KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

COLLEGE OF HEALTH SCIENCES

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CHARACTERISTICS OF WOMEN PRESENTING WITH ABORTION AT THE KOMFO ANOKYE TEACHING HOSPITAL, KUMASI, GHANA

BY

HELENA AGYEI

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A THESIS SUBMITTED TO THE DEPARTMENT OF COMMUNITY HEALTH IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF PUBLIC HEALTH (MPH) IN HEALTH SERVICES PLANNING AND MANAGEMENT

BY
HELENA AGYEI

AUGUST, 2012

DECLARATION

I declare that no part of this essay which I have submitted to Department of Community Health of the School of Medical Sciences has been published or copyrighted before in Ghana or elsewhere except the use of materials from other published sources which were fully documented and acknowledged.

Candidate……Signature…….

Date……..

Supervisor……Signature…….

Date…….....

Head of Department……Signature…….....

Date…….

DEDICATION

I dedicate this research to my family, Mr. Agyei Barima's family, I say God bless you all for your support, sacrifice, commitments and contributions.

To Philip Yaw Lartey, whose love, care and understanding enabled me to undergo this course successfully despite all the difficulties.

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LIST OF ABBREVIATIONS/ACRONYMS

AGI	Alan Guttmancher Institute
CAC	Comprehensive Abortion Care
CI	Confidence Interval
CHRPE	Committee on Human Research Publications and Ethics
CPR	Contraceptive Prevalence Rate
DHS	Demographic and Health Survey
EmOC	Emergency Obstetric Care
FIGO	International Federation of Gynecologists and Obstetricians
FP	Family Planning
GDHS	Ghana Demographic and Health Survey
GMHS	Ghana Maternal Health Survey
GSS	Ghana Statistical Service
HIV	Human Immunodeficiency Virus
ICM	International Confederation of Midwives

ICN	International Council of Nurses
ICPD	International Conference on Population and Development
IPAS	International Pregnancy Advisory Services
IUD	Intrauterine Device
IUSSP	International Union for the Scientific Study of Population
KATH	Komfo Anokye Teaching Hospital
KMHA	Kumasi Metropolitan Health Administration
MDGs	Millennium Development Goals
MHA	Metropolitan Health Administration
NRHS	National Reproductive Health Services
OR	Odds ratio
PAC	Post Abortion Care
SAC	Safe Abortion Care
SIA	Self-Induced Abortion
SPSS	Statistical Package for the Social Sciences
STIs	Sexually Transmitted Infections

TFR	Total Fertility Rate
UNPD	United Nations Population Division
WRA	Women in reproductive age
WHO	World Health Organisation

OPERATIONAL DEFINITIONS

Abortion	The expulsion or extraction of the products of conception from the uterus before the embryo or foetus is capable of independent life.
Abstinence	Refraining from sexual intercourse.
Contraceptive use or uptake	Contraceptive acceptance, method choice, continuation, switching and failure.
Conception	Conception is usually equated with the fertilisation of the ovum by the sperm, but is sometimes equated with the implantation of the fertilised ovum in the uterine lining.
Contraception	As a means of logical progression, contraception is necessarily anything that acts against conception, and therefore, anything that prevents the success of fertilisation or implantation.
Incomplete abortion	Occurs when some products of conception, usually the placenta, remain inside the uterus.

Induction	Deliberate termination of pregnancy before the viability of the fetus.
Measure of FP	Percentage of currently married women aged 15-49 who
Unmet need	want to stop having children or to postpone the next pregnancy for at least two years, but who are not using a contraceptive.
Maternal morbidity	Serious disease, disability or physical damage such as fistula and uterine prolapse, caused by pregnancy related complications
Maternal mortality	The death of a woman while pregnant or within 42 days of termination of pregnancy from any cause related or aggravated by the pregnancy or its management, but not from accidental or incidental causes
Maternal mortality rate	The number of deaths per 100,000 women in the 15-49 age group, measures the impact of maternal deaths on the population of women as a whole, not just on pregnant women
Maternal mortality	The number of maternal deaths per 100,000 live births,

ratio	measures the risk of maternal death among pregnant or recently pregnant women
Missed abortion	Is when the foetus has died in uterus and some or all of the non-living products of conception remain in the uterus.
Side effect	An effect of a drug other than the one it was administered to evoke.
Spontaneous abortions (not induced)	Commonly called miscarriages: involuntary interruptions of pregnancy or therapeutic abortions.
Self-induced Abortion (induced abortion)	Self-induced miscarriage (induced) is an abortion performed by the pregnant woman herself, outside the recognised medical system.
Unintended pregnancy	One that was not wanted at the time conception occurred, irrespective of whether contraception was being used.
Unsafe Abortion	A procedure for terminating pregnancy either by person lacking the necessary skills or in an environment lacking minimal medical standard or both

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ABSTRACT

To accelerate progress towards achieving the Millenium Development Goal 5 there must be a substantial reduction in abortions, particularly self-induced abortions alongside increased contraceptive uptake. This study describes the characteristics of women presenting with abortion at KATH in Kumasi, Ghana. A better understanding of the relationship between abortion particularly, induced abortion and women's background characteristics can improve our ability to identify subgroups in a population who are in the greatest need of effective contraceptive and post-abortion care services. Such information is valuable to program planners and policymakers in their efforts to facilitate women's ability to plan pregnancies.

Systematic random sampling was used to select 420 participants aged 15-49 years presenting with abortion at KATH in a cross-sectional study. The data collected at two points: using a questionnaire from June to August, 2011 while on admission and a telephone conversation (follow-up interview from September to November, 2011) after discharge from KATH were analysed with SPSS version 16 using logistic regression.

Majority, 252 (60%) of women who had self-induced abortion were younger than 30, single, unemployed with low education and of low socio-economic status as

compared with those with spontaneous abortion who were 30 years or with at least three children, married and had high socio-economic status.

It was revealed that, 253 (60.2%) of the respondents did not plan for the index pregnancy and about 64.9% terminated the pregnancy in pursuit of a career and for economic reasons. Also, 280(66.7%) did not use any modern contraceptive prior to the index pregnancy. Reasons gathered from the respondents showed that the fear of side effects contributed to a high rate of 55% post-abortion contraceptive non-use.

Of the 420 respondents, only 58 (13.8%) used contraceptives: three months after their discharge from the hospital even though they had been counselled on contraceptive use and had wanted to prevent unintended pregnancies, postpone or delay childbearing. Out of these 58 respondents, 54(93.1%) presented with induced abortion while 4(6.9%) had spontaneous abortion.

The study recommemded the sensitisation of all women of reproductive age particularly the youth to use post-abortion contraceptives to help prevent unplanned pregnancies, repeat abortions and maternal mortality. Also, they are to secure safe abortion services in a medical hospital or seek procedure for terminating an unintended pregnancy either by individuals with the necessary skills or in an environment that conforms to minimum medical standards, or both.

Key words: self-induced, spontaneous, abortion, post-abortion, contraceptive use.

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background Information

Understanding of the differences in levels of abortion according to women's characteristics can radiate light on the circumstances surrounding the reasons leading to abortion. Abortion levels may differ between subgroups of women because of variations in the level of unintended pregnancy and in the likelihood that women will choose abortion if they become pregnant unintentionally.

Women's characteristics influence their likelihood of terminating unintended pregnancies. However, within all demographic and socioeconomic subgroups, some women will obtain an abortion when faced with an unintended pregnancy. Even when differences in family formation behavior across socioeconomic and demographic subgroups narrow, as they often do when fertility declines, reliance on contraception and abortion may continue to vary for a number of reasons.

Promoting post-abortion contraceptive use is a key intervention for improving the health of all women and children. Contraceptive use plays an important role in reducing fertility. Contraceptive use or uptake, however, is the consequence of contraceptive acceptance, method choice, continuation, switching and failure.

The use of contraceptive methods to prevent unintended pregnancies is one of the most effective strategies to reducing self-induced abortion rates, and maternal morbidity and mortality. Thus, the provision of post-abortion family planning services that include counselling with easy access to contraceptive methods are suitable to determine the acceptance and selection of contraceptive methods by women who have had induced abortion.

According to the World Health Organisation (WHO) and the Guttmacher Institute, some 35 million induced abortions occur in developing countries each year. Approximately 20 million of these are unsafe abortions, which claim the lives of 67,000 women as a result of related complications. These deaths represent 13% of all pregnancy-related mortality, and in some countries as much as 25% of maternal deaths. In developing countries, one of every 75 women die of pregnancy or childbirth-related causes, compared to one of every 7,300 women in developed countries (WHO/Guttmacher Institute, 2010).

If contraceptives were accessible and used consistently and correctly by women wanting to avoid pregnancy, maternal deaths would decline by an estimated 25–35%. Fifty-five (55) million unintended pregnancies in developing countries occur every year to women not using a contraceptive method. Another 25 million occur as a consequence of incorrect or inconsistent use of a contraceptive method and method failure, (Bongaarts & Westoff, 2008).

These statistics provide evidence that family planning reduces abortion, thus decreasing the risk of maternal death. In addition, over the last two decades, there has been increasing evidence that family planning interventions have a role to play not only before a woman has become pregnant, but also after she has had an abortion or miscarriage.

In 1994, the international health community identified post-abortion care (PAC) as an important strategy to reduce maternal mortality by treating complications related to unsafe abortion and miscarriage, and by providing post-abortion family planning counselling and services to prevent repeated unplanned pregnancies and abortions. Although post-abortion family planning counselling and service delivery constitute part of all post-abortion care models, PAC services have historically sought to reduce maternal mortality by treating the symptoms of haemorrhage and sepsis rather than by addressing women's unmet need for family planning thus overlooking the potential of post-abortion care to interrupt the cycle of repeated unplanned pregnancies, abortions and complications leading to maternal death.

It has been revealed that for many post-abortion patients, the lack of family planning counselling and services quickly leads to another induced abortion, because fertility returns within four to six weeks after miscarriage or induced abortion. This makes it essential to ensure that post-abortion family planning counseling and service delivery are offered to all women who present for emergency obstetric or post-abortion care, regardless of the method of treatment (sharp curettage, electric or manual evacuation)

or place of treatment (operating theatre or PAC treatment room) as well as to all postpartum women (AGI, 1994).

Many factors contribute to the gap between access to, and use of, contraceptive methods or services. These include logistic, social and behavioural barriers to meeting the contraceptive needs and wishes of individuals and couples, as well as obstacles that stem from the way the services are organised. Successful delivery of family planning services requires proper coordination of activities that are involved at the various steps of the service delivery chain: counselling, provision of a wide choice of contraceptives, follow-up and appropriate referral, supervision, monitoring and evaluation and a functional logistics system.

The concept of the right to contraceptive choice, as an essential component of reproductive and sexual rights, has been endorsed by several landmark global consensus documents and international institutions: thus, there should be no incentives or coercion to adopt family planning or any particular method of contraception; contraceptive use results from proper understanding of issues at stake and free choice. Contraceptives should be provided to clients in accordance with the approved method specific guidelines and by providers who have been trained in provision of that method.

Maternal mortality reduction has been a focus of major international initiatives for the past two decades. Widespread provision of Emergency Obstetric Care (EmOC) has been shown to be an important strategy for addressing many of the complications that might otherwise lead to maternal death. However, unsafe abortion is one of the major causes of pregnancy-related deaths and will be only partially addressed by EmOC. Safe Abortion Care (SAC) is comprised of three elements that will contribute to reductions in maternal mortality, and these are as follows:

Safe induced abortion for all legal indications: In countries with ready access to safe, legal abortion, complications and deaths from unsafe abortion are reduced drastically. Romania offers a well-known example of this transformation: when the country's abortion law was liberalised in 1989 to allow women to secure safe abortion procedures, maternal mortality fell by 65% in the next three years, a decline primarily attributable to the decrease in abortion-related deaths. Similar findings have been reported for South Africa (Heise, 1997).

Treatment of abortion complications: Offering safe, accessible treatment of abortion-related complications means that fewer women will suffer or die as a result of those complications.

