ADHERENCE OF HEALTH CARE PRACTITIONERS TO THE ADOLESCENT REPRODUCTIVE HEALTH AND DEVELOPMENT POLICY AT THE GARISSA PROVINCIAL GENERAL HOSPITAL, KENYA

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DECLARATION

I Christine Mwikali Musee declare that this thesis is my original work and has not been presented for a degree in other university or any other award.

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CERTIFICATE OF APPROVAL

We confirm that the candidate under our supervision has carried out the work in this proposal.

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DEDICATION

I dedicate this work to my loving husband Josphart Musee Paul, and our children Daniel Mutavany'a Musee and Elizabeth Mwende Musee. Thank you so much for the support and understanding you accorded me throughout the entire process, by the grace of God.

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ABSTRACT

Background: Kenya's policies relating to population, family planning and reproductive health often receive weak or fluctuating levels of adherence. This undermines their implementation. The youth today form the majority of the Kenyan population (National Coordination Agency for Population and Development (NCAPD), 2011). The Adolescent Reproductive Health and Development (ARH&D) policy gives directives and actions to follow in meeting identified ends and goals in the reproductive and developmental needs of the youth (Ministry of Health-Youth Friendly Services (MOH-YFS), 2005).

Objectives: The purpose of this research was to evaluate adherence of the health care practitioners (HCPs) to the adolescent reproductive health and development policy at the Garissa Provincial General Hospital, Kenya (GPGH).

Study methods: The research was a cross sectional study with both qualitative and quantitative aspects done in June 2012. The sample comprised of 119 health care practitioners, including 88 nurses, 14 doctors and 17 clinical officers selected randomly. Purposive sampling was done for the adolescents client and 53 were interviewed.

Data analysis: Data were collected, cleaned and double entered, coded and counterchecked for accuracy. Quantitative data analysis was then conducted out using the SPSS (statistical package of social scientists) computer programme. Qualitative data analysis was done using computer assisted qualitative data analysis system (CAQDAS). Categorical variables were presented using frequency tables and graphs. Inferential statistics were done by chi square to compare percentages and explore association between ARH&D policy utilization and HCP characteristics.

Results: The HCP utilization rate of the ARH&D was 62.2%. The HCP religious affiliation staffing levels, age, frequency of supervision were some of the factors that influence implementation of the policy. There was a general satisfaction with quality of reproductive health services among the adolescent clientele at GPGH. Severity of infibulations has reduced in severity among the Somali people. Consanguineous marriages of under age girls, drug addiction, poverty, HIV and AIDS and family planning stigmatization are still high in NEP.

Conclusion: Adherence to the ARH&D policy was fairly high at the GPGH. There was no ideal YFS at GPGH. The adolescent satisfaction level was high despite some shortcomings with the HCP adverse characteristics, facility deficits, and service management hurdles.

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LIST OF ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
ARH	Adolescent Reproductive Health
ARH&D	Adolescent Reproductive Health & Development
CBOs	Community Based Organisations
CCC	Comprehensive Care Centre(s)
CCC	Comprehensive Care Clinic
CHW	Community Health Worker(s)
CME	Continuous Medical Education
DRH	Division of Reproductive Health
EDC	Educational Development Centre, Inc.
FPP	Family Planning Programme
FGC	Female Genital Cutting
FGD	Focus Group Discussion
FGM	Female Genital Mutilation
FP	Family Planning
GPGH	Garissa Provincial General Hospital
HCPs	Health Care Practitioners
HIV	Hetero Immune Virus
IPPF	International Planned Parenthood Federation

IQR	Interquartile Range
JHBSPH	John Hopkins Bloomberg School of Public Health
KAP	Knowledge, Attitude and Practice
KDHS	Kenya Demographic Health Survey
KHPF	Kenya Health Policy Framework
KI	Key Informant
KII	Key Informant Interview
KNBS	Kenya National Bureau of Statistics
KNH/ERC	Kenyatta National Hospital/Ethics Research Committee
MCH	Maternal Child Health
MDGs	Millennium Development Goals
M&E	Monitoring and Evaluation
MOH	Ministry Of Health
MOH-YFS	Ministry of Health-Youth Friendly Services
MOPHS	Ministry Of Public Health and Sanitation
NCAPD	National Coordination Agency for Population and Development
NCPD	National Council for Population Development
NEP	North Eastern Province
NFPGSP	National Family Planning Guidelines for Service Providers
NGOs	Non- Governmental Organisations
NHSSP II	National Health Sector Strategic Plan 2005–2010

NRHS	National Reproductive Health Strategy 2009-2015
OPD	Out Patient Department
PMO	Provincial Medical Officer
POPIN	United Nations Population Information Network
RCO	Registered Clinical Officer(s)
RH	Reproductive Health
SID	Society for International Development
SPSS	Statistical Package for Social Scientists
STI(s)	Sexually Transmitted Infection(s)
UNESCO	United Nations Educational Scientific and Cultural Organisation
UNPFPA	United Nations Population Fund Programme Association
UON	University Of Nairobi
USAID	United States Agency for International Development
VDRL	VDRL
WHO	World Health Organisation
YFS	Youth Friendly Services

OPERATIONAL DEFINITIONS OF TERMS

Adolescents, youth and **young people** are used interchangeably in this research. They are persons aged 10-24 years.

Infibulation is a type of female genital cut common amongst the female Somalis of North Eastern Province (NEP). The external genitalia is cut, and the remaining tissue is closely stitched or glued together with a natural substance. A small hole is left for passage of urine and menstrual blood.

Safe motherhood is a concept to assist women to achieve safe pregnancy and delivery leading to healthy babies of healthy mothers.

Unmet need is a term used in the context of family planning in this Policy. An adolescent female has unmet need family planning need if she wants to either space or limit births and is not using any method of family planning.

Reproductive health is a state of well-being in all matters relating to the reproductive system, its functions and processes.

Reproductive rights embraces the rights of the youth to receive adequate information on family planning access to family planning, the right of HIV/AIDS infected adolescents to receive health care without discrimination and consent and confidentiality issues for the youth pertaining to adolescent reproductive health (ARH).

Health Care Practitioners refers to qualified nurses, clinical officers and doctors.

Policy is a set of ideas and plans used as a basis for decision making. The ARH&D policy gives guidelines on how to handle adolescent sexual and reproductive rights and health, harmful Practices, drug and substance abuse, socioeconomic factors and reproductive of young people with disabilities.

Adherence is the rational compliance to the ARH&D policy document including the physical health facility characteristics, HCP characteristics and management issues including psychosocial issues.

CHAPTER ONE: INTRODUCTION TO THE STUDY

1.1 Background of the Study

The World Health Organisation (WHO, 2011) defines health policy as the decisions, plans, and actions that are undertaken to achieve specific health care goals within a society, defining a vision for the future. They outline priorities and the expected roles of different groups, and build consensus as well as inform people (WHO, 2011). Evidence in these writings indicates that the mere articulation of policy is not adequate to accomplish the policy goals (Longest 1998 as cited by Friedman, 2003). Studies by United States Agency for International Development (USAID, 2003) indicate that Kenya's national health policies set the stage for provision of quality health care. They are structured in such a way that the Health Care Practitioners (HCPs) concerned have appropriately outlined tasks for the level of health care that they provide (USAID, 2003).

The Kenya's National Coordinating Agency for Population and Development (NCAPD, 2010) indicates that more than a quarter of Kenya's population are adolescents. Studies by Senderowitz et al (2003) indicate that adolescents and youth are faced with a myriad of reproductive health care problems like unprotected sex, sexual pressure and coercion, sexual exploitation for favours and financial support, unsafe abortions, and susceptibility to HIV.

The Adolescent Reproductive Health and Development (ARH&D) policy in Kenya is a document dated 2003. It is grounded in the understanding that the relationship between a nation's development and the health of its adolescents and youth is of paramount concern. The policy responds to concerns raised in the National Population Policy for Sustainable Development (NPPSD), National Reproductive Health Strategy (NRHS), Children's Act and other national and international declarations and conventions on the health and development of adolescents (NCPD, 2003). Its aim is to improve quality of life for Kenya's youth. It defines adolescent health and development needs, provides guidelines and strategies to address adolescent health concerns. It promotes partnership among adolescents, parents and communities (NCAPD, 2011). The policy was used to set the national guidelines for provision of adolescent youth friendly service (YFS) in Kenya. They stipulate the characteristics and environment of the YFS, provider and staff characteristics and programme design characteristics (MoH-YFS, 2005).

According the Ministry of Health (MOH) on YFS, implementation of the ARH&D Policy is an essential tool in the planning, standardization, implementation, and monitoring and evaluation of the sexual and reproductive health of Kenya's adolescents. It helps reduce the unmet family planning needs, unplanned births and socioeconomic disparities in contraceptive prevalence rate (MOH-YFS, 2005). Implementation of the ARH&D policy cause harmony of adolescent reproductive health services in the country. This ensures rational based health care standards and upholding of professionalism.

Health indicators in North Eastern Province (NEP) are far worse than the national average. .Infant mortality rate 57/1000 live births and the under five mortality 80/1000 live births are very high compared to the national average of 52 and 74 respectively (KDHS -2008-9). The maternal mortality rate is the highest in the country at 1000 to 1300 per 100,000 live births, the national average being 484 per 100,000 live births (KDHS 2008 – 09). This is a clear indication that there is a gap in the reproductive health (RH) policy.

NCPD study evidence (2003) indicates the Somali community which is predominant in North Eastern Province (NEP) perceives Female Genital Mutilation /Cut (FGM/C) as a critical component of their culture to control female social desires and a tool also for fostering family honour (Sheikh, 2008). The prevalence rate of FGM is 97% in the Somali community. They practice infibulation (severe genital mutilation) associated with obstetric/ gynaecological complications (Begin community dialogue on FGM/C by discussing cultural justification (Kenya FGM/C 2008).

WHO (2008) studies indicate the Somali community favours high fertility and have religious barriers to FP and lack of male involvement in (FP). This has resulted in large families and weakened FP efforts in NEP. In addition poverty, conflicts, in these environs, hinder FP endevours (Educational Development Centre, Inc.(EDC, 2009). These are likely to interfere with the implementation of the ARH&D policy which advocates for FP among the sexually active youth whether married or not. It is with this view that this research seeks to assess the adherence to ARH&D policy by the policy implementers in the provincial General Hospital in NEP.

