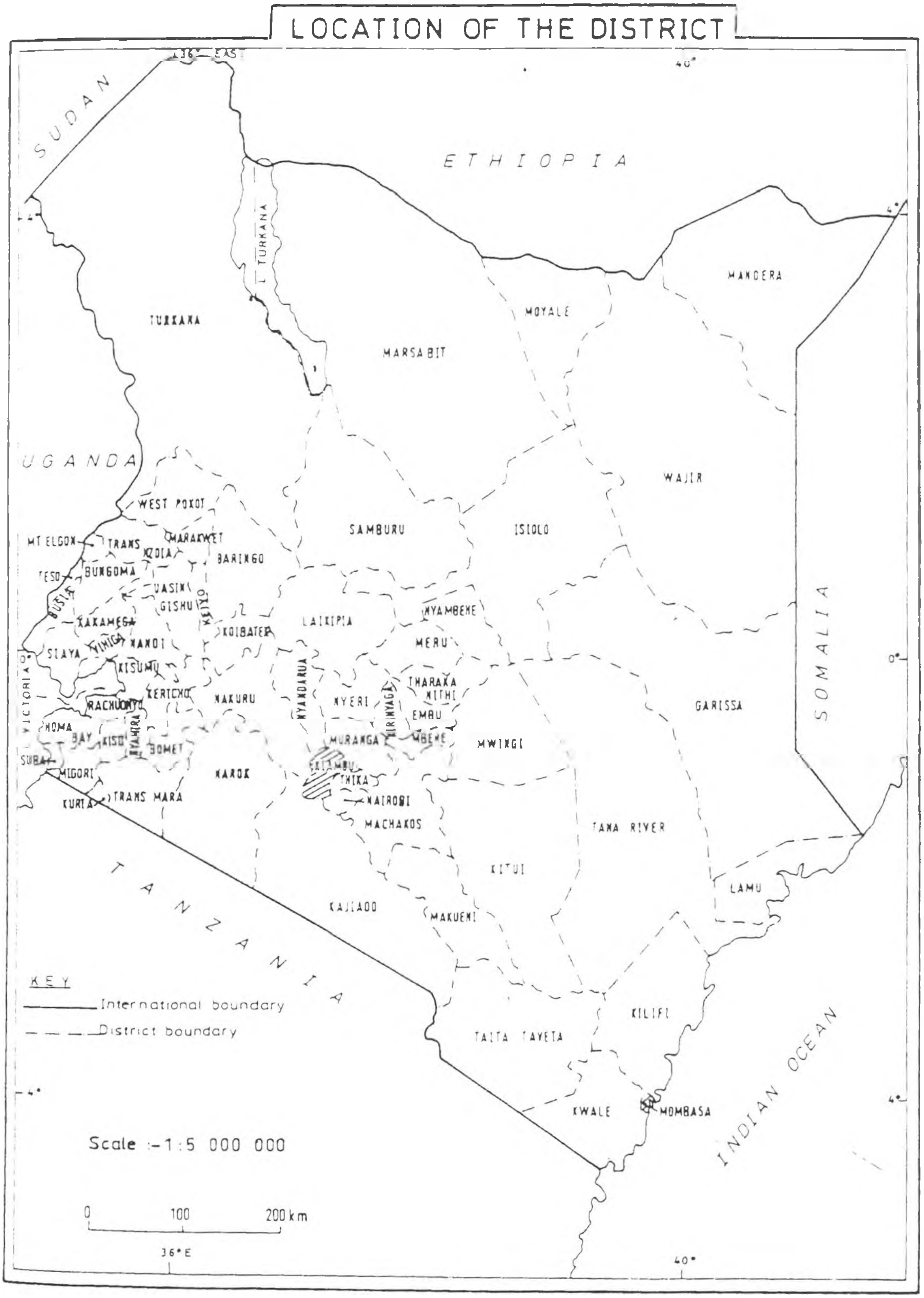
____
____
____

THANK YOU.

APPENDIX 2: FOCUS GROUP DISCUSSION /CASE NARRATIVE GUIDE

- Cervical cancer etiology
- Sources of information
- Factors influencing frequency of cervical cancer
- Cultural beliefs and practices related to the disease
- People`s perceptions regarding cervical cancer
- Knowledge of pap smears
- Attitudes towards pap smear
- Deterrents/ barriers
- Encouraging women to have pap smears

APPENDIX 3: LOCATION OF KIAMBU DISTRICT



Adopted from Kiambu District Development Plan (GoK, 1997-2001)

APPENDIX 4: LOCATION OF LIMURU DIVISION

Adopted from Kiambu District Development Plan (GoK, 1997/2001)