Provision of post-abortion contraception: Improved access to post-abortion contraception is one avenue to reduce the risk of repeat unintended pregnancies and unsafe abortions. Thus, a woman who has had an induced abortion and has been counselled on contraceptive use, is expected to be on contraceptive to avoid unwanted pregnancies. Once a woman has adopted a contraceptive method, she

will ideally continue to use it or switch to and continue using another method for as long as she wishes to avert pregnancy. Helping women to continue contraception safely and effectively is desirable both from ethical and public health perspectives. Improving contraceptive uptake among women with abortion does not only help women achieve their reproductive intentions, but it reduces unintended pregnancies, as well as related abortions, maternal mortality and morbidity.

However, contraceptive use can be tenuous. Many factors can lead a woman to abandon her means of preventing unintended pregnancy. These factors reflect needs and preferences unique to the individual woman; her relationship with her partner, friends, and extended family; her experience with health services; her community, society, and culture; policy and service delivery environment; political, societal, and economic conditions, and characteristics unique to a particular method.

Unintended pregnancy is both a fundamental notion underlying the rationale for contraception and a measure of a fundamental public health need in today's world. In developing countries, the risk of death following complications of unsafe abortion procedures is several hundred times higher than that of an abortion performed professionally under safe conditions. Complications resulting from unsafe abortion contribute to serious other health problems for women health such as infertility and pelvic inflammatory disease and chronic pelvic pain (Singh, 2010).

Since no contraceptive is 100 per cent effective in preventing all pregnancies, there will be unwanted pregnancies which women may seek to end by induced abortion. In almost all countries, the law permits abortion to save the woman's life and in some countries abortion is allowed to preserve the physical and mental health of the woman. Safe abortion services as provided by law therefore need to be available; there should be well-trained health personnel supported by policies, regulations and a health system infrastructure, including equipment and supplies, so that women can have rapid access to these services.

In Ghana unsafe abortion remains a major public health problem despite apparent liberalisation of the law on abortion over two decades. The work of Morhee and Morhee (2006) concluded that the current law on abortion makes enforcement difficult and leaves room for untrained personnel to engage in dangerous abortion procedures and that there is a need for law reform.

Addressing the problem of abortion in Ghana should significantly contribute to the achievement of Millennium Development Goal 5 on Improving Maternal Health, considering that unsafe abortion is one of the major factors behind the high maternal mortality rates in the country. More than 1 in 10 maternal deaths (11%) in Ghana is the result of induced abortions. Also, a substantial proportion of women who survive an unsafe abortion experience complications from the procedure (Sedgh, 2010).

Self-induced abortions occur worldwide. Some studies suggest that it is fast becoming a birth control method. Most induced abortions occur as a result of unintended pregnancies. The stigma associated with induced abortions in developing nations coupled with laws that render abortions legal only under certain conditions results in the practice of clandestine, unsafe abortions even when legal and safe services are available (Adebysoye, 1997).

Cases of unsafe abortion are common in Komfo Anokye Teaching Hospital (KATH-the study area) in the Ashanti Region of Ghana. KATH records revealed the rate of unsafe abortion is similar to other parts of the developing world despite the education in family planning and other health education given to people. Therefore, it is important to study the characteristics of women presenting with abortion particularly induced abortion to KATH.

Though abortion is legal in Ghana, women still obtain unsafe abortions (Alan Guttmacher Institute, 1999) due to lack of knowledge at the provider and population levels. Most women, especially in the developing world have misconception together with other factors that influence the use of contraception which makes post-abortion care deficient and calls for the need for the service to be incorporated into practice for Ghana to attain the MDG 5.

1.2 Statement of the Problem

Many pregnant women presenting at KATH with complications of unsafe abortion might have resorted to the methods leading to induced abortion which may include using misoprostol orally or vaginally and using substances such as herbs, broken bottle inserted into the vagina or cervix with the aim of aborting the pregnancy.

Complications such as perforation of the uterus requiring surgical removal of the uterus (hysterectomy), infertility is very often the result of the method used to induce the abortion. Unfortunately some women die soon after arrival to the hospital, or on their way to the hospital.

The high rate of death as a result of this practice is a major concern to health planners, health care providers, family members, religious leaders and the nation at large. There is the need to match findings from characteristics of women with abortion (induced or spontaneous) and post-abortion contraceptive uptake studies to develop strategies to address both.

1.3 Rationale of the Study

Government and health personnel of most African countries continue to debate on how to make services and for that matter, maternal health services more accessible to all categories of women. This research is therefore, aimed at describing the characteristics of women with abortion particularly, those with self-induced abortion

presenting at KATH to ensure high post-abortion contraceptive uptake among them in order to prevent unplanned pregnancies, repeat abortions and improve maternal health.

1.4 Research Questions

1. What are the characteristics of women with abortion presenting at KATH?
2. What are the reasons associated with post-abortion contraceptive use and non-use?
3. Are the characteristics of women with induced abortion different from those with spontaneous abortion?

1.5 Objectives

1.5.1 General Objective

To describe the characteristics of women presenting with abortion at KATH from June to August, 2011 while on admission and a follow-up assessment of their post-abortion contraceptive uptake after discharge from September to November, 2011.

1.5.2 Specific Objectives

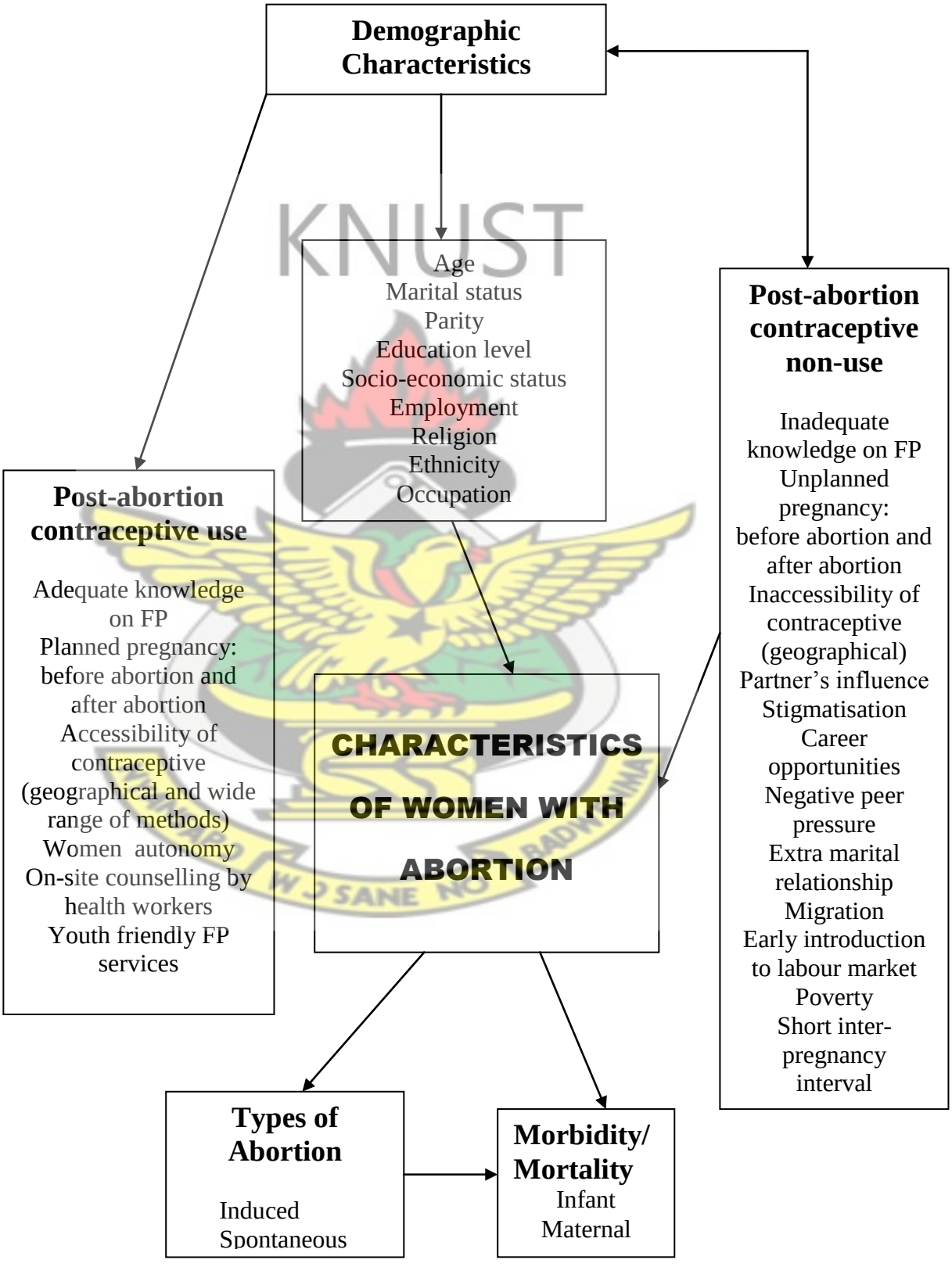
1. To describe the characteristics of women presenting at KATH with abortion

2. To investigate the reasons (accessibility) associated with post-abortion contraceptive use and non-use

3. To compare the characteristics of women presenting with induced abortion with those presenting with spontaneous abortion at KATH

1.6 Conceptual Framework

Fiqure 1:1 Conceptual Framework on characteristics of women with abortion



Client's demographic characteristics such as age, marital status, parity, occupation, socio-economic status, religion and education level have a relation to types of abortions. For instance, if a woman is below age and becomes pregnant, she eventually opts for termination which is often determined by the partner due to socio-economic reasons to avoid stigmatisation in favour of career opportunities. In contrast, where women marry young and are expected to have a child soon after marriage, abortion will be infrequent among young women.

Socio-cultural factors such as partner's influence: giving women the power to decide on whether or not to use family planning services are contributory factors for contraceptive use. If only a man is given the mandate to make decisions on issues pertaining to health such as post-abortion contraceptive use for the whole family as a sort of respect for religious beliefs and traditions, then the woman has no other choice than to follow the dictates of her husband even when she has the desire to use contraceptives or safe abortion services. Her failure to use post-abortion contraceptive can result in another unintended pregnancy which might intend lead to self-induced abortion and untimely death.

The perceived opportunity cost of having a child, where women have opportunities for education, employment and career development, younger and unmarried women are the most likely to want to postpone marriage or childbearing and to obtain an abortion when a pregnancy occurs.

Service related factors such as good on-site counselling and provision of post-abortion contraceptive by skilled health providers ensures confidentiality and fosters better relationship among health providers and these women coming to the hospital. Therefore, they choose to reject the myth or misconception about contraceptive use from their peers and relatives.

The Abortion law in Ghana is to a large extent liberal. The ignorance of the law as demonstrated in some studies (Morhee & Morhee, 2006) indicates that advocacy coupled with public education should be intensified. Though abortion is legal in Ghana, women still obtain unsafe abortions due to lack of knowledge at the provider and population levels.

1.7 Justification for the study

Identifying the individual and relationship of the characteristics of abortion patients particularly those with self-induced abortion is the first step toward targeted policies and programs aimed at reducing unsafe abortion in Ghana.

The study is expected to help provide information on characteristics of women with abortion and their post-abortion contraceptive uptake, help medical personnel such as doctors, nurses, pharmacists and other paramedical staff in the study area to carry out effective health education against abortion and promote post-abortion ccontraceptive use.

This study will go a long way to educate women on the dangers involved in abortion particularly, self-induced abortion and inform them on the need or importance of post-abortion contraceptive use when it is published. Also for academic purposes, the study will be useful to future researchers as a reference in similar studies.

Recommendations made in this study, will be useful for health planners to help control health events (complications or deaths) and improve maternal health.