1.2 Statement of the problem

Several research studies indicate that, there are reproductive health problems reported within Garissa and the wider North eastern province (NEP) involving adolescent sexual health and

reproductive rights. Harmful practices, including early marriage, female genital cutting (Sheikh, 2008), and gender-based violence (EDC, 2009) also aboard. EDC reported that gender disparity Garissa to be the worst in the country. Notably girls are coerced to marry early leading to early dropout from school and increased divorce/separation rates. The report further indicated that only 24% of women in NEP were involved in decision making about their health. Domestic violence was common and HIV prevalence was stated as 4.2 in 2007 up from one per cent in 2002 (EDC, 2009). The stigma attached to HIV and AIDS was cited to be substantial while HIV testing rate was reported as low (Sheikh, 2008). A study by WHO revealed that family planning iuptake in NEP was less than one per cent (WHO, 2008). In recognition of these challenges the Kenya government specifically targets adolescents through its ARH&D policy and sets out to increase the proportion of facilities offering youth-friendly services from baseline to 80% by 2015 (MOH-YFS, 2005). In the GPGH setting, minimising the challenges and threats to adolescent reproductive health it are critical to ensure high adherence to ARH&D policy among the HCPs so as to maximize the benefits of reproductive health services among the adolescents. Few studies conducted to evaluate implementation of ARH&D policy adherence in this health care setting. This study therefore intended to describe the adherence of health workers to ARH&D policy and recommend strategies for increasing adherence at GPGH.

1.3 Objectives

13.1 Goal/aim

The purpose of this research was to evaluate the implementation of ARH&D Policy for the Service Providers at Garissa Provincial General Hospital with an aim to scale up youth friendly services in the hospital to clients.

1.3.2 Specific objectives

1) Determine utilisation of the Adolescent Reproductive Health & Development policy among the Health Care Practitioners in Garissa Provincial General Hospital.
2) Determine the characteristics of the youth friendly services in the hospital.
3) Identify the factors that influence the utilisation of the Adolescent Reproductive Health & Development Policy among these health care workers in Garissa Provincial General Hospital.

4) Establish the satisfaction level of the adolescent clientele pertaining to the quality of the reproductive health care offered to them at he Garissa Provincial General Hospital.

1.4 Research questions

The study sought to answer the following questions:

1) What factors influence the implementation of the ARH&D Policy among the Garissa Provincial General Hospital health care practitioners?
2) What needs to be done to scale up the implementation of the Adolescent Reproductive Health & Development policy in this hospital?
3) What are the characteristics of the youth friendly services at the Garissa Provincial General Hospital?
4) What is the satisfaction level of the adolescents clients/patients pertaining to the reproductive health services offered to them at the Garissa Provincial General Hospital?

1.5 Purpose of the research

This research was aimed at describing the implementation and adherence of the ARH&D policy at GPGH and thus providing documentary evidence.

1.6 Null Hypothesis

There is no adherence to the Adolescent Reproductive Health & Development policy among Health Care Practitioners at the Garissa Provincial General Hospital.

1.7 Conceptual Framework

1.7.1 Origin and Relevance of the Donabedian Conceptual Framework

This paper drew upon the framework of the Donabedian quality of care framework (Adopted from the Donabedian quality of care framework 1980, 1986, 1988 as cited by John Hopkins Bloomberg school of Public Health, 2006).

John Hopkins Bloomberg School of Public Health (JHBSPH) 2006) states that Donabedian was a pioneer in the health care quality. He defined the health care triad of structure, process and outcome.

1.7.2 Structure

JHBSPH (2006) states that structure, focuses on physical facilities and health giver qualifications. Later organisational behaviour and management of employees were included as part of organisational attributes and structure. Medcape (2007) indicates that leadership, human capital, group dynamics, information management systems are essential structural elements of quality improvement in a health care setting. They serve as primary catalysts of the process.

In this research structure refers to the attributes of settings where the adolescence health care is delivered at the GPGH in regards to implementation of the ARH&D policy, as is required in implementation of YFS. It looks at the physical facilities convenient of hours of treatment, convenient of hospital location, sufficient privacy/confidentiality, comfortable surroundings and availability of educational materials. The health care attributes facility including provider/Staff training, competency and attitudes, privacy and confidentiality, provision of information and education to the clientele. There is focus on the management attributes including affordability of services, youth involvement, inclusion of both boys and girls in service delivery, availability of wide range of services, referrals systems available, waiting time Policy implementation support and publicity of youth RH services at the GPGH.

1.7.3 Process

Medscape (2007) indicates that the process refers to whether or not good medical practices are followed. They are the tasks done to and for the patient by practitioners in the course of diagnosis and treatment (JHBSPH, 2006 and Nicholson 2008).

In this paper the process refers to whether or not standard medical practices are followed during diagnosis and treatment of adolescence RH needs. The process will be assessed through accessibility, affordability, availability and equitability of adolescent RH services at the GPGH.

1.7.4 Outcome

According to JHBSPH (2006) outcome refers to the impact of health status by the combination of structure and the process. They are conditional on both structure and process. Medscape (2008) indicates that the structure and process are measured in facility cleanliness, waiting time, staff attitudes. Outcome measures performance and continuous monitoring of performance keeps quality of care high. Nicholson states that continuous monitoring of performance result to reduction of morbidity and mortality, and improvement in the quality of life of the patients. He says that practitioner safety is a desired factor in this framework. Medcape (2007) states that system redesign helps correct deficiencies to improve quality of care and that only structure and process can be manipulated to modify health care.

In this study the quality of adolescent RH care outcomes was measured from customer satisfaction, client perception of high quality of RH care, client re-visits, good client/provider interpersonal services and service cost.

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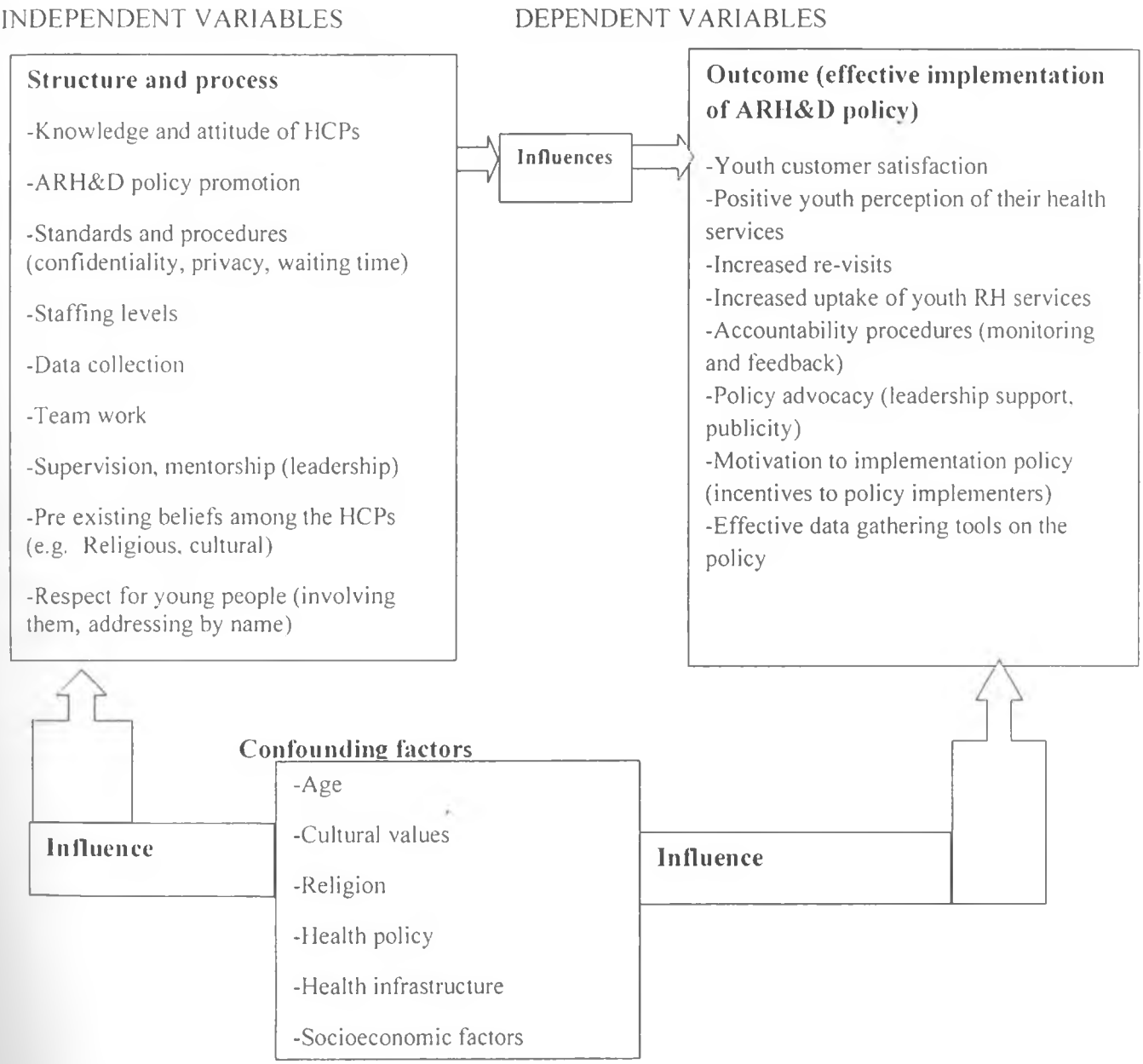
JHBSPH (2006) emphasizes that the Donabedian framework needs both monitoring and feedback to ensure quality of health care services.

Figure 1: Conceptual framework



Adopted and modified from the Donabedian quality of care framework (Donabedian 1980, 1986, 1988 as cited by John Hopkins Bloomberg school of Public Health, 2006).

1.8 Justification

Surveillance reports indicate a high population growth in NEP. This study results would be used to beep up family planning uptake in the area. Advocacy to reduce gender imbalance (inequity) would be stepped up.

Ways would be developed and applied to overcome/reduce any barriers to policy implementation. It would be leverage to the HCPs to adhere to the ARH&D policy. Availability, accessibility and affordability of RH services for young people will be promoted by utilizing the research results. Tailor made adolescent RH services and development endevours that are culture sensitive and socially acceptable will be increased including YFS, among others.

Communication skills and healthy relationships among the young people would be scaled up as simple methods of reducing HIV and AIDS.

The research findings would inform the ARH&D policy formulators, evaluators and implementers on where and how to create change if need be in any of these areas and serve as a source of evidence to accelerate attainment of the Millennium Development Goals (MDGs).

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

WHO (2008) estimates indicate that more than a half the world's population is below 25 years of age. About one third of them are between ages 10 and 24. About 83% of all adolescents live in developing counties with Africa holding the largest population of youth. It states that at 1.7 billion, today's generation of youth is the largest in history.

2.2 Changes during Adolescence

Behague et al (2006) behavioural studies, show that the adolescence period is a time of dynamic change physically, emotionally and socially. Adolescent behavioural choices are responsive to information on the relative risks of different varieties of a risky sexual activity (Dupas 2007). Behague et al (2006) states that good communication and other relationship skills can help ensure that adolescent relationships with peers, relatives, teachers and friends are satisfying and mutually respectful. The studies assert that young people need to learn how to manage new feelings about sexuality in order to make responsible decisions about their health, reproduction, and parenthood.