CHAPTER TWO

2.0 LITERATURE REVIEW

A lot of studies have been conducted on various topics related to maternal/child health and survival globally including unsafe abortion, induced abortion, spontaneous abortion, ectopic pregnancy, maternal mortality, post-abortion contraceptive uptake and their causes and recommendations have also been made. This literature review therefore concentrates mainly on some of the studies done in this area and their significance to this study in particular.

Worldwide, reproductive preferences and behavior often vary across socioeconomic and demographic subgroups. These variations not only reflect differences in patterns of family-building goals and experiences, but also are likely to necessitate differences in the means that women use to achieve their desired family size and timing of births, including contraception and abortion.

2.1 Characteristics of women presenting with abortion

Studies indicate that a sizable percentage of women in Ghana have, at some time, resorted to the voluntary termination of an unwanted pregnancy. Ghanaians approach the topic of abortion with the view that it goes against traditional ethics and values, however, large numbers of maternal morbidity and mortality cases arise from unsafe abortions. Statistics from the 2007 Ghana Maternal Health Survey (GMHS) suggest that 11% of

maternal deaths result from these unsafe abortions (GMHS, 2007). A previous unpublished work of Sintim, 2008 revealed about two-thirds of cases of abortion presenting to the Komfo Anokye Teaching Hospital as unsafe.

Although the abortion law in Ghana is said to be "broadly interpreted", abortion is illegal unless performed by a medical practitioner in a medical facility under circumstances involving rape or defilement of a female idiot, incest, foetal impairment or when physical or mental risk could occur to harm the life of the woman.

Characteristics of abortion seekers reveal that rates are higher among 20 to 24 year olds, those who live in urban areas as well as among women who belong to the highly educated and wealthier categories. In addition, the 2007 Ghana Maternal Health Survey reports that one-in-five women who had experienced an abortion in the last five years cited financial constraints as the main reason for terminating the pregnancy for those residing in both rural and urban settings.

The 2008 Ghana Demographic and Health Survey (GDHS) showed an increase in contraceptive use among currently married women in Ghana, from 13.0% in 1988 to 19% in 2003 and 17% in 2008. Similarly, an increase in the proportion of sexually active unmarried women using a contraceptive method was noted between 2003 and 2008, from

43.5% to 50.4%. This increase in contraceptive use is encouraging; however, studies suggest that Ghana's contraceptive prevalence rate (CPR) is still too low to have solely led to the observed reduction in fertility levels from 1988 to 2008. Induced abortion, however, (taken together with contraceptive use) could explain this decrease in fertility (GDHS, 2008).

In developing countries, maternal mortality is high, with 440 deaths per 100,000 live births (in sub-Saharan Africa, this figure reaches 920). One in three women gives birth before age 20 and pregnancy-related morbidity and mortality rates are particularly high in this group. One quarter of the estimated 20 million unsafe abortions and 70,000 abortion related deaths each year occur among women aged 15–19 years, and this age group is twice as likely to die in childbirth as women aged 20 or over. It is estimated that 90% of abortion-related and 20% of pregnancy-related morbidity and mortality, along with 32% of maternal deaths, could be prevented by use of effective contraception. In sub-Saharan Africa, it is estimated that 14 million unintended pregnancies occur every year, with almost half occurring among women aged 15–24 years (Ekanem, 2005).

Financial circumstances are the most common reason for seeking repeat abortions. Premarital exposure to pregnancy risk has increased, with a widening gap between sexual debut and age of marriage, and increased sexual activity prior to marriage, placing young women at increased risk when they are most socially and economically vulnerable.

Reported sexual activity among adolescents in developing countries is generally high, although there is considerable variation between countries and data validity is often poor. In sub-Saharan Africa, 75% of young women report having had sex by age 20 (Gilda, 2007).

It has been argued (Hatcher 2005) that few sexually active adolescents in developing countries use modern contraceptive methods such as oral contraceptives and condoms, and although there is considerable variation between countries, uptake is generally much lower than in developed countries. Previously identified limits to contraceptive use among adolescents in developing countries include inadequate knowledge, sex education and access to services; risk misperceptions; and negative social norms around premarital sexual activity and pregnancy.

2.2 Reasons associated with post-abortion contraceptive use and non-use

In 1969, Ghana became one of the first African countries to adopt a population policy. Acceptance of family planning was slow, however, and 20 years later, in 1988, the prevalence of modern contraceptive use had reached only 5%. Between 1988 and 1998, though, the use of modern contraceptive methods nearly tripled, from 5% to 13%. At the same time, the total fertility rate dropped from 6.4 to 4.5 lifetime births per woman (Stanback, 1997).

To improve quality of care and clients' access to family planning and other reproductive health services, Ghana recently developed and disseminated National Reproductive Health Services Protocols to which all family planning health service points should adhere are designed to remove medical barriers and replace differences between clinical practices with uniform, quality services.

Moreover, the work of Sundby (2006) concluded that marginalised populations often have few options when it comes to family planning. In Latin America, programmes that provide youth-friendly services and reach out to remote areas with indigenous or migrant populations are bringing family planning to many who would not otherwise have it. Young people also constitute a particular group who's sexual and reproductive rights have not always been given the necessary attention by policymakers and service providers.

Choices are made under particular circumstances and vary in differing social and cultural contexts, (see WHO (2004a) and WHO, (2004b)). Research has demonstrated that choices are complex, multifactorial and subject to change (Walsh, 1997). In as early as 1985, Snowden wrote that no contraceptive method is perfect and that women need to make trade-offs among different methods, necessitating access to a range of methods:

"The methods of fertility regulation from which most couples choose represent a choice among unpleasant alternatives".

In developed countries, longer-acting, highly effective methods are more popular (female sterilisation, used by 23%; IUDs, used by 15%), and in developing countries, short-acting and reversible methods (oral contraceptives, used by 16%; condoms, used by 13%), are more often used (Snowden, 1985).

Bongaarts (2002) has predicted a "gradual increase in availability of a wider range of methods" in developing countries, making the explicit value judgments that this will be due to an associated with improved quality of services, more open markets and higher levels of contraceptive knowledge and education.

Nonetheless, a review of evidence-based contraceptive choices by Glasier (2006) has recently noted that "The most successful contraceptive method is likely to be the one that the woman (or man) chooses, rather than the one the clinician chooses for them". The work of Thompson (1996) and Bromham (1996) revealed that exchanges in the medical media over the introduction of long-acting implantable contraceptives have highlighted the human rights angle.

In Zimbabwe, a 1996–1998 study comparing two hospitals showed that when the intervention site provided on-site counseling and access to free contraceptives at the same location and at the same time as emergency treatment, women were significantly more likely than women treated at the control site to adopt highly effective methods of contraception (96% versus. 5%) and had fewer than half the unplanned pregnancies (42 against 96) during the year-long follow-up. The percentage of patients who had a repeat abortion during follow-up was more than twice as high at the control site, where only emergency services were provided, as at the intervention site (5.3% compared to 2.5%). Thus, offering contraception to women at the time of post-abortion care prevented more unplanned pregnancies and repeat abortion in a one year period compared with women who did not receive contraceptive services at the same time or location of their treatment for abortion complications suggest there are sufficient service delivery points to provide decentralised abortion care, but that the full range of necessary abortion care services may not be provided at all these sites (Central Statistical Office: Zimbabwe & Macro International Inc., 2000).

The Mexico City study found that acceptance of a post-abortion contraceptive method was significantly associated with higher education, prior contraceptive use, reported abortion-related complications, and having a greater number of children (IUSSP, 2008). The Cambodian study found that women were significantly more likely to accept a method if they presented at sites with integrated services and where there were had a range of contraceptive options (UNDP, 2009). In sum, there is an ongoing need to

strengthen post-abortion contraceptive uptake, even in settings where these services are widely available. These services should be an integral part of post-abortion care, offer a range of methods and promote informed choice (Schiavon, 2008).

The International Union for the Scientific Study of Population-IUSSP (2008) Scientific Panel on Abortion, in collaboration with International Pregnancy Advisory Services (IPAS)–Ethiopia Office, held a seminar on "Interrelationships between contraception, unintended pregnancy and induced abortion" in Addis Ababa, Ethiopia on 1-3 December 2008. The papers revealed that barriers to contraceptive use exist across a wide variety of country settings but the specific barriers to use vary depending on the country as well as the life stage of different women within that country. Barriers to contraceptive use are often a result of gender inequality that results in poor communication about family planning between partners, social prescripts which prohibit sexual behavior among a certain segment of the population, and poor service delivery: the consequent unintended pregnancies end in induced abortions.

These papers identified factors that facilitate or hinder women's post-abortion uptake of contraception in India (two papers), Cambodia, and Mexico. Studies were conducted in settings where post-abortion contraceptive counselling ranged from inconsistent (rural India) to widely available and integrated into abortion services (Mexico City, urban India). All of the studies were quantitative and drew from large clinic or community

samples of women who had undergone induced surgical abortions. The studies drew from diverse contexts, but arrived at similar conclusions. Post-abortion contraceptive uptake ranged from around 40% (rural India, Cambodia) to a high of 86% in urban India. In general, women opted for more permanent methods such as tubal ligation and IUD. Also, the availability of contraceptive counselling immediately after the procedure was an important factor in women's acceptance of a method.

Worldwide, around 200 million women say they want to delay or prevent pregnancy but are not using effective contraception. Either they will not get pregnant, they fear side effects or their families objects. Thousands of unintended pregnancies lead to ill health which in turn leads to maternal deaths. Between 1960 and 2000, the population growth of married women in developing regions using contraceptives rose from less than 0% to 60%. Population growth is highest in poor countries already struggling to meet their peoples needs for jobs, education, health care and services. Fewer than 20% of sexually active young people in Africa use contraception. Apart from lack of money, barriers include insufficient knowledge and misperceptions about the partners opposition (UNPD, 2009).

The outset of the knowledge, attitudes and practice regarding FP was recognised as the rationale for investments in FP programs. The extent of unintended fertility and correspondingly, the amount of unsatisfied demand for fertility regulation is crucial to

determining strategies to reduced fertility. The assumption often unstated has been that prevention of unintended pregnancies through contraception is preferred to prevention of unintended births through induced abortion, although the impact on aggregate fertility rates is for all intents and purposes the same.

About a quarter of all women wants to stop having children or to postpone the next pregnancy for at least two years, but is not using contraceptives. Such women are defined by Demographic and Health Surveys (DHS) as having an `unmet need' for family planning. Unmet need does not necessarily mean that family planning services are not available. It may also mean that women lack information, or that the quality of the services on offer does not inspire the necessary confidence, or that women themselves have little say in the matter (Westoff & Ochoa, 1991). Thus, the total demand for FP is the sum of contraceptive prevalence and unmet need.

2.4 Characteristics of women presenting with induced abortion verses women presenting with spontaneous abortion

A study composed of patients with pregnancy termination complications in Ghana between June and July 2008 revealed that majority of patients report having had a spontaneous abortion (75%; n=439), while 17% (n=100) and 8% (n=46) report having had an induced abortion or an ectopic pregnancy, respectively. Factors associated with women in each of the three groups were explored using multinomial logistic regression.

When compared to women with spontaneous abortions, women with induced abortions were younger, poorer, more likely to report no religious affiliation, less likely to be married, more likely to report making the household decisions and more likely to fail to disclose this pregnancy to their partners. Within the induced abortion subsample, failure to disclose the most recent pregnancy was associated with already having children and autonomous household decision making. Most miscarriages occur very early in a pregnancy. Approximately 10-50% of pregnancies end in miscarriage, depending upon the age and health of the pregnant woman (Schwandt et al, 2008).

The risk for spontaneous abortion is greater in those with a history of more than three previous (known) spontaneous abortions, those who have had a previous induced abortion, those with systemic diseases, and in women over age 35. Other causes can be infection (of either the woman or the fetus), immune responses, or serious systemic diseases of the woman. A spontaneous abortion can also be caused by accidental trauma. However, intentional trauma to cause miscarriage is considered an induced abortion (Guttmacher institute, 2011).

In a national sample of 12,432 French women who had a single birth in a public or private maternity hospital during one week in 1995, women with two or more induced abortions were more likely to be unmarried, less likely to be employed during pregnancy, had a lower educational level, a higher incidence of inadequate antenatal care, were more

likely to be smoking during pregnancy, and had a higher incidence of preterm birth compared to women with one induced abortion or no history of prior induced abortion (Singh, 2002).

2.5 Knowledge Gaps and Innovations on Contraceptive Uptake in the World, Africa and Ghana

It has been established that the prevalence or use and effectiveness of contraception is important in predicting unintended pregnancy and the abortion rate. Thus, use of effective contraceptive methods is essential in preventing unintended pregnancies that are later voluntarily terminated. However, recent data reveal that among women who experienced an induced abortion between 2002 and 2007, about 70% failed to use a method prior to the terminated pregnancy. 28% of women used a method but reported experiencing contraceptive failure (Cleland et al 2006).

Post-abortion contraceptive counselling is a critical point of intervention and service delivery and provides a powerful rationale for PAC services. In practice, however, treatment of complications is usually the sole focus and family planning is often neglected. It is essential to restore the family planning component to PAC services, not only to prevent repeat unintended pregnancy and abortion, but also because it is integral to achieving the Millennium Development Goals, the goals for HIV and other health

objectives - reducing maternal morbidity and mortality, mother-to-child transmission of HIV and new HIV infections (Corbett, 2003).

Again, services could produce cost savings as well as rapid results, women and communities should demand quality PAC services that provide them with accessible, cost-effective post-abortion family planning services that can assist them in reducing unplanned pregnancy and repeat abortion, reduce new HIV infections, improve the health of a woman's next child and ultimately improve the health of her family.

The whole of Africa needs research-based evidence and technical advice to the governments in the development of their national health policies and programs. The results of the Navrongo experiment (GDHS, 2008) demonstrated that affordable and sustainable means of combining nurse services with volunteer community action can accelerate attainment of the United Nations Millennium Development Goals (MDGs).

There is still the need for the Government of Ghana to initiate programmes in the effort to reach its MDG5 goal by 2015, with particular focus on the reduction of maternal morbidity and mortality due to unsafe abortion by improving access to and the quality of contraceptive services.

CHAPTER THREE

3.0 METHODOLOGY

This chapter describes how, when and where the study was done and what the study is about. The aspects discussed in this chapter include study methods and design, study population, study variables, sample size, sampling techniques, pre-testing, data handling, data analysis, ethical issues, limitations and assumptions.

3.1 Study Type and Design

All patients presenting with abortion were approached and requested to participate in the study. A cross-sectional study design was used to describe characteristics of women with abortion presenting at KATH from June to August, 2011 while on admission and a follow-up from September to November, 2011 after discharge from the hospital.

The study started with the design of tools for data collection which was the questionnaire for women aged 15-49 years presenting with abortion at KATH. It continued with pre-testing of the tool and after pre-testing, consent was sought for the study from participants. Data collection was then done by the use of questionnaire. Whilst data collection was on-going, entry and validation was being undertaken. After data collection and entry, analysis was done. Quantitative research methods were used for the study.

3.2 Study Area

3.2.1 District and KATH health profile

Kumasi, Ghana's second largest city is about 300km from the national capital, Accra. The city is 150sq km in size. Kumasi is bounded by four districts, to the north Kwabre, on the south Bosomtwe Atwima Kwanwoma, on the east Ejisu Juaben and on the west Atwima. Politically, Kumasi is divided into ten sub metropolitan areas namely: Manhyia, Tafo, Suame, Asokwa, Oforikrom, Asawase, Bantama, Kwadaso, Nhyiaeso and Subin.

The Kumasi Metropolitan Health Services are organized around 5 sub-metro health teams namely; Asokwa, Bantama, Manhyia North and South and Subin. There are several health facilities in both the public and private sectors. These include Komfo Anokye Teaching Hospital (KATH), which is one of the two national autonomous hospitals, four quasi health institutions, (4MRS, KNUST Hospitals, Police and Historic Advent Herbal Hospital), two MCH Clinics (Dote and Ayeduase), one Community Clinic (Apatrapa in the Bantama sub-metro) and five government/public hospitals with one designated as a Regional Hospital (Kumasi South Hospital). In addition there are 180 known private health institutions in the metropolis. This figure includes 13 industrial clinics. Kumasi has hospital bed utilisation statistics of 63.3%, target population less than 1 year and expected pregnancy of 4.5% and target population for WIFA as 23.2% (GSS 2000 census projection).

3.2.2 Population

In terms of population, it is the largest of the 27 districts in the Ashanti Region. It has an estimated 2010 population census of 4,780,380 with 51.2% women. Also, it has an annual growth rate of 3.4% and 15% coverage of family planning. The population figure is however applicable during the night since day time population is above 2,000,000. There are 213 communities in Kumasi. Kumasi is a cosmopolitan city with trading being the main occupation of the inhibitants. The maternal mortality rate for the Komfo Anokye Teaching Hospital (KATH) reportedly increased by 51.4%, with an increasing change of 111 maternal deaths in 2010 to 152 in 2011, representing 36.9% (GSS, 2010). Child survival remains relatively low in the region with Kumasi's rate as 85.8%.

The services offered by the Komfo Anokye teaching hospital include: patient care, teaching and research (in that order) are all considered central to the hospital's mandate. The hospital has specialised units in Medicine, Surgery, Obstetrics and Gynaecology, Pediatrics, Dentistry, Ophthalmology, Orthopaedics, Ear, Nose and Throat, Pathology and Communicable Diseases. The other major departments include Pharmacy, Radiography, Radiotherapy, Physiotherapy and Occupational Health. The Komfo Anokye teaching hospital is therefore a host to other institutions such as KNUST.

The geographical location of the 1000-bed Komfo Anokye Teaching Hospital, the road network of the country and commercial nature of Kumasi make the hospital accessible to all the areas that share boundaries with Ashanti Region and others that are further away.

3.3 Study Population

It comprised all women within the age range of 15-49 years presenting with abortion at KATH from June to August, 2011. They were approached and requested to participate in a study on characteristics of women with abortion presenting at KATH. The target population was the women with abortion (induced and spontaneous).

3.3.1 Inclusion criteria

A woman in the age group of 15 and 49 years presenting at KATH with abortion (induced or spontaneous) and had given her consent to participate in the study.

3.4 Sample Size

The study focused on a total of 420 individuals within the study area. They included all women with abortion (induced or not induced).

3.4.1 Sample Size Estimation

$$n = \frac{Z^2 pq \rho q}{d^2}$$

n = the desired sample size

z = the standard normal deviation 1.96 or reliability coefficient, where α = 0.05

Total admission x, for all women from June to August in 2011 was 4172. Of this figure, y, 1764 was abortion (induced and spontaneous).

p = proportion in the target population estimated to have a particular characteristics

p = x/y = 0.42, q = 1- p = 0.58, d = degree of accuracy desired at 0 .05

So p = 42% = 0.42 but q = 1-p = 1- 0.42 = 0.58 and d = 0.05

$$\mathbf{n} = \frac{Z^2pq}{d^2}$$

$$n = \frac{(1.96)^2\,(0.42)\,(0.58)}{(0.05)^2}$$

n ≈ **374**

The initial sample size was rounded up to **420,** the sample size, women with abortion after a careful consideration of non-response of about 10% and the confidence interval of 95% were employed in the study (Source: KATH, O&G records).

3.5 Sampling Technique

Systematic sampling technique was used for the selection of samples for the study. From a population total of 4172 (N) individuals, 420 were used as sample size, n. The total

number of the population, N, was divided by the sample size, n. This gave the sampling interval or the probability of selection, k; k was then used as the constant difference between subjects. Thus for a population of 4172 and a sample of 420, k = 4172/420 = 9.93 ≈ 10. For any selected random number, x, between 1 and 10, the first sampled person is the x-th then every kth person. For instance, if k was 10 and x was 7, the 7th was the first person, then the 17th was the second person, then the 27th was the third person and so on was selected for the study.

3.6 Data Collection Techniques and Tools

Patients presenting to KATH with abortion were approached and asked to participate after explaining the purpose of the study to them. After they had given their consent, the questionnaire was administered to them each day. Its validity and reliability had been checked through the previous pilot survey.

The data were collected at two points; while on admission and after discharge from KATH. Dummy tables were used to collect secondary data from the facility records. Interviews were conducted at KATH using a four-part questionnaire. The interviews were conducted in their local languages particularly, Twi in order to ensure that the questions were fully understood by the clients. The first part of the questionnaire was on their demographic, household and socio-economic information. The second part was information on fertility, all the pregnancies each woman had experienced as well as

details about contraceptive use and pregnancy intention. The third part was assessment of knowledge on abortion laws and accessibility of safe abortion services. The fourth part was administered using a telephone interview after discharge from the hospital.

3.6.1 Pre-testing and Study Protocol

It was essential for the study to be done in a similar area with a similar environment to enable the instruments to be redesigned if need be. In all, four field assistants and one assistant investigator were recruited for the data collection exercise. Some questions in the data collection tools were modified after the pre-testing. They were given one week training on how to conduct a successful field interview. They were briefed on the objectives and the nature of the research. Since the interview was mostly conducted in Twi, an agreed translation of the various questions, concepts and common terminology was arrived at to ensure uniformity. In order to ensure that questions in the questionnaire were meaningful and easily understood by respondents, a pre-testing of the tool was conducted at Sunyani Regional Hospital.

Women with abortion (either spontaneous or induced) were usually admitted to the A3 gynaecological ward and stabilised after which they were sent to the theatre for evacuation of the remaining products of conception. They were put on antibiotics and when clinically stable, discharged home.

When they have had the evacuation of the uterus and were stable (usually less than 6 hours), they were approached and the study aims explained to them and their consent sought. Those who consented and met the other inclusion criteria were recruited. The questionnaire was administered by trained research assistants.

These women were counselled in the ward and offered contraceptive before been discharged home by the trained FP nurses in the ward, the Department of Obstetrics and Gynaecology of KATH normal protocol. Three months after discharge, the respondents were contacted by phone and the enquiries about their use or non-use of contraception were made using the fourth part of the questionnaire.

3.7 Study Variables

The study variables were the independent variables (demographic characteristics and family planning indicators) and the dependent variable abortion: induced and not induced or spontaneous. The background variables: Age, sex, level of education, ethnicity, marital status and the residence. The family planning indicators: sexual activities, contraceptive methods, partners influence, accessibility, knowledge of family planning, socio-cultural beliefs and availability of post-abortion contraceptive care services.

Table 3.1: The study variables

Variable	Operational definitions of study variables	Scale of measure-ment	Indicator	Objec-tive Achieved
Age	Age: number of completed years of the respondent at the of sampling	Ordinal	Age in completed years	**1**
Marital status	Marital status: whether the respondent is married or not, or divorced	Nominal	Married or not	**1**
Employment	the work or job of the respondent at the time of study	Nominal	Employed or not	**1**
Level of education	Educational level: the highest educational level the respondent has attained at the time of the study	Nominal	Highest Level of education attained	**1**
Socio-cultural norms	Socio-cultural influence on respondent's decision on contraceptive uptake	Nominal	Partner's influence	**3**
Contraceptive use/prevalence:	Ever used contraceptive	Nominal	women who had once used contraceptives	**2**
Reasons for not using post-abortion contraceptives	Perception category of the respondents for not using contraceptive	Nominal	Reasons for non use	**3**
Availability of FP services contraception	Right to Choice	Nominal	Right to choice	**2**
Post-abortion contraceptive uptake	Current users	Nominal	Unmet need	**2**

3.8 Data handling

The completed questionnaires, numbered serially were checked thoroughly and double entry data was done on a computer on a daily basis by two data clerks using SPSS software. To check for accuracy, completeness of data and ensure quality, the data was handled by using a password on the computer which stored the data that has been entered as soft copy as soon as it was collected. Data cleaning and verification were done on a regular basis and back-up copies were kept by the Principal Investigator and a final copy kept at the facility. The hard copies of the questionnaire were also stored in a locker for safe keeping.