2.3 HIV and AIDS Infections among Adolescents

A study by Fischer et al indicates (2005) that among the many challenges young people face is the risk of HIV/AIDS. This evidence stated that in the world, youth account for an estimated half of the five million new HIV infections each year approximately 7,000 young people become infected every day, five every minute. In the USA teenage sex combined with drug and/or alcohol use is increasing. One quarter of sexual experiences in high school aged teens say they used alcohol and/or drugs the last time they had sex. The proportion had increased 18 percent from 22% in 1991 to 25% in 2003 (Washington, DC, 2005). In sub-Saharan Africa, adolescents account for almost one quarter of people living with HIV and several studies have reported high rates of sexually transmitted infections (STI), pregnancy, and their complications (WHO, 2008). The Kenya Division of Reproductive Health revealed that about 43% of all Kenyans are below 15 years (Kenya Division of Reproductive Health (DRH), 2005).

Evidence indicates that in Kenya, a half of all new HIV infections occur among adolescents and young adults aged 15-24 years. Girls are 2-3 times as likely to be infected as boys the same age (Ndirangu, 2007).

2.4 Positive effects of Counselling and Communication during Adolescence

Mbugua (2007) in his research findings indicates that most educated mothers in urban Kenya experience socio-cultural and religious inhibitions which hinder them from providing meaningful sex-education to their pre-adolescent and adolescent daughters. In another research finding in Kenya, menstruation being sexual reproductive health issue which starts at adolescent is surrounded many myths that women have been forced to keep it a secret, leading to suffering, especially for the young adolescent girls that are often confused about their body changes (Musomi 2007). Behavioural study evidence reveals that healthy communication between youth mentors and the young people are able to delay sexual debut. It promotes sexual and reproductive health by addressing gender, reproductive health, preventive behaviours, sexually transmitted infections, HIV and AIDS, abstinence, gender violence, decision making, communication, and other important life issues (Behague, 2006).

2.5 The need to include Married Adolescent Girls in Reproductive Health

In sub-Saharan Africa HIV infection is higher among sexually active adolescent girls than boys. A research in Kenya showed that married adolescent girls are a neglected population in need of RH support. In settings such as Nyanza Province, Kenya, rates of HIV infection are extremely high, and evidence increasingly indicates that married adolescent girls are more likely to be infected with HIV, compared with their unmarried counterparts who are sexually active (Arurkar & Ayuka, 2007).

2.6 The Role of Sexual Abstinence in Prevention of HIV and AIDS

In a Kenya based study Chiao and Mishra (2007) demonstrated that promoting sexual abstinence among never-married youth is an important component of HIV and AIDS prevention campaigns for youth. In that survey the abstinence level for those who received prevention education on abstinence was higher than among those who had not.

2.7 The Role of Sexual Genital Mutilation in HIV and AIDS Infections

Several studies indicate that FGM and HIV/AIDS continue to be more prevalent in sub-Saharan Africa (Bwana et al, 2000, Yount & Abraham 2007, Sheikh, 2008). Circumcised adolescents virgins in Kenya, Lesotho and Tanzania were reported to be infected with HIV. In a study done in Transmara, Kenya FGM prevalence rate was at 74%. About 94% circumcisions were done at home. (Bwana et al 2000). The Somali community practice infibulations, the most severe kind of FGM/C. The external genitalia is severed totally and the remaining tissue is stitched or glued together with a natural substance. A small opening is left for passage of urine and menstrual flow (Sheikh, 2008). FGM has serious health effects on education, health and social life of the girl child (Bwana et al 2000). In addition there is the potential for HIV transmission through unhygienic circumcision procedures. Circumcised male and female virgins are substantially more likely to be HIV infected than uncircumcised virgins (Brewer et al 2007).

2.8 There is Increased Liberal Sexual Attitudes among the Youth Today

Reinders et al (2007) states that there are liberal attitudes globally, on youth culture and youth sexuality. Failure to acknowledge young people's sexuality rights and failure to provide them with information leads to unprepared experimenting with sexuality. Young people are therefore increasingly affected with sexual health problems like teenage pregnancy, early motherhood, unsafe abortions, STIs including HIV, sexual harassment and abuse fuelled by gender inequality, exclusion for being HIV positive and discrimination based on sexual orientation. Sexuality education is needed to prevent these problems, and guide young people in a healthy sexual development (Reinders et al, 2007).

2.9 The need to Protect Orphaned Adolescents from HIV Infection

Surveillance studies have reported that about 55% of orphans worldwide are adolescents (Ngari, 2008). In Kenya, the majority of HIV-infected adolescent orphans are females. Protective life situations and keeping female adolescent orphans in school or in vocational training have been recommended as effective HIV prevention strategies (Nyambedha, 2007).

2.10 The Role of Sexual Debut in HIV Infection

A Kenyan based research by Ikamari and Towett (2007) indicates the onset of sexual activity as being early with engagement in unsafe sex. Despite engaging in unsafe sex practices, the

majority of the adolescents did not view themselves as being at the risk of contracting HIV/AIDS (Ikamari and Towett 2007) or getting pregnant.

2.11 Coerced Sex among Adolescents

Ngari 2008 in her study asserts that for sexually experienced girls, almost 40% were coerced at first intercourse, including those in romantic relationships and that 10% of boys reported being coerced. The study highlights the issues of coerced sex and gender violence. In another study forced first time sex was reported by 16% of girls and 4% of boys. The sexual experiences of boys were examined in more detail - 21% reported ever having persuaded or forced a girl to have sex and I 7% reported ever having themselves been persuaded or forced, with 10% reporting both experiences. Boys who held traditional gender role attitudes and who were out of school were likely to coerce a girl to engage in sex than other sex (Reynolds and Kimani, 2006).

2.12 An Integrated Approach to Implement Adolescent Reproductive Services

The Ministry of Health document on YFS (2005) indicated that sexually active young people need a variety of reproductive health (RH) and HIV services, including contraception, HIV counseling and testing, testing and treatment for other sexually transmitted infections (STIs), pre- and postnatal care, and post abortion care. This means that there is need to refer clients between contraceptive and HIV/STI services. An integrated approach can make a variety of services available during the same hours, at the same facility, or from the same health care provider (MOH-YFS 2005).

2.13 Minimum Conditions of Youth Friendly Services

To ensure comprehensive youth and integrated services the ARH&D policy has introduced youth friendly services (NCAPDPRB 2000, Senderowitz et al, 2003, Erulkar et al, 2005). The minimum conditions include affordability and accessibility, privacy and confidentiality, provider competence/ attitude, quality and consistency, reliability and sustainability, inbuilt monitoring and evaluation system, safe and basic range of services (MOH-YFS 2005). Similar characteristics have been shown to be effective among HIV positive youths in a Comprehensive Care Clinic (CCC) (Ndirangu, 2007).

2.14 Unmet Adolescent Reproductive Health needs Despite ARH&D and YFS

EDC (2009) study indicated that despite the introduction of the ARH&D policy and YFS, women in Kenya have an unmet FP needs. Young women aged 20-24 years have the highest fertility rate and higher unmet FP need of about 30% (NCPD, 2011) yet health services are under utilised in the country. Studies among nurse-midwives in Kenya and Zambia indicate that they disapproved of adolescent sexual activities including masturbation, contraceptive use and abortion and displayed pragmatic attitudes. Those who had been trained in youth friendly services were more positive (Warenius et al, 2006).

2.15 Definition of Policy

A policy is a guideline that has been formalized by administrative authority and guides and directs action towards an identified purpose (Popper, 2005). Policies reflect values that the stakeholders work for, standards and procedures, upheld, choices made, in congruence with the vision, mission, objectives and core values in organisations and countries (Jones, 2007).

2.16 Definition of Health Policy

WHO (2011) states that health policy refers to decisions, plans, and actions that are undertaken to achieve specific health care goals within a society. A policy defines a vision, establishes targets and points of reference, priorities and the expected roles of different groups, builds consensus and is a source of information. Health policies govern access to care, allocation of resources, and standards of care and help organizations run smoothly and protect both health-care providers and patients (Jones, 2007).

2.17 Defining the ARH&D Policy

The ARH&D policy is a written document with directives and actions to follow to meet identified goals to meet the reproductive health needs of the youth (MOH-YFS 2005). It spells out the actions and resources, standards and procedures required to implement RH and development activities to the youth. It gives direction to the necessity of YFS declaring the provider characteristics, health facility characteristics, programme design characteristics (Senderowitz et al, 2003).

2.18 Policy Implementation in Kenya

Clichton (2008) states that in Kenya policies relating to population. family planning and reproductive health often receive weak or fluctuating levels of commitment leading low policy implementation. Grassroots health care workers and youth advocates can improve adolescent health and well-being. They can encourage key decision-makers to take actions to fuel implementation of ARH&D policy directives (Mutunga 2006) through advocacy and lobbying for support.

2.19 Defining Policy Implementation

Policy implementation is the step of ensuring that decisions are translated into actions (USAID 2005-2010). Mutunga (2006) states that policy implementation includes interpretation of the policy, determination and mobilization of required resources, programming and sequencing implementation activities, policy implementation, assessment of deviation from policy objectives and plan, and provision of continuous feedback to interested parties. Implementation is concerned with process, the procedures, structures, habits, and behaviour which characterize implementation activities (Clichton, 2008).

Scaling up implementation of the ARH&D policy will result in low adolescent deaths (NCAPD, 2011), safe sex (MOH-YFS, 2005), reduce FGM, promote gender equality (Sheikh, 2007), reduce illegal abortions and improve post abortion care, reduce maternal/neonatal mortality and morbidity, increase family stability, improve economic status, reduce malnutrition, promote human rights, delay first sexual debut, reduce mental break down, alcohol and drug addiction (Ngari, 2008), pursue the MDGs course, among others (MOH-YFS, 2005).

2.20 Practical Problems that Hinder Implementation of Public Policy

These may include Lack of participation of the policy implementers during policy formulation (USAID 2009), lack of effective co-ordination, Inadequate organizational structures for policy implementation, ineffective-administration at operational level, lack of motivated implementers (USAID 2005-2010) poor reporting, feedback and evaluation systems.

2.21 Possible Solutions to Facilitate Implementation of Policy

To promote policy implementation there may be need to introduce result oriented management, increase the capacity of administrative system for policy implementation (Jones, 2008), decentralize of policy-making units to the people on the ground where policy implementation

takes place (USAID, 2010), creation of special policy analysis and monitoring units, establishment of data banks and, institutionalization of policy analysis and evaluation as part and parcel of the policy implementation system (Popper, 2005).

CHAPTER THREE: MATERIALS AND METHODS

3.1 Study design

This study was a cross sectional study employing both qualitative and quantitative approaches undertaken for 3-4 months between March and June 2012. The study tools included a semi structured questionnaire for the HCPs (appendix 11), a semi structured key informant interview (appendix V), an observation check list (1V) and a semi structured client exit questionnaire (appendix 111) to collect the data. A detailed description of each study instrument is provided in section 3.8.