3.9 Data analysis

SPSS version 16 was used to analyse the data for the study. Cross-tabulation together with frequency distribution was used to examine variables. This provided values to be tested for association. For nominal variables, Chi-square and p-values were used. Logistic regression analysis was then used to estimate odds ratios (ORs) to assess the strength of association between variables with 95% confidence intervals (CIs) and $p < 0.05$ level of significance.

3.10 Ethical Consideration

The study protocol was given to the Committee on Human Research, Publications and Ethics (CHRPE) at the School of Medical Sciences, KNUST for ethical clearance before embarking on the study. A written informed consent for the interview was signed by respondents. All information collected remained confidential and used for the purposes of the study only. Signed or thumb-printed consent forms were kept separately from completed questionnaires. The Kumasi Metropolitan Health Administration (KMHA) and the Komfo Anokye Teaching hospital (KATH) administrations also provided the administrative clearance.

3.11 Assumptions

Since KATH is a tertiary referral centre and most complicated cases were referred there, it was assumed that: the sample population is a representative of Kumasi metropolis population of women with abortion, all the responses obtained from the respondents were true and accurate, women have been accessing health services in the Komfo Anokye Teaching Hospital and that in the course of the study, there were no sudden changes in the population profile.

Thus;

- The respondents were truthful with their responses.

- All the quality control measures were strictly adhered to by the interviewers and other research assistants.

- The sampled population was a representative of the study population.

3.12 Limitations of the Study

The cross-sectional study design used for this study is limited in its ability to draw valid conclusions or to tell whether the exposure proceeded or followed the outcome. This might not have assessed the total burden of health needs of the population which is useful in informing the planning and allocation of health resources.

The data were collected by means of sampling instead of a complete census. The results of the sample survey might differ from the complete census which could give more accurate picture of the characteristics of the population instead of using a few respondents to generalise for the entire population.

The study was conducted within a total period of six months, from June to November and this was not long enough to permit an in-depth evaluation of the variables studied and measured.

- Some of the detailed information required about their family planning needs might have been difficult to recollect from long-term memory, making some respondents not to have given the true picture of the situation.

- All the possible confounders might not be known from this study.

- Non-response is a particular problem affecting cross-sectional study design and could result in bias of measure of the outcome.

3.13 Reliability and Validity of the Study

Data of the interview were analysed using SPSS version 16. Proportions, frequencies, percentages were reported on the study and a pie chart was used for an illustration. As part of the quality control measures to ensure quality and reliable information, the following steps were taken to handle the data:

- Data gathered were checked to ascertain its completeness and accuracy.

- The questionnaires were numbered before storage.

- The place and the person responsible for storing the data were also determined.

- The data were stored on a computer with password protection and backups.

CHAPTER FOUR

4.0 RESULTS

This chapter presents the findings on the study. The respondents 420, were clients who reported with the history of abortion at the hospital. Tables and graphs were used for the presentation of the results. The chapter is organised based on the objectives of the study.

4.1 Demographic characteristics of study sample

Of the 420 respondents who presented with abortion, 252(60%) were involved with induced abortion while 168(40%) had spontaneous abortion (miscarriage). Among those with induced abortion, 139(55.2%) the modal age group was 20-24 years with a mean age of 22 and a standard deviation of 1.48. These women were single, unemployed with low education and low socio-economic status.

From the study, the respondents who were married 275(65.5%) were more than those who were single 145(34.5%). The respondents who were single 137(54.4%) had more induced abortion than those married 115(45.6%).

Those who had no children 103(40.9%) were more involved with induced abortion than those with at most two (2) children 87(45.5%). The proportion of christian respondents as

compared to muslim respondents were 362(86.2%) of which 220(87.3%) were involved with induced abortion and 56(13.3%) of which only 32(12.7%) were involved with induced abortion respectively. There were 162(64.3%) of the respondents with primary education level as against 58(23.0%) with secondary education level involved with induced abortion and 32(12.7%) out of 52(12.4%) among those with no formal education had induced abortion.

Among the respondents who were employed 324(77.7%), majority 109(43.3%) were traders who in terms of socio-economic status, were core poor 83(19.8) or poor 191(45.5%), in the society and could not afford safe abortion services at the hospital right away rather, resorted to herbs or concoction, classified as self-induced abortion.

Table 4.1: Demographic Characteristics (N= 420)

VARIABLE	CATEGORY OF ABORTION		Total (n%)	Chi ^{2} (p-value)
	Induced (n %)	Spontaneous (n%)		
Age group (years)				
<=24	139(55.2)	50(29.8)	186(45.0)	(0.001)
25-34	81(32.1)	74(44.1)	155(36.9)	
>=35	32(12.7)	44(26.2)	76(18.1)	
Total	252(100.0)	168(100.0)	420(100.0)	
Marital Status				
Married	115(45.6)	160(95.2)	275(65.5)	(0.001)
Single	137(54.4)	8(4.8)	145(34.5)	
Total	252(100.0)	168(100.0)	420(100.0)	
Parity				
0	103(40.9)	31(18.45)	133(31.7)	(0.001)
1	59(23.4)	50(29.8)	109(26.0)	
2	28(11.1)	31(18.4)	59(14.1)	
>=3	62(24.6)	56(33.9)	118(28.2)	
Total	252(100.0)	168(100.0)	420(100.0)	
Religion				
Christianity	220(87.3)	142(84.5)	362(86.2)	(0.209)
Islam	32(12.7)	24(14.3)	56(13.3)	
Traditional	0(0.0)	2(1.2)	2(0.5)	
Total	252(100.0)	168(100.0)	420(100.0)	
Education				
None	32(12.7)	20(11.9)	52(12.4)	(0.966)
Primary	162(64.3)	108(64.3)	270(64.2)	
Secondary	58(23.0)	40(23.8)	98(23.2)	
Total	252(100.0)	168(100.0)	420(100.0)	
Socio-econ. Status				
Core poor	42(16.7)	41(24.4)	83(19.8)	(0.079)
Poor	125(49.6)	66(39.3)	191(45.5)	
Middle class	75(29.7)	50(29.8)	29.8)	
Rich	10(4.0)	11(6.5)	21(5.0)	
Total	252(100.0)	168(100.0)	420(100.0)	
Occupation				
Farmer/Trader	109(43.3)	88(52.4)	197(46.9)	(0.154)
Civil/public servant	79(31.4)	48(28.6)	127(30.2)	
Unemployed/Student	64(25.4)	32(19.0)	96(22.9)	
Total	252(100.0)	168(100.0)	420(100.0)	

Source: Field Data, 2011
Chi-square tests homogeneity of proportions
p-value < 0.05 implies significance relation

4.1.1 Respondents' FP characteristics

A total of 153(36.4%) out of 420 respondents sought information on FP from health workers and 123(29.3%) from the media yet a total of 105(68.5%) could not take any measures in preventing the index pregnancy.

It was found that, 253(60.2%) of the respondents did not plan for the index pregnancy and 280(66.7%) did not use any modern contraceptive prior to the index pregnancy. They, notwithstanding used some traditional methods of contraception. This was a reflection of the high rates of self-induced abortion.

Almost all the respondent's partners 404(96.2%) were not on any form of contraceptive and as such 374(89.0%) did not allow the respondents to use modern contraceptives. Some were of view that their approval could lead the women into prostitution or make them go astray.

Although, 340 (80.9%) of the respondents had the desire to use a contraceptive, about 48 out of 80 had never used any form of modern contraceptive before for fear of side effects and other misconceptions.

Pre-intervention and post-intervention studies on knowledge, attitudes and practices (KAP) were conducted. Women did not seek family planning services because they lacked detailed knowledge about methods, were afraid of side effects, were shy and worried about privacy and confidentiality, and were concerned that they would not be treated with respect. Some were also unaware that the government provided health insurance on safe abortion services. Adolescents, in particular, did not request reproductive health services as a result of these worries.

Inadequate knowledge on family planning services on the part of the respondents prevented them from accessing the services to the fullest. The respondents therefore expressed their desire to seek safe abortion services in the hospital whenever the need arises which could be as a result of the counselling they might have had from the family planning counsellors at the hospital.

VARIABLE	CATEGORY OF ABORTION	Total (n %)	Chi ^{2}

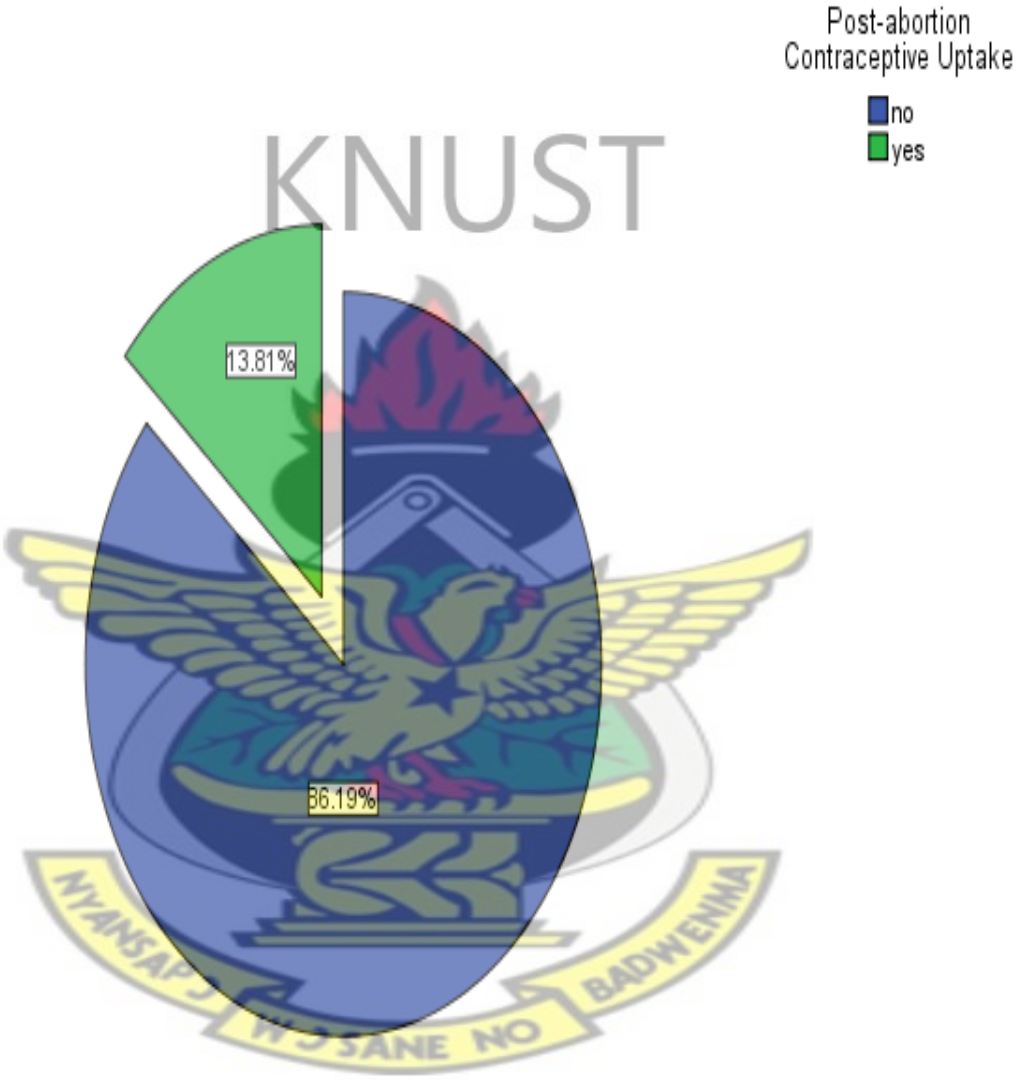
Table 4.1.1: FP characteristics of women with abortion

	Induced (n %)	Spontaneous (n%)		
Source of infomation on FP				
Relatives	91(36.1)	53(31.5)	144(34.3)	
Media (radio/TV)	75(29.8)	48(28.6)	123(29.3)	
Health worker	86(34.1)	67(39.9)	153(36.4)	(0.458)
Total	252(100.0)	168(100.0)	420(100.0)	
Planned for index pregnancy Yes	87(34.5)	80(47.0)	167(39.8)	7.217
No	165(65.5)	88(53.0)	253(60.2)	(0.005)
Total	252(100.0)	168(100.0)	420(100.0)	
Partner's approval of contraceptive use	23(9.1)	23(13.7)	46(11.0)	
Yes	229(90.9)	145(86.3)	374(89.0)	2.153
No	252(100.0)	168(100.0)	420(100.0)	(0.153)
Total				
Partner's use of contraceptive	9(3.6)	7(4.2)	16(3.8)	0.761
Yes	243(96.4)	161(95.8)	404(96.2)	(0.684)
No				
Used modern contraceptive prior(3months) to index pregnancy	78(30.9)	62(36.1)	140(33.3)	1.607
	174(69.1)	106(63.1)	280(66.7)	(0.207)
Yes	252(100.0)	168(100.0)	420(100.00	
No				
Total				
Desire to use contraceptive now		132(78.6)	340(80.9)	
Yes	208(82.5)	36(21.4)	80(19.1)	1.029
No	44(17.5)	168(100.0)	420(100.0)	(0.314)
Total	252(100.0)			
If no, give reason		12(33.3)	32(40.0)	
Fear of side effect	20(45.5)	17(47.2)	32(40.0)	
Want a child	15(34.1)	7(20.5)	16(20.0)	(0.758)
It is ungodly	9(20.4)	36(100.0)	80(100.0)	
Total	44(100.0)			
Knowledge on safe abortion services		48(28.6)	148(35.2)	
Yes	100(39.7)	120(71.4)	272(64.8)	5.453
No	152(60.32)	168(100.0)	420(100.0)	(0.02)
Total	252(100.0)			

4.2: Follow-up assessment on post-abortion contraceptive use among women with Abortion

Among the 420 respondents only 58(13.8%) used contraceptives: three months after their discharge from the hospital even though they had been counselled on contraceptive use and had wanted to prevent unintended pregnancies, postpone or delay childbearing. Out of these 58 respondents, 54(93.1%) presented with induced abortion while 4(6.9%) had spontaneous abortion.

Figure 4.1 Follow-up assessment of Post-abortion Contraceptive Uptake among women with Abortion



4.3: Follow-up assessment of post-abortion contraceptive non-use

Also, almost all the respondents, 394(93.8%) were given counselling on contraceptive use by the health providers before discharged home and those who were given contraceptives at the facility claimed the methods were recommended to them. The distance and the cost of taking a taxi from 0.50p to GH¢ 1.00 by 58.6% of the respondents and above GH¢ 1.00 by 41.4% of the respondents deterred the respondents from accessing the family planning services due to poverty or low socio-economic status.

Table 4.3.: Follow-up assessment of Post-abortion Contraceptive uptake and non-use: N=420

VARIABLE	POST-ABORTION CONTRACEPTIVE USE		Total (n %)	P-value
	Use (n %)	Non-use (n %)		
Counselled				
Yes	58(100.0)	336(92.8)	394(93.8)	
No	0	26(7.2)	26(6.2)	0.363
Total	58(100.0)	362(100.0)	420(100.0)	
(ASSESSIBILITY OF FP SERVICES) Closeness to FP facility				
Yes	36(62.1)	222(61.1)	258(61.4)	
No	22(37.9)	140(38.7)	162(38.6)	0.914
Total	58(100.0)	362(100.0)	420(100.0)	
Means of transportation				
Walking distance	22(37.9)	109(30.1)	131(31.2)	
Bicycle/motor	4(6.9)	16(4.4)	20(4.8)	0.293
Taxi/trotro	32(55.2)	237(65.5)	269(64.1)	
Total	58(100.0)	362(100.0)	420(100.0)	
Cost of transportation				
0.50p-GH¢ 1	34(58.6)	202(55.8)	236(56.2)	
Above GH¢ 1	24(41.4)	160(44.2)	184(43.8)	0.510
Total	58(100.0)	362(100.0)	420(100.0)	

Source: Field Data, 2011
p-value < 0.05 implies significance relation

4.3.1: Follow-up assessment of post-abortion contraceptive non-use among women with induced abortion (n=252)

Of the 252 respondents with induced abortion, 54 (21.4%) used a post-abortion contraceptive. The methods they used were mainly pills and injectables. Reasons gathered from the respondents showed that the fear of side effects contributed to a high rate of non-use.

Of all the 54 respondents with induced abortion who used contraceptives after discharge, 20 (37.9%) used pills and 27 (50.0%) used injectables whereas 4 (7.4%) and 3 (5.7%) used Intrauterine Device (IUD) and Jadelle respectively.

Moreover, 45(22.7%) out of 198 respondents wanted a child so they did not use any form of modern contraceptive.

Table 4.3.1: Follow-up assessment of post-abortion contraceptive non-use among women with induced abortion (n=252)

VARIABLE	FREQUENCY	PERCENT
Current use of contraceptive		
Yes	54	21.4
No	198	78.6
Total	**252**	**100.0**
Methods used (n = 54)		
Injectables	27	50.0
IUD	4	7.4
Jadelle	3	5.7
Pills	20	37.0
Total	**54**	**100.0**
Reasons for non-use (n = 198)		
Fear of side effects	109	55.0
Want a child	45	22.7
Very expensive	33	16.7
Its ungodly	11	5.6
Total	**198**	**100.0**
Reasons for termination of pregnancy		
Pursue my career	104	41.3
Just not ready	88	34.9
Financially not sound	60	23.6
Total	**252**	**100.0**
Partner's approval		
Yes	23	9.1
No	229	90.9
Total	**252**	**100.0**
Received post-abortion counselling		
Yes	247	98.0
No	5	2.0
Total	**252**	**100.0**
Contraceptive availability at the facility		
Yes		
No	25	46.3
Total	29	53.7
Closed to FP facility	**54**	**100.0**
Yes		
No	148	58.7
Total	104	41.3
Means of transportation	**252**	**100.0**
Walking distance		
Riding a bicycle/motor	85	33.7
Need to take a trotro/taxi	8	3.2
Total	159	63.1
Cost of transportation	**252**	**100.0**
From 0.50p - GHC 1.00		
Above GHC 1.0	202	80.2
Total	50	19.8
	252	**100.0**

4.4: Comparison between demographic characteristics of women presenting with induced abortion and those presenting with spontaneous abortion

The adjusted odds ratios demonstrated a statistically significant trend to a higher risk of induced abortion with non-use of contraceptives. Similarly, there was association with respondents' marital status, socioeconomic status, plan of index pregnancy, partners' influence, level of knowledge on contraceptives and category of abortion. Both crude and adjusted relative rates of contraceptive use were biologically significantly lower with further distance from family planning sites and with the high cost of transportation.

Statistically, there was a significant difference in proportion between the two groups. As shown in the adjusted model, those younger than 30 years and were single with low socio-economic status were twice more likely to have induced abortion than those with spontaneous abortion who were 30 years and above with at least three children who were married and had high socio-economic status.

The study revealed that those who did not plan the index pregnancies were two (2) times more likely to induced abortion than those who planned the index pregnancy. Also, it was evident that those who had inadequate knowledge on family planning services (had information from their friends other than the health workers or the media) had misconception or fear of side effects about contraceptive use. They were more likely to have abortion than their counterparts who had information from the right sources.

Table 4.4: Characteristics of women presenting with induced abortion verses those presenting with spontaneous abortion

VARIABLE	Unadjusted Model 1			Adjusted Model 2		
	OR	CI	P-Value	AOR	CI	P-Value
Age group						
<=24	1					
25-34	0.39	0.25-0.62	0.001	0.55	0.31-1.00	0.050
>=35	0.26	0.15-0.46	0.001	0.54	0.27-1.10	0.091
Marital Status						
Married	1					
Single	23.83	11.21-50.55	0.001	20.98	9.41-46.81	0.001
Parity						
0	1					
1	0.79	0.20-0.50	0.001	0.02	0.51-1.82	0.918
2	0.39	0.70-0.90	0.000	0.19	0.20-0.50	0.336
>=3	0.82	0.36-1.89	0.648	0.21	0.88-1.78	0.887
Socio-econ. Status						
Core poor	1					
Poor	1.85	1.10-3.12	0.021	3.47	1.60-7.53	0.002
Middle class	1.46	0.84-2.56	0.182	1.94	0.83-4.54	0.127
Rich	0.89	0.34-2.31	0.807	1.43	0.38-5.33	0.596
Occupation						
Trader	1					
Civil servant	1.33	0.84-2.10	0.221	1.58	0.88-2.83	0.123
Unemployed/ Student	1.61	0.97-2.69	0.065	1.73	0.80-3.73	0.163

p-value < 0.05 implies significance relation

Source: Field data 2011

VARIABLE	Unadjusted			Adjusted		
	OR	CI	PV	OR	CI	PV
Source of info.						
Relatives	1					
Media (radio/TV)	0.91	0.55-1.49	0.709	0.99	0.57-1.72	0.982
Health worker	0.72	0.47-1.19	0.221	0.83	0.49-1.40	0.489
Planned for pregnancy						
Yes	1					
No	1.72	1.16-2.57	0.007	1.75	1.13-2.71	0.012
Reason for termination						
Pursue my career	1					
Just not ready	0.83	0.53-1.30	0.432	0.79	0.50-1.26	0.336
Financially not sound	0.97	0.57-1.58	0.833	0.95	0.56-1.62	0.887
Partner's approval						
Yes	1					
No	1.58	0.85-2.92	0.145	2.03	1.04-3.97	0.039
Ever used contraceptive						
Yes	1					
No	1.30	0.84-1.97	0.205	1.19	0.74-1.91	0.466
Desire to use contraceptive now						
Yes	1					
No	0.78	0.47-1.27	0.018	0.87	6.52-1.46	0.590
Knowledge on FP						
Yes	1					
No	0.61	0.40-0.92	0.20	0.59	0.37-0.92	0.02

p-value < 0.05 implies significance relation

Source: Field Data, 2011

CHAPTER FIVE

5.0 DISCUSSION OF RESULTS

This chapter sought to explore the characteristics and factors predicting contraceptive uptake among women with abortion experiences. In line with results from chapter four, it was suspected that prior to their abortions the women did not use contraception leading to unintended pregnancies which they later aborted or attempted to abort. Therefore, it was expected that the women would be on contraceptives after the abortion to prevent further unintended pregnancies.

5.1 Demographic characteristics of women with abortion: induced or spontaneous

Post-abortion contraceptive uptake could go a long way to reduce maternal mortality particularly, among women with unsafe abortion. Majority of the respondents irrespective of their ages were involved in abortion and did not use any modern contraceptives.

In sub-Saharan Africa, it was estimated that 14 million unintended pregnancies occur every year with almost 50 per cent occurring among women aged 15-24 years (Ekanem, 2005) This is similar to the findigs of the study where those below and within the age group 20-24 were more likely to have unintended pregnancies and induced abortion than those from 30 years and above with at least three children who were married and had high socio-economic status. These women were associated with single or cohabiting

status, lower socio-economic status, low education level and high socio-cultural influence (partner's influence) on contraceptive use which increased the rate of induced-abortions.

A Ghanaian woman may not be willing about carrying a pregnancy to full term because her partner denies responsibility, she is not ready to marry or her family perceives childbearing outside marriage as unacceptable. For instance, Ghanaian cultural setting or society tends to disapprove of a mother's sexual behavior if both she and her daughter are nursing infants at the same time (GDHS, 1998).