3.2 Study area

The study was done in GPGH in NEP. The hospital has a paediatric emergency unit, children's ward, male and female medical wards, male and female surgical wards, gynaecological services, maternal and newborn health services, operating room services, family planning services, pharmacy department, radiology department, laboratory services, health management and information services, outpatient department, among others.

During the study period the average bed occupancy at GPGH which has an in-patient capacity of 248 was 90%. The distribution of inpatient capacity by department is, 54 paediatric beds, 67 surgical beds, 42 for obstetrics and gynaecology beds and 85 medical department.

The out patient department (OPD) is organised in special clinics, dental, pharmacy, accident and emergency and paediatric clinic. The OPD serves an average of 243 patients per day. It is the main referral hospital in North Eastern Province and neighbours districts of Isiolo and Mwingi in Eastern Province and Tana River district in Coast Province. It is also a main referral facility for parts of the republic of Somalia.

North Eastern Province (NEP) is one of the eight (8) provinces in Kenya. It borders Ethiopia to the North, Somalia to the East, Coast province to the south and Eastern province to the west. It has a population of **2,345,000(70% are nomads)** that is dispersed in a vast region within an area of 126,000km^2. This constitutes about 20% of the total land in Kenya. It comprises of three (3) counties- Garissa, Wajir and Mandera. Garissa County has three constituencies namely Dujis Constituency, Fafi Constituency and Lagdera Constituency .

The GPGH is located about 200 metres by the Garissa-Mandera highway. The main road is in fairly good condition and passable. VCT and CCC services are combined under one roof in the first building to the left near the mausoleum. There are records, counseling services, laboratory services, pharmacy services, toilet facilities, a television at the reception. The ANC and post natal services are located to the right side of the hospital two buildings away from the hospital entrance. There are records services, ANC services, post natal services, MCH services, FP services, cervical cancer screening and testing services, pretest and post test counseling. The delivery services are offered in the labour ward.

The adolescent population at Garissa is treated with the rest of the patient in GPGH. The facility is fairly clean.

The government is the main health care provider in the province (99%) with private facilities limited to major urban centres (Source: PMO's Office, 2010). The map of Garissa and photograph of the hospital have been attached in the appendices section (figure 2 and 3).

3.3 Study population

The study population comprise of all qualified Health Care Provider including the qualified nurses, RCOs and doctors attending to reproductive health needs of youth. A total of 119 HCPs were interviewed. The youth population comprised adolescents aged 10-24 years who were treated at the GPGH during the study period (March-June 2012). A total of 53 adolescents responded.

3.4 Inclusion criteria

- All qualified HCPs (nurses, RCOs, doctors) in the study units were eligible.
- Those qualified HCPs (nurses, RCOs and doctors) on duty during the data collection period were included.
- All those HCPs (nurses, RCOs and doctors) who consented participated voluntarily.
- All consenting adolescents above 18 years of age participated.
- All adolescents below 18years who assented to participate and had a parent or guardian willing to sign for them the participant's consent participated.

3.5 Exclusion criteria

- All HCPs (nurses, RCOs, doctors) who did not consent to participate in the study were excluded.
- All HCP trainees were excluded other those seeking ARH services.
- All qualified personnel who were not nurses, RCOs or doctors working in the hospital were excluded.
- All adolescents refusing assent to participate were excluded.
- All adolescents below 18 years of age who did not have a parent or guardian to sign the participant's consent for them were excluded.

Additional information was obtained through voluntarily consenting key informants composed of the head of the Maternity/Child Health (MCH) services, the head of the family planning services, the head and deputy of the Voluntary and Counselling and Testing (VCT)/ Comprehensive Care Clinic (CCC) , the acting in charge labour ward, the acting hospital nurse in charge and the hospital deputy in-charge and the pharmacist serving the Voluntary and Counselling and Testing (VCT)/ Comprehensive Care Clinic (CCC) pharmacy.

3.6 Sample size determination

The sample size was determined using the Fishers formula formula for determination of sample size (Fisher et al 1999 as cited by Mugenda and Mugenda 2003):

$$n = \frac{z^2 pq}{d^2}$$

where n = desired sample size (if the target population is over 10,000)

z = the standard normal deviate at 95% confidence interval (= 1.96).

p = the proportion of doctors, nurses, and RCOs in the target population estimated to be utilizing the ARH&D policy.

q =1-p

d= level of precision around estimated prevalence of ARH&D policy utilisation (set at ± 5% or 0.05).

Substituting the above formula with figures:

$$n = \frac{(1.96 \times 1.96) \times (0.5 \times 0.5)}{0.05 \times 0.05} = 384.16$$

Since the target population is less than 10.000 the sample size was adjusted using the following formula:

$$Nf = \frac{n}{1+(n/N)}$$

Where Nf is the desired sample size when the target population is less than 10,000.

n= the desired sample size when the target population is less than 10,000.

N is the estimate of the population size which as per the above calculation is 384.

Hence $Nf = \frac{384}{1+(384/172)}$

$= \frac{384}{1+2.23256}$

$= \frac{384}{3.23256} = 118.7913$

= **119 qualified health care workers**

= In addition a total of **53 adolescents** were purposively sampled due to lack of previous background information on those adolescents previously treated at GPGH.

= **7 key informants** composed of in-charges/acting in-charges of areas that offer ARH services.

Table 1: Proportionate Sample Sizes of the HCPs

Cadre	Number	Proportions	Proportionate Sample size
Nurses	127	127/172x100=**73.837%**	73.837%x119=87.866=**88 nurses**
Doctors	20	20/172x100=**11.628%**	11.628%x119=13.8373=**14 doctors**
Clinical officer	25	25/172x100=**14.535%**	14.535%x119=17.29665=**17 clinical officers**
Total	**172**	**100%**	**119**

Therefore the total of 119 Health Care Providers comprised of 88 nurses, 14 doctors 14 and 17 clinical officers.

3.7 Sampling method

A hospital list of the target population was obtained from GPGH management. Every second eligible HCP participated for simple random sampling purposes. If the second HCP declined the next HCP willing respondent in the workers list was interviewed. The study was explained to eligible HCPs. Willing HCPs were asked to give a written consent after their questions were answered. A self administered questionnaire (appendix II) was given to each participant HCP to fill. Data were collected during periods when interference with normal nursing services was expected to be minimal. Additional information was obtained through key informant interviews and a check list for YFS. An exit self administered semi structure questionnaire for the clientele, assisted by the researcher, where indicated, was used to collect research data. The youth sample size was obtained conveniently because there were no data to show how many youth were treated at GPGH. At least thirty were targeted.

3.8 Study instruments

Four tools were administered during the study. They included a semi structured questionnaire, (appendix II) for HCPs, an observation check list (appendix 1V) to assess YFS characteristics, a key informant interview guide (appendix V) for ARH service managers and a client exit semi

structured client exit interview (appendix III) for the youth. They were adopted and modified from three different tools namely:

-A rapid youth friendly assessment tool by Senderowitz et al 2003,

-The MOH-YFS document assessing characteristics of youth friendly services

-Best practices for family planning clinics (Burlew & Philliber 2006, Kirby 2007, Alford 2008 & Alford 2009) and allows one to assess whether best practices are in place in the family planning clinic with respect to confidentiality, respectful treatment, screening and counseling, integrated services, cultural competency, accessible and affordable care, reproductive and sexual health care, staff development, services for young men, (advocates for youth, 2011) among others.

Other information collected from the HCPs included their demographic data, knowledge and attitude towards ARH&D policy, the factors that influence their implementation of the ARH&D policy in GPGH, the management systems in GPGH in regards to policy implementation. The exit questionnaire assessed the satisfaction level of the adolescent clients-what they liked/disliked about the clinic, the waiting time, convenient hours to be seen, information given, confidentiality and privacy, involvement in own care, staff attitude towards them.

3.9 Recruitment and training

Three research assistants were trained on interviewing the adolescents. Three sessions lasting at least a half an hour were conducted. A random sampling method was used to recruit consenting HCPs (qualified nurses, RCOs, and doctors). Those recruited were given the structured questionnaire to fill after consent had been obtained. The adolescents were assisted through the questionnaire interview by the researcher and the trained research assistants. The threat posed by language barrier was overcome by using local research assistants conversant with the local language. These assistants interpreted responses from participants who could not communicate in English or Kiswahili.

3.10 Data collection procedures

After permission had been obtained from the KNH/ERC, The ministry of education and the GPGH administration, the second'consenting person from the comprehensive hospital workers' list was eligible to fill HCPs questionnaire. The eligible person was to have the study explained to them thoroughly. Any questions or concerns related to the study procedures were answered. Eligible participants were then requested to give an informed written consent. Those who

accepted to participate were asked to fill the questionnaire. Assistance was given where required. (The consent form was available in both English and Kiswahili).

The sample recruitment targeted 88 nurses, 14 doctors and 17 clinical officers (yielding a total sample of 119 health care providers).

Adolescents who were 18 years and above old voluntarily gave a consent and filled the exit questionnaire themselves/ or with assistance where indicated. The respondents' assent for those less than 18 years of age was given by any available parent/guardian, and the youth was then asked to fill the questionnaire him/herself or assisted. There were no records available on how many adolescents had previously been treated at GPGH and therefore a minimum sample size of 30 youths was targeted through purposive sampling and a total of 53 respondents were obtained.

Additional information was obtained through voluntarily consenting key informants composed of the head of the Maternity/Child Health (MCH) services, the head of the family planning services, the head and deputy of the Voluntary and Counselling and Testing (VCT)/ Comprehensive Care Clinic (CCC) , the acting in charge labour ward, the acting hospital nurse in charge and the hospital deputy in-charge and the pharmacist serving the Voluntary and Counselling and Testing (VCT)/ Comprehensive Care Clinic (CCC) pharmacy. Guided discussions were held. They were tape recorded and short notes were taken by the researcher.

The check list used to assess characteristics of the YFS was done by the researcher as observations of these sought characteristics were made.

3.11 Pretesting of the questionnaire

Ten HCPs' questionnaires were pretested among equivalent HCPs (nurses, RCOs, doctors) at Kitui District General Hospital (Eastern Province) for reliability and validity. The key informant interview guide was conducted on heads and acting heads of units as enforcers of health policy. The adolescent exit questionnaires were pretested on ten adolescents at Kitui General Hospital. For pretesting the checklist, a single check list was completed on aspects of YFS at Kitui hospital. The reasons for pre-testing the study instruments at the Kitui General Hospital included, but were not limited to, the following similarities:

- Both institutions are government owned and majorly funded by the government and thus both have similar supplies for RH needs of the youth.

- Both are in semi arid areas with a vast land area being served by a scarce road network and transport system. Climatic and weather conditions play a role in the economic status of a place and the disease distribution to some extend (Nyambati, 2010) including the reproductive needs of the youth.

- In the poverty analysis report Garissa and Kitui are among the rural poor districts (Mukui, 2005). The economic state of a place tends to determine the disease pattern of the area and whether the clients can or cannot afford the health services they need.

- Both counties have suffered settlement conflicts due to scarce resources; Garissa within and without the town between the different pastorists tribes (EDC, 2009) and Kitui within the Kitui-Tana river district boarders between herdsmen and farmers settling in the area from neighbouring district of Tana river. The conflicts are mainly resolved through local leaders in both counties (Musyoka, 2007; EDC, 2008). The peace status of an area has an influence on the drive for health, economic status among others including YFS.

3.11 Data Analysis

The questionnaires were checked for completeness. Once data had been collected, cleaning and entry was done. Double entries of data was done, coding and counterchecking for accuracy done. Transcription of recorded KII was done.

Quantitative data analysis was then conducted out using the SPSS (statistical package of social scientists) computer programme. Qualitative data analysis was done using computer assisted qualitative data analysis system (CAQDAS). The quantitative data analysis was done in two stages. Firsts a descriptive analysis, of all the variables in the dataset was conducted using measures of centrality-mean, median and mode -and measures of variability-range, standard deviation for continuous variables. Categorical variables were described using frequency tables and graphs. In the second stage, inferential analysis was conducted using chi square tests to compare percentages and explore association between ARH&D policy utilization and HCP characteristics. A cut-off P value of 0.05 was used to determine statistical significance.

3.12 Ethical consideration

Permission to undertake this study was obtained from Kenyatta National Hospital/Ethics Research Committee (KNH/ERC- appendix VIII), the GPGH administration (appendix IX), as well as the Ministry of higher education (appendix X), Kitui District General Hospital administration-pretesting area (appendix X1). Participation was voluntary. Eligible participants selected for inclusion signed a written consent (appendix 1A, appendix 1B, appendix XIIA, or appendix XIIB). Confidentiality, privacy, anonymity, justice were assured in handling all information obtained during the study. No incentives were given to study participants.

3.14 Study assumptions

- That the respondents would give honest comprehensive answers. The respondents were be requested to give honest meaningful answers to overcome ambiguity and dishonesty
- That the target population would be interested. Benefits of the study were explained aiming at persuading probable respondents without coercion.
- That there would be no bias in the responses on personal opinion issues. Probable biased responses were overcome by requesting respondents to give honest answers likely to make health care better.

CHAPTER FOUR

4.0 RESEARCH RESULTS

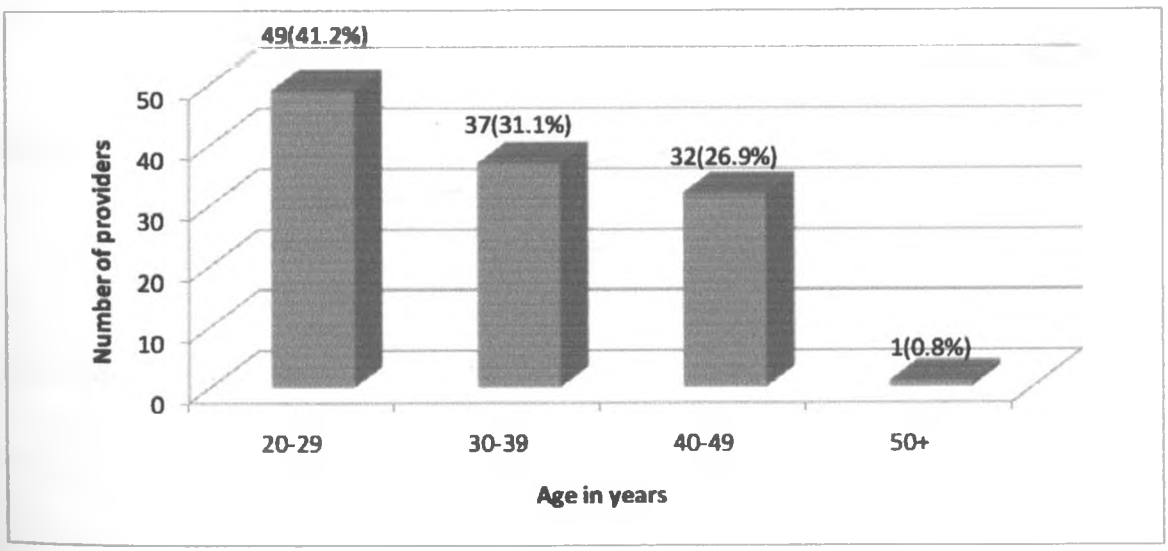
A total of 119 health care providers engaging in provision of reproductive health services at GPGH and 53 youths attending GPGH were recruited for the study. The characteristics of the health care providers and their responses to interview questions are presented below. The responses and characteristics of the health services are presented in the final section of this chapter.

4.1.0 CHARACTERISTICS OF HEALTH CARE PROVIDERS

4.1.1 Age

The mean age of the healthcare providers was 33.1 years (SD 7.6), range 22 to 52 years. The most common age among the HCPs was aged 20-29 years with 49 (41.2%) out of the 119 healthcare providers in this age group (Figure 2). There was only one (0.8%) respondents aged 50 years and above. Figure 2 presents the age distribution of participating Health Care Providers.

Figure 2: Age distribution of participating Health Care Practitioners



4.1.2 Gender

As shown in table 2, 72 (60.5%) of the Health Care Providers were female. Male Health Care Providers were older (mean = 34.9 years [SD = 8.6]) than the female (mean = 31.9 years [SD = 6.7]) providers (t-statistic = 2.13; p value = 0.035).

4.1.3 Profession

Among the three cadres of healthcare providers recruited in this study nurses constituted the majority (n=88, 73.95%). There were 14 (11.76%) doctors and 17 (14.29%) clinical officers in the study (table 2).

4.1.4 Religion

Table 2 shows the religious affiliation of the HCPs. Christianity was the most commonly professed religion with 88 (73.95%) representation while 28 (23.53%) reported they were Muslims.

Table 2: Characteristics of the HCPs Recruited in the Study

	n = 119	Percent
Gender		
Male	47	39.5
Female	72	60.5
Profession		
Doctor	14	11.76
Nurse	88	73.95
Clinical officer	17	14.29
Religion		
Christian	88	73.95
Muslim	28	23.53
Other	3	2.52
Academic qualification		
Certificate	24	20.17
Diploma	76	63.87
Bachelors degree	16	13.45
Masters degree	3	2.52
Total	**119**	**100**

4.1.5 Duration of service

The HCPs had served for a median duration 6 years (Interquantile range (IRQ) 2 to 13) (The IQR represents the boundary between 25% (1st quartile) and 75% (3rd quartile) of a variable). The comparison of median length of service presented in table 3 below shows that there were statistically significant differences in the length of service among HCPs in the different professions (Kruskal Wallis (chi squared = 9.75; p = 0.0077). The nurses had served for the longest median duration (7 years), clinical officers (median = 3 years) and doctors 2 years.

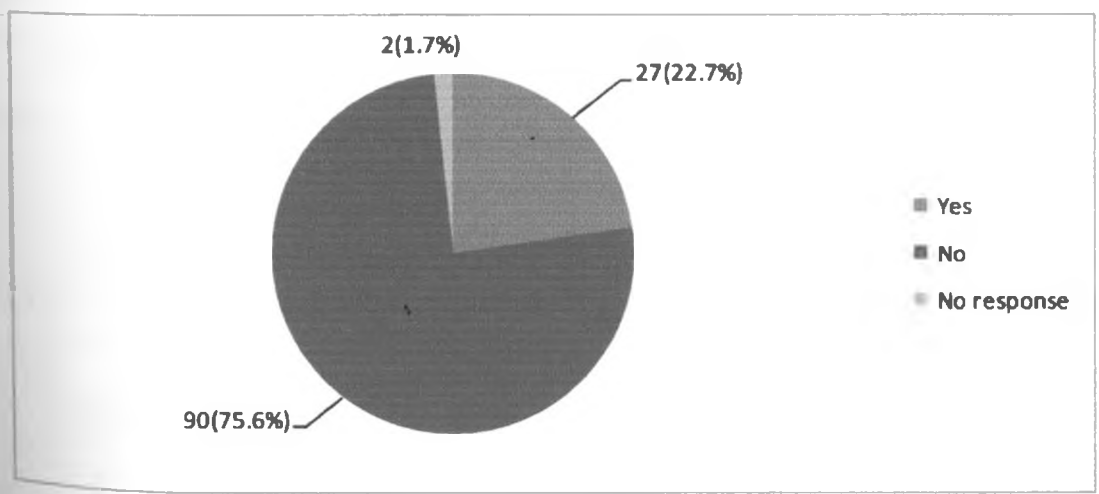
Table 3: Median Duration of Service among HCPs

	Duration of service (in years)			P value
Profession	Median	25th percentile	75th percentile	(Kruskal wallis test)
Doctor	2	1	10	0.0077
Nurse	7	2.5	14.5	
Clinical Officer	3	1	4	
Total	**6**	**2**	**13**	

4.1.6 Reading of the ARH&D Policy by the HCPs

Most (n = 90, 75.6%) of the HCPs at GPGH had not read the ARH&D policy (figure 3). There were no significant differences among the three cadres of HCPs with regard to reading of the ARH&D policy (Fisher's exact p = 0.7). Eighteen (20.5%) nurses, 5 (35.7%) doctors and 4 (25.5%) clinical officers had read the policies.

Figure 3: Number of Health Care Providers who had read/not Read the ARH&D Policy



4.1.7 Training of HCPs on ARH&D

Sixteen (13.45%) healthcare providers reported having been trained in ARH&D (Table 4). Conversely, 24 (20.17%) of the healthcare providers including 10 ARH trained HCPs indicated that they had attended at least one CME on ARH&D. Out of the 119 providers, 82 (68.91%) reported that they had heard of youth friendly services.

Table 4: ARH&D Training, CME Attendance at GPGH by the HCPs

	n = 119	Percentage
Trained in ARH&D		
Yes	16	13.45
No	102	85.71
No response	1	0.84
Attended ARH&D CME		
Yes	24	20.17
No	95	79.83
Ever heard of youth friendly services		
Yes	82	68.91
No	33	27.73
No response	4	3.36

There was no significant association between receiving ARH&D training and the profession of a health care provider (p = 0.363).

Table 5 shows that two (14.3%) doctors, 10 (11.5%) nurses and 4 (23.5%) clinical officers had been trained in ARH&D.

Table 5: ARH&D Training and the Profession of the HCPs

	Trained in ARH&D		
	Yes	No	Fisher's exact P value
Doctors	2(14.3)	12(85.7)	0.363
Nurses	10(11.5)	77(88.5)	
Clinical officers	4(23.5)	13(76.5)	

Table 6 shows that the healthcare providers who had ARH&D training had a significantly shorter median duration of service (median = 2 years) compared to those who did not have training (median = 6.5 years; Mann-Whitney p = 0.0172).