5.2 Reasons associated with post-abortion contraceptive uptake and non-use

Being able to plan how many children to have and when to have them is a recognised human right. But this right is not yet realised, especially among women. Most of the respondents wished to postpone pregnancy and delay childbearing for economic reasons. Yet post-abortion contraceptive use as a means of spacing or limiting births remained very low. In societies, where men make the decisions regarding the woman's reproductive health, it becomes essential to know men's contraceptive use habits and actively involve them in sex education in promoting family planning. Also, most successful contraceptive method is likely to be the one that the women or partner chooses rather than the one the healthcare provider proposes for them (Hogerzeil, 2000).

Counselling immediately after abortion was an important factor in women's acceptance of a method. The study revealed that the respondents were significantly more likely to accept a method if they had a range of contraceptive options to offer at sites to promote informed choice. On-site provision of a wide range of safe, effective and convenient family planning methods is said to encourage more people to use contraception (Glasier, 2006). Thus addition of a method yields a net increase in contraceptive prevalence, one-method family planning programs are inadequate to meet individual fertility goals, availability of multiple methods increases contraceptive use and contraceptive prevalence depends upon the number of methods made available through multiple outlets in a country (Heise, 1997).

The cost of abortion extend well beyond those of the health system, societies bear the economic cost of lower productivity caused by long term disability and mortality. If contraception were accessible, maternal mortality would decline by an estimated 25-35% (Bongaarts and Westoff, 2008). Thus, post-abortion contraceptive uptake would interrupt the cycle of repeat unplanned pregnancy, abortion and complications leading to maternal mortality.

However, post-abortive respondents with induced abortion used methods such as pills and injectables as against long-term methods like IUD, implant or Jadelle that are said to be more safer and effective. Snowden (1985) wrote that no contraceptive method is

perfect and that women need to make trade-offs among different methods, necessitating access to a range of methods: The methods of fertility regulation from which most couples choose represent a choice among unpleasant alternatives.

It was also suggested that the choice of implant rather than oral or injectable contraceptives could have a big impact on unintended pregnancy particularly among the adolescent since fertility returns four to six weeks after abortion and family planning has a role to play before a woman becomes pregnant and after abortion or miscarriage.

Family planning empowers women and can save their lives. It can also help reduce poverty, slow population growth and ease pressures on the environment. Yet family planning services often fail to reach those with the greatest need: the poor, those living in remote areas and urban slums and people with little education. Other vulnerable groups lacking access include youth, indigenous populations, people living with HIV and internally displaced people.

This study tested that lower geographic access to family planning facilities is associated with lower rates of contraceptive use with high unintended pregnancies. Researchers estimate that universal access to family planning empowers women and could save the

lives of about 175,000 women each year. Also, increasing birth intervals to at least 36 months could also prevent the deaths of 2.7 million children under 5 (UNPD, 2009).

From this study, it was found that respondents' low level of knowledge on contraceptive use including the fear of side effects was a reason for low post-abortion contraceptive use leading to high rate of unintended pregnancies, some of which ended in self-induced abortion. Also, those married who intentionally induced abortion were not on contraceptives due to the fact that they were not ready to have children or did not plan the index pregnancies.

Among those who planned the index pregnancy, some could not correctly use the contraceptives that were at their disposal. And as stipulated in literature, mere increases in prevalence of contraceptive use need not necessarily mean success in avoiding unwanted or mistimed pregnancies. The output, unintended pregnancies, ended in self-induced abortions. Data from this study indicated that there was low over all post-abortion contraceptive use of 13.8% with high unmet FP needs of about 32% as against low over all contraceptive use of 17% in Ghana (GDHS, 2008) with high unmet FP needs of 34%.

In most of the developing countries, unintended pregnancies are mainly consequence of restricted access to family planning services (WHO, 1996). It was evident that, most of the respondents were far away from family planning centres and had to patronise taxi or trotro at high prices from 0.50p to GH¢1 and above GH¢1. Since these women were not economically sound and unmarried with virtually low education these 'high' prices deterred them from accessing the family planning centers for just contraceptives which they were to pay at a fee.

Increasing access is the dissemination of information about family planning and available services if the public media outreach is targeted toward marginalised and vulnerable population (Bongaarts, 1991). Community-based distribution of contraceptives has been a successful program model in many countries for decades, reaching women and couples who would otherwise have to travel great distances. Community-based distribution can also allow women to access services away from public scrutiny, avoiding the stigma attached to family planning use in some communities.

CHAPTER SIX

6.0 CONCLUSIONS AND RECOMMENDATIONS

Problems identified were strong socio-cultural (partner's influence) and economical factors, inadequate reproductive health knowledge on contraceptives use and subsequent need of post-abortion contraception. These factors require intervention from health professionals, social groups and government policy makers.

6.1 Conclusions

From the data, very few of the respondents had ever used contraceptives. There were misconceptions about the use of modern contraceptives and sustained education must be mounted to reverse this. There were also negative reactions from the partners and society towards pregnant adolescent women. Partners might have been unhappy, indifferent, or surprised about the pregnancies while others refused responsibility. Most parents also were said to be angry with their pregnant daughters these factors coupled with socioeconomic factors among the women, partners and parents influenced the decision made in seeking abortion.

The women were found to have low level of sex education as well as poor knowledge of reproductive health issues. Sources of information on family planning particularly PAC appeared to be very much limited. The core components of PAC comprising: treatment of

incomplete abortion, contraceptive counselling services and community empowerment through community mobilisation, were totally not rendered to post-abortion provided clients.

The Programme of Action adopted at the International Conference on Population and Development (ICPD) held in Cairo in 1994 recommended that family planning programmes should "Recognise that appropriate methods for couples and individuals vary according to their age, parity, family-size preference and other factors, and ensure that women and men have information and access to the widest possible range of safe and effective family-planning methods in order to enable them to exercise free and informed choice".

Moreover, the extent of male use of family planning and the nature of men's role in family planning must be examined carefully and critically for involving men actively in family planning. Policies that aim to increase male involvement must be sensitive to cultural values, apply to a decentralised government approach toward information and supplies, include adequate political will and consider the costs and benefits of changing values. A policy, compatible to traditional values should stress the value of male individuals contributing as much as possible for their own and others' welfare.

Community participation is considered important in order to create a feeling of mutual support. Therefore, a sizeable investment will be required for mass distribution of contraceptive information.

The dissemination of information about family planning and available services through the public media as a tool for advocacy and awareness on reproductive and sexual health is said to have a significant impact on men. This could do away with highly taboo issues related to sex and the use of male and female condoms, breaking down cultural barriers and paving the way for open discussions on reproductive health issues.

On a broader level, increasing access to family planning services is helpful in achieving Millennium Development Goal 5, reducing maternal mortality by three-quarters between 1990 and 2015 using a country's contraceptive prevalence rate as an indicator to monitor progress of this goal.

6.2 Recommendations

To help women who want no more children or avoid unwanted pregnancy, family planning providers should make sure that they offer highly effective long-acting and permanent methods, as well as reversible methods suitable for birth spacing. For

example, programs need to retrain clinicians to provide counseling on and insertion of IUDs, particularly the Copper T 380, which is effective for 12 or more years. Given the favorable safety profile of copper IUDs, they deserve greater emphasis in post-abortion and postpartum services.

Reorganisation of services using simple delivery systems, job aids, efficient and effective counseling, and written instructions will be required for health systems to provide contraceptives for all clients regardless of the surgical, medical and anesthesia regimens used in PAC treatment. Written post-treatment instructions and contraceptive information are necessary in addition to verbal instruction, given the physical and emotional stress surrounding abortion and the inability to remember new information common with antianxiety and narcotic pain medications. Women who are not literate generally have access to family members or neighbours who can read them the written instructions.

Post-abortion uptake of family planning is needed just as much and can be as successful for women treated with sharp curettage under general anesthesia as for those treated with vacuum aspiration under local anesthesia. Therefore, reorganisation of services is also needed in facilities where women are treated in the operating room.

Health system administrators and policy makers first need to learn about and acknowledge the magnitude of the problem of unsafe abortion in the country due to unintended pregnancies through contraceptive non-use to enable them plan ahead to provide the care women need (WHO, 2007).

Policies and funding decisions need to emphasize post-abortion family planning needs. Providing sufficient resources for post-abortion family planning from national budgets and international donors is essential. These resources include not only the training for post-abortion care services, but family planning commodities and other equipment needed to provide the package of post-abortion care services, which must be included in national, regional, district and facility budgets. Training for in-service and pre-service providers should reflect the new priorities. Accordingly, job descriptions would need to change so that the scope of work is inclusive of post-abortion family planning counseling and service delivery.

Organisations such as the International Confederation of Midwives (ICM), the International Federation of Gynecologists and Obstetricians (FIGO) and the International Council of Nurses (ICN) should jointly engage policymakers, their members and the institutions where they work to effect change. In many cases, these professionals are in the best position to influence policy and the priorities for health resources in their countries and the scope of practice for their members. Decentralisation of services to

midlevel clinicians will require collaboration and teamwork among medical, nursing and midwifery providers and professional organisations as a means of bringing attention to the urgency of the need to strengthen post-abortion family planning.

Christian health organisations, should be compelled to strengthen family planning services and respond to the gap in contraceptive services, especially in Africa, including family planning for post-abortion care clients. Since faith-based organisations provide 30–70% of health care in many African countries, they have the potential to increase the uptake of family planning among post-abortion clients and reduce unmet need for family planning and repeat unsafe abortion.

Contraceptive prevalence rates are critical health measures of family planning program performance. A key output measure of postabortion family planning performance is the proportion of women leaving the facility with a method. This indicator has increased rapidly in post-abortion facilities and programs where family planning services are strengthened. Important measures of quality for PAC programs will document that women received family planning counselling, that women received concise written instructions for using their chosen method, that women have a plan for follow-up family planning services, that there is involvement of husbands and partners when the woman agrees, and that a plan for ongoing contraceptive supplies exists.

Also, there should be strong health information system to:

- Improve overall health status and reduce inequalities in health outcomes of people living in Ghana particularly, women.

- Work in collaboration with all partners in the health sector to ensure that every individual, household and community is able to access quality health service delivery.

- Increase geographical and financial access to health services particularly, family planning.

All health workers must acquaint themselves with the legal code for abortion so they could impact knowledge to women concerning their legal right when requesting abortion. There should be education on the fatal consequences of abortion complications.

Public Health advocates can speak out about the need to provide post-abortion care, citing local statistics on women's deaths and the cost to local hospitals.

To reach vulnerable young people, the health system should provide clinical services specifically for youth. Youth services are to be provided in a separate space within the adult clinic so that the centers could seek input from young people in an ongoing effort to improve service. Also, youth living or working on the street must be considered so as to improve their access to sexual and reproductive health services.

Public Health Nurses should organised health education programmes to offer family life education, sex education and contraceptive use to both men and women at market places, churches, mosque and schools. Schools are viewed as an ideal place for educating the youth about the problems of high fertility and about the use of family planning methods, such as the condom. Comic books on how to use condoms are suggested as a good source.

Religious organisations should be used to educate people about responsible parenthood and to minimize barriers to use of modern contraception.

Associations should be encouraged to invite health workers and family planning advisors to educate their members on the importance, durability and reliability of using contraceptive.

Mass media campaign can alert the public to the problems of unsafe abortion. Staff at the maternal and child Health should give talk on abortion and its complications in their clinics in local dialect to enlighten the women that abortion is not the best way for family planning.

Family Planning counselling services and contraceptives should be affordable and if possible free to women treated for abortion. Women particularly, young people should be given the necessary attention on their reproductive rights by policymakers and service providers.

Men must also be involved actively in contraceptive use. Also, they must be involved in health issues arising from pregnancy and delivery to have effective result that is preventing abortion. Contraceptive services must be made accessible and affordable for both men and women to patronise them.

Also, the administration of KATH could ensure better service delivery chain through:

The provision of quality (adequate and effective) counselling for all women by using antenatal and post-abortion care clinics as avenues for indepth information on abortion and post-abortion contraceptive use.

Availability and assessibility of contrcaptives or methods mix at service delivery point to ensure the right to choice by all clients.