Table 6: ARH&D Training and Duration of Service

	N	Median	Interquartile range		P value
Trained in ARH&D					
Yes	16	2	1	6	0.0172
No	102	6.5	2	14	
Total	**118**	**6**	**2**	**13**	

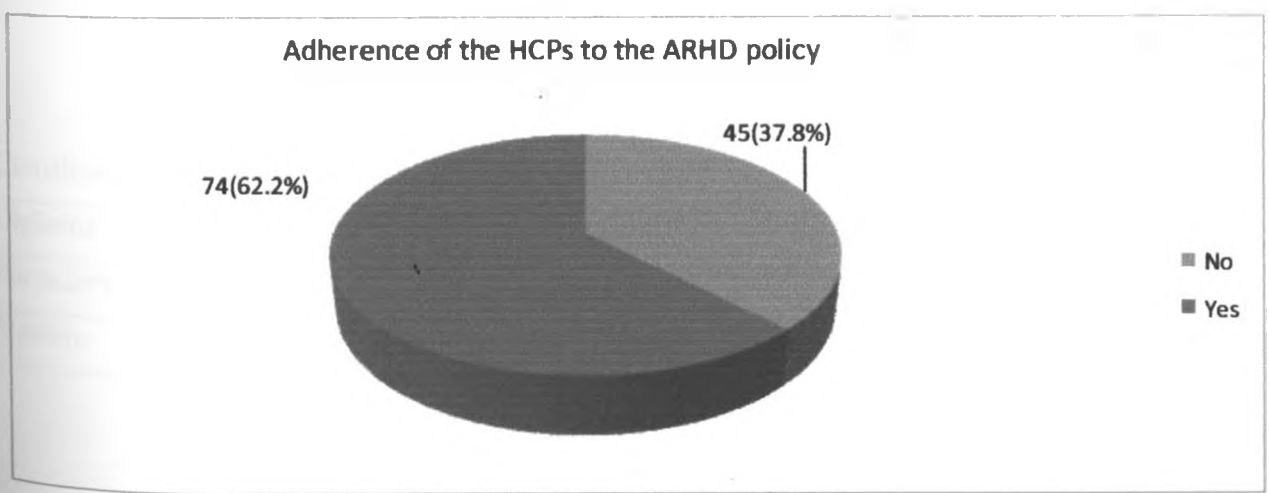
4.2.0 HCP ADHERENCETO THE ARH&D POLICY

HCP responses on the implementation of the 12 components presented in table 7 below were used to define ARH&D adherence. Those who implemented at least 80% (9 out of the 12 components) were considered to be adhering to the ARH&D policy. As shown in figure 4 below on the basis of this definition 74(62.2%) HCPs were utilizing ARH&D policy.

Table 7: HCPS' Responses used to define ARH&D Utilisation

ARH&D component	No. of HCPs	Percentage
Discuss sexuality	106	89.08
Discuss HIV and AIDS	114	95.80
Discuss family planning	110	92.44
Provide FP methods to married clients	108	90.76
Provide FP methods to unmarried clients	81	68.07
Provide artificial FP methods to unmarried youth and school age adolescents	36	30.25
Support masturbation	7	5.88
Support female circumcision ban	108	90.76
Support traditional male circumcision ban	62	52.10
Fight gender violence	112	94.12
Professional post abortion care for unmarried clients	87	73.11
Separate place for adolescent reproductive health services	99	83.19

Figure 4: Adherence of the HCPs to the ARH&D policy at GPGH



4.2.1 Factors influencing ARD&H Adherence

The provider factors influencing adherence to ARH&D policy were identified using the chi square and Fisher's exact test for comparing proportions and are shown in table 8.

Table 8: Provider Factors Influencing Adherence to the ARH&D Policy

	ARH&D utilization			
	Yes	No	Chi square	P value
Gender				
Male	31(66.0)	16(34.0)	0.47	0.49
Female	43(59.7)	29(40.3)		
Adequate staffing				
Yes	8(53.3)	7(46.7)	3.64	0.16
No	55(67.9)	26(32.1)		
Don't know	11(47.8)	12(52.2)		
Provider has read ARH&D policy				
Yes	20(74.1)	7(25.9)	-	0.29*
No	53(58.9)	37(41.1)		
Academic qualification				
Certificate	15(62.5)	9(37.5)	-	0.086
Diploma	44(57.9)	32(42.1)		
Bachelors	14(87.5)	2(12.5)		
Masters	1(33.3)	2(66.7)		

4.2.2 HCP Age and Adherence to the ARH&D Policy

The age of HCPs was significantly associated with adherence to the ARH&D policy (p=0.005). Rates of adherence to the ARHD policy was lowest among HCPs aged 30-39 years, 15(40.5%) followed by 40-49 years, 21(65.6%). Highest adherence was among the youngest age group, 37(75.5%) as shown in table 9 below.

Table 10: HCP Age and Adherence to the ARH&D Policy

Age in years	Adhered	Did not adhere	
20-29 years	37(75.5)	12(24.5)	0.005*
30-39 years	15(40.5)	22(59.5)	
40-49 years	21(65.6)	11(34.4)	
50 years+	1(100)	0	

4.2.3 HCP Religion and ARH&D Policy Adherence

Religious affiliation of HCPs showed a statistically significant association with ARH&D adherence (Fishers exact p = 0.006). Adherence to the ARH&D policy was higher among HCPs who were Christians, 61 (69.3%) compared to the HCPs who were be Muslims, 13 (46.4%).

Table 11: HCP Religious Affiliation and ARH&D Policy Adherence

Religion	Adhered	Did not adhere	
Christian	61(69.3)	27(30.7)	0.006*
Muslim	13(46.4)	15(53.6)	
Other	0(0.0)	3(100.0)	

4.2.4 Supervision of HCPs and Adherence to the ARH&D Policy

Frequent supervision of HCP was significantly associated with ARH&D policy adherence as shown in the table 11 below (p = 0.047). Thirty-five (72.9%) HCPs reporting frequent supervision also reported adhering to the ARH&D policy compared to 39(54.9%) of the HCPs who were not supervised regularly who also reported adhering to the ARH&D policy.

Table 12: Frequency of Supervision of HCPs

Frequent supervision	Adhered	Did not adhere	Chi	P value
Yes	35(72.9)	13(27.1)	3.94	0.047
No	39(54.9)	32(45.1)		

4.2.5 HCP Profession and Adherence to the ARH&D Policy

Table 12 below indicates that profession (p=0.61), was not significantly associated with adherence to the ARH&D policy.

Table 13: HCP Profession and Adherence to the ARH&D Policy

	Adhered	Did not adhere	
Profession			
Doctor	10(71.4)	4(28.6)	0.61*
Nurse	55(62.5)	33(37.5)	
Clinical officer	9(52.9)	8(47.1)	

4.2.6 HCP Training and Adherence to the ARH&D Policy

As shown in the table 13 below, adherence rate to the ARH&D policy among the HCP with relevant training was 10(62.5%) compared to 63(61.8%) among the non-trained HCP. HCP adherence to the policy was therefore not significantly associated with training (p = 0.96).

Table 14: HCP Training and adherence to the ARH&D Policy

	Adhered	Did not adhere	Chi	P value
Trained in ARH&D				
Yes	10(62.5)	6(37.5)	0.003	0.96
No	63(61.8)	39(38.2)		

4.2.7 Other HCP Characteristics and Adherence to the ARH&D Policy

Among the 16 healthcare providers holding a Bachelors degree shown in Table 2, 5 (31.25%) were nurses and 11 (68.57%) were doctors. All the three HCPs with postgraduate Masters Degrees were doctors. All the 17 clinical officers had diploma qualifications while nurses (n=59) commonly held a diploma and the remaining 24 nurses were certificate holders. The remaining provider characteristics including gender (p =0.49), profession (p=0.61), staffing levels (p=0.16), having read the policy (p=0.29) and academic qualification (p=0.086) were not significantly associated with adherence to the ARH&D policy.

4.3.0 CHARACTERISTICS OF THE ADOLESCENT HEALTH SERVICES

4.3.1 Variety of Services Available and Implemented

Table 14 shows HCPs adherence to the components of ARH. Out of the 12 components evaluated HCPs reported least implementation of two components: talking to clients about masturbation and providing artificial FP methods to unmarried youth and school age adolescents. Only 7 (5.88%) and 36 (30.25%) HCPs were willing to promote these components of ARH. Conversely, over 90% of HCPs reported that they discuss HIV and AIDS (95.8%, family planning (92.44%). They provide FP to married clients (90.76%), support the ban on female circumcision (90.76%) and the fight against gender violence (94.12%).

Table 15: Variety of Adolescent Health Services available and their Implementation

	Number	Percentage
ARH&D component		
Discuss sexuality	106	89.08
Discuss HIV and AIDS	114	95.80
Discuss family planning	110	92.44
Provide FP methods to married clients	108	90.76
Provide FP methods to unmarried clients	81	68.07
Provide artificial FP methods to unmarried youth and school age adolescents	36	30.25
Support masturbation	7	5.88
Support female circumcision ban	108	90.76
Support traditional male circumcision ban	62	52.10
Fight gender violence	112	94.12
Professional post abortion care for unmarried clients	87	73.11
Separate place for adolescent reproductive health services	99	83.19

4.3.2 Team Work among the HCPs

Most (n = 102, 85.71%) HCPs reported that they worked with cooperative team members including their supervisors and 81 (680.7%) reported in staffing shortages which affected provision of ARH services.

4.3.3 Maximum Time of Interaction between Clients and HCPs

Table 15 shows the maximum amount of time that the HPCs at GPGH spent with their adolescent client. Out of the 119 respondents, 52 (43.7%) spent at most 20 minutes with each client and 42 (35.29%) spent a maximum of 40 minutes while 12(10.08%) spent about an hour with each client.

Table 16: Interaction Period between Client and HCP

	Number (n)	Percentage
Maximum time HCPs spent with each client		
20 minutes	52	43.7
40 minutes	42	35.29
About one hour	12	10.08
Other	5	4.2
Not stated	8	6.72
Adequate staff to provide adolescent health services		
Yes	15	12.61
No	81	68.07
Don't know	23	19.3
Cooperative work team among HCPs		
Yes	102	85.71
No	16	13.45
Not stated	1	0.84

4.3.4 Staffing and Supplies Issues

Table 16 below shows the services that were reported by HCPs to have been adversely affected by staff shortage along with areas that clients considered to be offering ineffective services. Most (64.71%) of the HCPs said that cervical and breast cancer screening and treatment services at GPGH were ineffective. These services were rated lower than all the remaining services considered being ineffective by 40% or fewer of the interviewed HCPs.

Table **17:** ARH&D Services Adversely Affected by Staff Shortages and Supplies Inadequacies

	Services affected by staff shortage	**Ineffective services due to supplies inadequacies**
	Number (%)	Number (%)
Counseling services	24(20.17)	27(22.69)
Contraceptive use	34(28.57)	30(25.21)
Sexual violence/ assault & post rape care	49(41.18)	48(40.34)
Post abortion care	39(32.77)	37(31.09)
MCH, inpatient & outpatient services	17(14.29)	17(14.29)
Pregnancy in youth	48(40.34)	48(40.34)
Drug and substance abuse	51(42.86)	46(38.66)
HIV/ AIDS counseling, testing and treatment	22(18.49)	25(21.01)
Cervical and breast cancer screening and treatment	77(64.71)	77(64.71)
Infertility screening and treatment	41(34.45)	29(24.37)
Gender equality and RH services	35(29.41)	36(30.25)

4.3.6 Some Motivating Factors of HCP Performance

Table 17 below shows the factors that HCPs reported as helping them to be effective in providing ARH services. Most common factor, self motivation was at 103 (86.55%), training and experience, 77 (64.71%), clean environment, 45(37.82%), and adequate supplies, 40(37.82%).

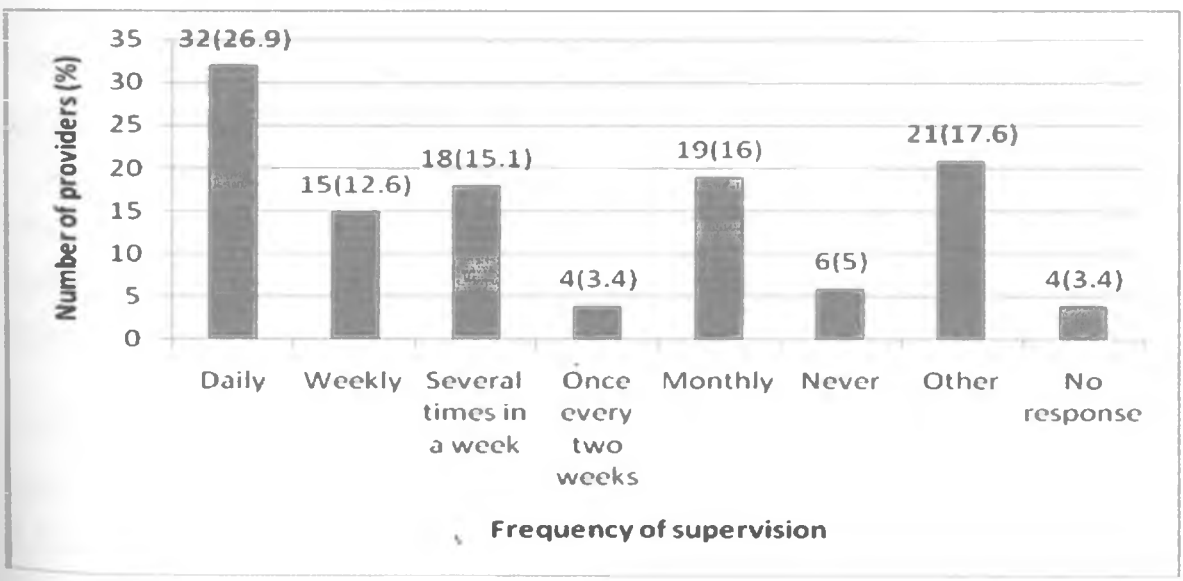
Table 18: Some Factors that Help HCPs to be Effective in Providing ARH Services at GPGH

Factors	Number (n)	Percentage
Self motivation	103	86.55
Training and experience	77	64.71
Clean safe environment with good ventilation	45	37.82
Adequate supplies	40	33.61
Management provides supervision, mentorship and guidance	37	31.09
Adequate staffing ratios	32	26.89
Motivated by management	29	24.37
Management always listens	23	19.33
Management chain of command is good	21	17.65
Other reasons	5	4.2

4.3.7 Supervision of the Health Areas Providing ARH&D Services

The frequency of supervision of ARH&D activities at GPGH are presented in figure 5. . The majority 32 (26.9%) of HCPs reported that they received supervision on a daily basis. A further 15.1% were supervised several times a week and 18 (15.1%) at least once every week.

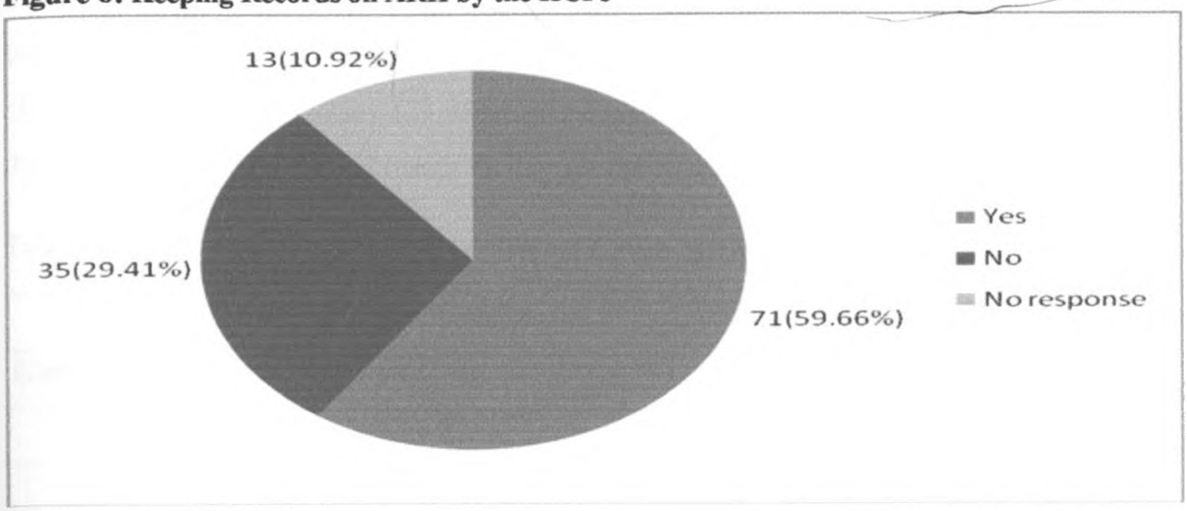
Figure 5: Frequency of Supervision Visits of the Health Care Services



4.3.8 Record Keeping on ARH Services

As shown in figure 6, 71 (59.66%) HCPs confirmed that they kept records on ARH while 35 (29.41%) did not keep records on ARH services.

Figure 6: Keeping Records on ARH by the HCPs



4.3.9 Promotional Activities on ARH Services

Twenty-seven (22.69%) of the interviewed HCPs reported that they held promotional activities in regards to ARH services through health talks and health education, public awareness campaigns, counseling and mentorship and involving youth in social activities.

4.3.10 Research on ARH

Out of the 119 health providers, two (1.68%) reported having done research on ARH and both of these HCPs also reported that they had a scientific publication related to ARH.

4.4.0 CLIENTELE SATISFACTION WITH QUALITY OF ARH SERVICES

A total of 53 youths attending ARH services at GPH were recruited for an exit interview to determine the level of their satisfaction with the quality of ARH services at the facility and to characterize the health services. The description of the participating adolescents and their responses given in the exit interview are presented below.

Youth Client Characteristics

4.4.1 Age and Gender

A total 53 adolescents were interviewed. Out of these 50(94.33%) were female while 3 (5.66%) were male. The mean age was 19.5 years (SD = 3.7), range 11 to 24 years. On average the male clients were slightly younger than female clients (mean ages 18.7 years versus 19.6 years;

difference -0.93 (95% CI -5.8 to 3.96)) but this difference in age was not statistically significant (t statistic = -0.65; p value 0.57).

4.4.2 Marital Status

Table 18 presents some characteristics of the adolescent clients interviewed. Approximately three-quarters (n = 41, 77.36%) of the clients reported that they were married. All the three male clients were single. Eighteen (33.96%) of the clients responding to the exit interview reported that they were visiting GPGH health facility for the first time.

Table 19: Basic Characteristics of Adolescent Clients at GPGH

	Number (n)	Percentage
Gender		
Male	3	5.66
Female	50	94.34
Marital status		
Single	11	20.75
Married	41	77.36
Divorced/Separated	1	1.89
First visit to clinic		
Yes	18	33.96
No	35	66.04

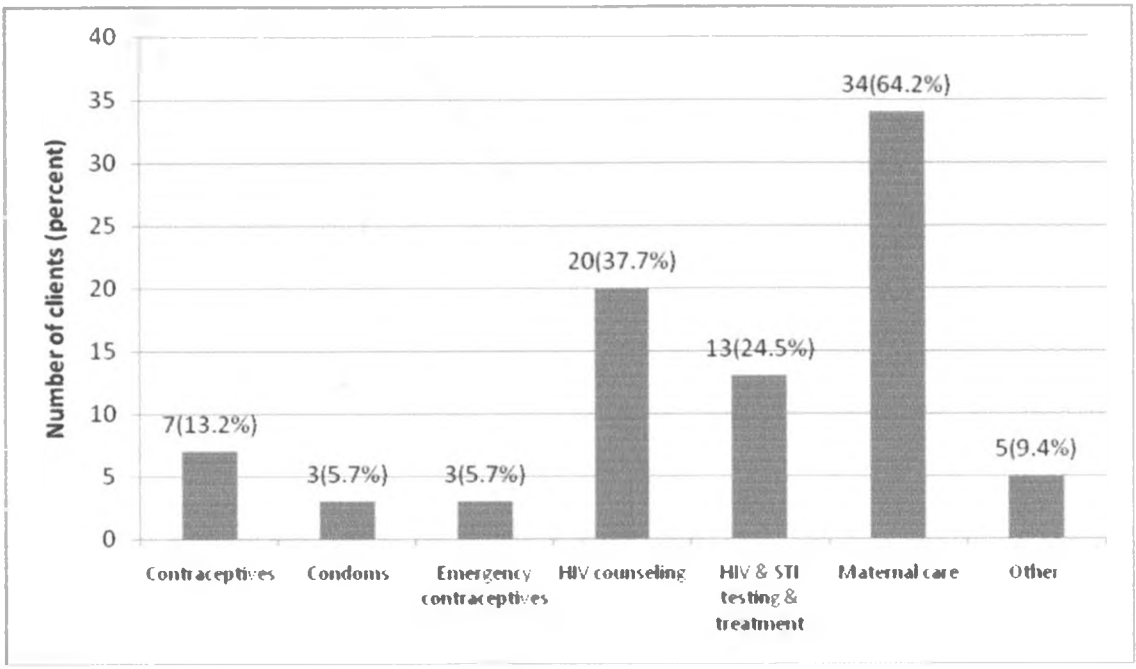
4.4.3 HCP Friendliness to the Youth Clients

Twenty-seven (50.9%) of adolescent clients reported that all the staff treated them in a friendly manner while the remaining 26 (49.1%) clients said only some of the staff were friendly.