Better follow-ups and appropriate referral programs: after discharge those who come for reviews within the first six (6) weeks should be linked to family planning counsellors who would intend refer the client to a nearby clinic after choosing a method to ensure continuity of use.

Effective and efficient supervision, monitoring and evaluation should be done to check the flow of a functional logistics system in order to avoid frequent stock out of resources.

Moreover, the Ministry of Health, MOH should:

- Reorganise service so that counselling and methods are available in the same room as emergency treatment

- Develop protocols for provision of post-abortion contraception

- Orient staff (all levels) about the program

- Train service delivery team

- Use research results to support improvements in PAC on FP services

- There should be prompt care avoiding delays by decentralising post-abortion care and setting up a referral system.

- All women treated for complication of unsafe abortion should be offered family planning counselling and services as well as other reproductive health care.

Finally, program goals for the future should include universal access to and when desired, provision of family planning services following abortion, whether induced or spontaneous. The need for at least a six-month pregnancy interval after miscarriage before attempting to become pregnant again would guide providers to recommend family planning for all women receiving PAC services. Post-abortion and postpartum family planning for all women should go hand in hand, though there are some differences in appropriate contraceptive methods.

6.3 Concluding Remarks:

- Contraception is an essential element of PAC

- PAC clients may or may not wish to use FP immediately

- The desire to delay, space, pursue a career and low socio-economic status are reasons giving for having an induced abortion suggesting unmet need for FP

- Contraceptives could be recommended for use immediately post-abortion provided clients are properly counselled and screened for conditions appropriate for usage.

- There is the need to match findings from contraceptive and induced abortion studies to develop strategies to address both.

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APPENDICES

APPENDIX A

QUESTIONNAIRE

CHARACTERISTICS OF WOMEN WITH ABORTION PRESENTING AT THE KOMFO ANOKYE TEACHING HOSPITAL

INTRODUCTION

This is a cross-sectional study aimed at describing the characteristics of women presenting with abortion at KATH in Kumasi, Ghana and contributing to the development of effective programs such as post-abortion contraceptive use to address the issues of unintended pregnancies, repeat abortions and maternal mortality. It is an academic work with the objective of contributing to the body of knowledge about the prevention of self-induced abortion and the promotion of the health of women.

You are assured of confidentiality of your response and the fact that it will not be associated with you now or in the future, but will only be used for the purpose of this study. You are at will to stop the interview at anytime without a cost.

Your name is required.

Please answer the questions below as sincerely as possible.

SECTION A:

DATE_____	**QUESTIONNAIRE NO._____**	**INTERVIEWER_____**
CODE_____	**NAME……**	

INTERVIEWER TO NOTE:

Answer questions 1 - 5 from the patient's folder or relevant books (e.g. A&D)

	CHARACTERISTICS OF WOMEN WITH ABORTION PRESENTING AT KATH	
	SOCIO-DEMOGRAPHIC INFORMATION – SECTION B	
1.	Age (in completed years)	_____
2.	Parity	_____
3.	How many previous termination(s) has client had	_____
4.	What category is the index pregnancy? (based on history) 1. induced 2. not induced (miscarriage)	 □ 1 □ 2
	SECTION C **SOCIO-CULTURAL/ ECONOMIC BACKGROUND**	
5.	What is your marital status? 1. married 2. single (boy-friend) 3. divorced/separated 4. cohabiting (stays with partner and rites have not been performed)	 □ 1 □ 2 □ 3 □ 4
6.	Religion 1. Christian 2. Islam 3. Traditionalist 4. Aethiest	 □ 1 □ 2 □ 3 □ 4
7.	Education level 1. None 2. Primary 3. Secondary 4. Tertiary (post secondary)	 □ 1 □ 2 □ 3 □ 4
8.	Name of place of residence _____	

CHARACTERISTICS OF WOMEN WITH ABORTION PRESENTING AT KATH		
9.	Residence category 1. urban 2. peri-urban 3. urban – slum 4. rural	 □ 1 □ 2 □ 3 □ 4
10	What type of accommodation do you have? 1. Rent a room 2. A room and a hall 3. 2-bedroom apartment 4. 3-bedroom apartment	 □ 1 □ 2 □ 3 □ 4
11	Do you live in a 1. compound house 2. residential area	 □ 1 □ 2
12	Occupation 1. trader 2. civil/public servant 3. artisan (seamstress, mason, carpenter, hairdresser etc) 4. farmer 5. student 6. unemployed 7. other please state_____	 □ 1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7
13	How much do you usually spend a day?	_____
14	Do you earn regular income? 1. yes 2. No	 □ 1 □ 2
15	What is the occupation of your partner? 1. trader 2. civil/public servant 3. artisan (seamstress, etc) 4. farmer 5. student 6. unemployed 7. other please state_____	 □ 1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7
16	Do you receive any support from your partner? 1. yes 2. no	 □ 1 □ 2

CHARACTERISTICS OF WOMEN WITH ABORTION PRESENTING AT KATH		
17	If yes, what forms of support do you regularly get from your partner? 1. financial 2. companionship 3. religious (prayers) 4. counsel (advice) 5. occupational 6. household chores 7. caring for children 8. Others (state)_____	 □ 1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8
18	Did you receive any financial assistance from your relative while pregnant? 1. Yes 2. No	 □ 1 □ 2
19	Do you have NHIS? 1. Yes 2. No	□ 1 □ 2

Which of these items do you own?		**YES**	**NO**
20	House		
21	Car		
22	Land		
23	Mobile phone		
24	Electrical item (freezer, sound system, fan, etc)		
25	Furniture (e.g. bed, chairs, etc)		
26	Gas cooker		
27	Number of clothes not sewn		
28	Number of shoes		

CHARACTERISTICS OF WOMEN WITH ABORTION PRESENTING AT KATH		
29	On a scale of 1 – 5 how would you rank yourself on the socio-economic scale (use of visual scale) 1. core poor 2. poor 3. middle class 4. rich 5. very rich	 □1 □2 □3 □4 □5
30	Do you think your economic status has contributed to the termination of this pregnancy? 1. yes 2. no 3. Don't know	 □ 1 □ 2 □ 3
	SECTION D **REPRODUCTIVE HISTORY**	
31	How many times have you been pregnant?	
32	How many children do you have?	
33	How old is your last child?	
34	Have you ever had any pregnancy related problem 1. yes 2. no (skip to Q38)	 □ 1 □ 2
35	If yes, what problem did you have? Please state	
36	Would you want to be pregnant again? 1. yes 2. no	 □ 1 □ 2
37	Did you plan the index pregnancy? (the one that was just aborted) 1. yes 2. no (skip to Q41) 3. Don't know	 □ 1 □ 2 □ 3
38	What was/were the reason(s) for termination?	
39	If no, why was it not planned?	
40	Did you want this (index) pregnancy? 1. yes (skip to 47) 2. no	 □ 1 □ 2
41	If no, what did you intend to do with it? 1. keep it 2. terminate it	 □ 1 □ 2

CHARACTERISTICS OF WOMEN WITH ABORTION PRESENTING AT KATH	
42	Did you do anything to end this pregnancy? 1. yes ☐ 1 2. no ☐ 2
43	If yes, what agent(s) did you use? Please state
44	Did you have to go somewhere to terminate this pregnancy before coming here? 1. yes ☐ 1 2. no (skip to 45) ☐ 2
45	If yes, where did you go? _____
46	Do you know of any means by which pregnancies are terminated 1. yes ☐ 1 2. no (skip to Q47) ☐ 2
47	If yes, please state the method(s) you know.
48	Why was this (index) pregnancy terminated?
SECTION E **FAMILY PLANNING PERSPECTIVE**	
49	Did anyone talk to you about how to prevent unwanted pregnancies (contraception)? 1. yes ☐1 2. no ☐2
50	If yes, who talked to you about how to prevent unwanted pregnancy 1. friends ☐1 2. relatives ☐2 3. media (radio) ☐3 4. books ☐4 5. partner ☐5 6. health worker ☐6 7. other (state_____)
51	Which method(s) of prevention of unwanted pregnancies was discussed? Please state_____
52	Is your partner using contraceptives? 1. Yes ☐1 2. No ☐2
53	Does your partner want/allow you to use contraceptives 1. Yes ☐ ☐1 2. No ☐2

CHARACTERISTICS OF WOMEN WITH ABORTION PRESENTING AT KATH	
54	Have you used modern contraceptive before? 1. yes 2. no
55	Did you use modern contraceptives prior to index pregnancy? 1. yes ☐ 1 2. no (skip to Q56) ☐ 2
56	If yes, state the type used
57	Would you want to use a contraceptive now? 1. yes (skip to 58) ☐ 1 2. no ☐ 2
58	If no, why is it that you don't want to use contraceptive now? (Go to Q59 after answering) 1. I want a child ☐ 1 2. it is ungodly ☐ 2 3. it is expensive ☐ 3 4. side effects ☐ 4 5. Other state…….. ☐ 5
59	If yes, which contraceptive would you want to use? Please state
	SECTION F **SAFE ABORTION AWARENESS**
60	Have you heard about safe abortion services? 1. yes ☐ 1 2. no ☐ 2
61	Do you think it is legal to terminate a pregnancy in Ghana 1. yes, it is legal ☐ 1 2. no, it is not legal ☐ 2
62	Would you go to a hospital to seek for termination of pregnancy if you don't want it? 1. yes ☐ 1 2. no ☐ 2
63	If no, why not?
64	What can you do to prevent unsafe abortion? Please state
Thank you very much!	

FOLLOW UP QUESTIONS

Telephone Conversation

Name of respondent:

Telephone number:

Telephone (proxy):

Best time call:

1. Are you using contraceptive now?

   Yes ☐ No ☐

2. If yes, what method?

3. If no, why are you not using contraceptive?

   a. Fear of side effects

   b. Wants to get pregnant soon

   c. Very expensive

   d. It is ungodly

   e. Partner disapproves of its use

   f. Other, please state ……

4. Were you advised to use contraceptive by the service provider?

   Yes ☐ No ☐

5. Were you given contraceptive at the facility by the service provider?

Yes ☐ No ☐

6. Was it a method of your choice?

Yes ☐ No ☐

7. Do you have a family planning center (FPC) near you?

Yes ☐ No ☐

8. If you know of one how do you get there?

   a. Walking distance
   b. Ride a bicycle
   c. Need to take trotro/taxi
   d. Other means, please state ……

9. If you do go by transport, how much does it cost?

   a. GH 30-50p
   b. 50p-GH¢1
   c. Above GH¢1

APPENDIX B

The Map of Ashanti region

Work plan: (MPH) HEALTH SERVICES PLANNING AND MANAGEMENT, KNUST

TIME TABLE FOR FIELDWORK IN KATH (June-August, 2011)

WEEK	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
1.	Fine tuning of questionnaire		Pre-testing	Pre-testing	Pre-testing	-Private work-	- Private work -
2.	CWC visit at KATH	Data collection				- do -	- do -
3.	Data collection	Visit Zongo community to interview members on FP	FP presentation to drivers at Kejetia	Data collection		- do -	- do -
4.	Data collection		Analyse of HIV/AIDS records of KATH	Group discussion on HIV/AIDS with drivers and head potters	Data collection	- do -	- do -
5.	Presentation and interview with two adolescent		Core mgt meeting	Data collection		- do -	- do -
6.	A visit to CWC	Data collection			A visit to the District Education office at Subin	- do -	- do -
7.	Data collection		Visit to birth and death registry		Data collection	- do -	- do -
8.	Data collection		Consultation with field supervisor			- do -	- do -
9.	Consultation with project supervisor			Data collection		- do -	- do -
10.	Am: Library Pm: Core mgt meeting	Programme meeting with volunteers				- do -	- do -
11.	Data collection	Visit to Batama communities		National Immunization Programme		- do -	- do -
12.	CWC visit at KATH	Data collection			Visit to KATH FP center	- do -	- do -
13.	Am: Internet. Mgt meeting	ANC visit at KATH	Final write up		Assessment with field supervisor	- do -	- do -