4.4.4 Services Required by the Clients

The services commonly demanded by the adolescent clients on the day of the exit interview are shown in figure 7. The most demanded services were maternal care (64.2%), HIV counseling (37.7%) and HIV and STI testing and treatment (24.5%). Among the other services demanded by clients were smear tests, sexuality counseling services and treatment for other gynecological conditions. Each of these latter services was requested by a single client. Two clients visited the facility for miscarriage treatment services.

Figure 7: Services sought by clients in the health care facility



4.4.4 Health Service Availability and its Delivery

Only one (1.9%) client reported that she did not receive the service sought. This client had come for pap smear test and cited health provider engagement in other duties as the reason for failure to have the procedure done. Two (3.8%) clients seeking HIV counseling and maternal care respectively reported receiving partial care. The client seeking HIV care felt that information tailored for male client needs was limited and the client seeking maternal care received only partial care because she had delivered before arriving at the facility.

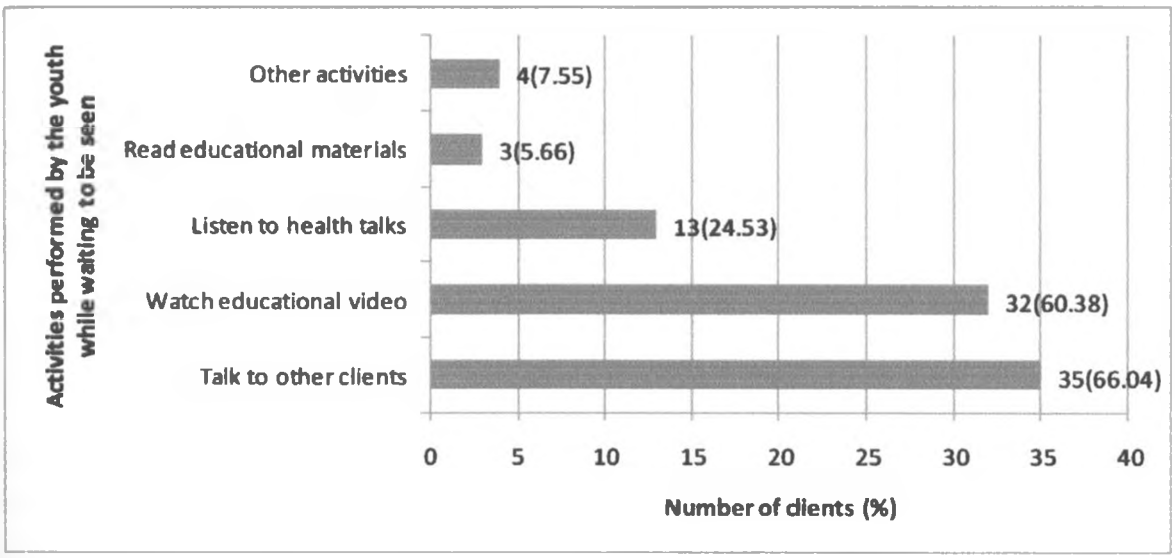
4.4.5 Client Privacy and confidentiality

Thirty seven (69.8%) youths did not feel comfortable with presence of another HCP apart from the examiner in the room during counseling or physical examination. Common concerns were raised with confidentiality and privacy. In fact when clients were asked whether HCPs reassured them confidentiality, 39 (73.6%) adolescents responded that reassurance was not given. One client was concerned about being examined by a male HCP and a second client stated that she preferred being attended by female HCPs.

4.4.6 Client Waiting Time

The figure 8 below shows the activities that youths reported engaging in while waiting to be attended to at the clinic. The clients commonly reported engaging in more than one activity. The three main activities were: 35(66.04%) talking to other clients, 32 (60.38%) watching educational videos and 13(24.53%) listening to health talks.

Figure 8: Activities performed by the youth while waiting to be seen



Three (5.7%) clients said the time spent at the clinic was too short and 15(28.3%) said waiting time was too long. The remaining clients responded that the waiting time was just right. All the respondents, 53 (100%) reported that the clinic opening hours were convenient.

4.4.7 Answering of Client Concerns by HCPs

Twenty-four (45.3%) of the interviewed adolescents reported that they had some concerns at the end of their session and that the HCP clarified their concerns while the remaining 29 (54.7%) clients did not have any concerns.

4.4.8 HCP Dissemination of Information on ARH&D

Table 19 below shows the extent to which HCPs gave clients information on the different component of ARH services during the sessions. Thirty-three (62.26%) clients reported being informed about prevention of HIV, STI and unwanted pregnancies, 31 (58.49%) were informed

on safer sex options and 16 (30.19%) on contraceptives. At the end of the session, only 8 (15.09%) clients were reminded or informed about the available ARH&D service delivery points.

Table 20: Provision of Information on ARH to the Youth by the HCPs at GPGH

Information given to the adolescent clients	Number (n)	Percentage
Safer sex options	31	58.49
Prevention of HIV, STI and unwanted pregnancy	33	62.26
Contraceptives	16	30.19
Emergency contraception	7	13.21
Relationships and sexual enjoyment	7	13.21
Other concerns e.g. body image, genital hygiene	14	26.42
Available service delivery points	8	15.09
Other	2	3.77

4.4.9 Adolescent Client Awareness on What to do if Unhappy with the Hospital Visit

Thirty-seven (88.68%) respondents were unaware of what actions to take if they were unhappy with the visit to the health care facility while only three (5.66%) of respondents knew what to do. The rest did not respond.

4.4.10 Previous Opportunities for Clients to Express Themselves

Table 20 below shows that most, 38 (71.7%) youth clients reported that they had not previously been given an opportunity to express their opinion about the ARH services provided at GPGH.

Table 21: Previous Opportunities given to Clients to Express Themselves

	Number (n)	Percentage
Have you been given an opportunity to express your opinion about services		
Yes	11	20.75
No	38	71.7
Not applicable	4	7.55
Total	53	100

4.4.11 ARH Care Aspects either Liked or Disliked by Clients

Out of the 53 adolescent respondents participating in the exit interview, 18 (33.96%) indicated that they had noted particular issues that they liked at the facility (table 21). These issues included a caring, friendly and welcoming staff, short waiting times, and integrated services. Thirty four (64.15%) youths noted things they did not like including dirty toilets, long waiting hours, male staff attending to women, delivering alone, and expensive cost of ARH services.

Table 22: Aspects of the health services either liked or disliked by Clients

	Number (n)	Percentage
Anything in particular you liked at clinic		
Yes	18	33.96
No	34	64.15
No response	1	1.89
Total	53	100.0

At the end of the session most clients, 51 (96.2%) were informed of the date to return for a follow up visit and 48 (90.6%) were informed that they could return any time if necessary. All the clients indicated that they would recommend the clinic to a friend or relative.

4.5.0 KEY INFORMANT INTERVIEW FINDINGS

The Key Informant Interviews (KIIs) were conducted on seven Key Informants (KIs). They included the head of the Maternity/Child Health (MCH) services, the head of the family planning services, the head and deputy of the Voluntary and Counselling and Testing (VCT)/ Comprehensive Care Clinic (CCC), the acting in charge labour ward, the acting hospital nurse in charge and the hospital deputy in-charge and the pharmacist serving the Voluntary and Counselling and Testing (VCT)/ Comprehensive Care Clinic (CCC) pharmacy.

The findings from the seven Key Informants (KIs) are presented in this section along the five broad themes discussed in the interviews. These themes were based on an initial search of literature on ARH&D in Kenya.

4.5.1 Concerns facing youth in Garissa

In general, there was consensus among the key informants that the priority concerns outlined in the ARH&D policy reflected the health needs of the youth in Garissa and more specifically the

needs of those youth visiting GPGH. These areas are adolescent health and reproductive rights, harmful practices, drugs and substance abuse, socio-economic factors and adolescent and youth disabilities. A particular concern related to adolescent health and reproductive rights raised by most respondents was female genital mutilation presented later in the analysis as an independent concern.

"...drugs of addiction like miraa cause the adolescents not to go to school, early marriages, lead to high school dropout, the climate is harsh to allow children from poor families to walk long distances to school. ... Adolescent girls are married off early.... Among the Malakote people, the infibulation is still at grade 4. The FGM continues to cause difficult labour, infections, perineal and cervical tears, recto-vaginal fistula, very painful sex, poor delivery outcomes. ....." [KI number C]

4.5.2 Implementation of ARH&D policy

While the participants consistently appreciated that significant gains had been achieved in the implementation of ARH&D they suggested broader participation of the various stakeholders implementing various aspects as recommended by the policy in order to scale up its implementation.

"There need to hold stakeholder meetings to understand the implementation ..., engage the youth, social forums including youth groups, ministry of youth affairs, identify actors in youth issues locally. A work plan of implementation is required. Key community and government administrators need to be involved." [KI number F]

Additional suggestions for scaling up implementation included: infrastructural development for youth friendly services, and encouraging culture of openness in these youth friendly centers. Closely linked to the issue of scaling up ARH&D policy were suggestions for promoting community engagement in adolescent reproductive health through engaging religious and community leaders.

4.5.3 CHALLENGES FACED IN ADOLESCENT REPRODUCTIVE HEALTH

4.5.3.1 Stigmatization of family planning

From the KII, HCPs felt FP issues evoke negative connotations that within cultural set up in NEP. Women are expected to reproduce many children "*...A wife who did not have at least ten*

children was not respected as woman in the community."[KI number C] The informants commonly linked the societal perception and attitudes towards FP as being influenced greatly by religious affiliation in this region which is predominantly a Muslim society. Further the KIIs suggested that the strong religious influence could be used to promote aspects of ARH&D policy that conform to religious beliefs.

4.5.3.2 Female Genital Mutilation

Female circumcision has been rampant in Garissa. This research has established through its KIIs that FGM has now reduced in terms of the grade of infibulation, significantly among the Somali people through health education by the health workers and advocacy by the Islamic religious leaders. The labia majora and the labia minora are not now being cut but the clitoris is. The suturing of the vaginal opening continues. Among the Malakote people, however, the infibulation is still reported to be at grade 4. The FGM continues to cause difficult labour, infections, perineal and cervical tears, recto-vaginal fistula, very painful sex, poor delivery outcomes, among others.

" infibulation has gone down. The community has been enlightened that FGM is not sunna (a religious obligation) but a traditional practice. Sheikhs have been used to talk to the community and many have accepted to change and have opted out of the custom." [KI number D]

4.5.3.3 Early marriages and maternal complications

Early or child marriage being marriage of anyone below 18 years of age and is recognised as a violation of children's rights. Very young girls in NEP are given off (consanguineous marriages) to marry old men who are then exposed to a myriad of maternal complications.

"we encounter cases of very young girls of ages 13, 14, 15 coming for delivery, already married are married to elderly men who do not care for them...the men mainly get married to have children.. .the expectant mothers fear antenatal clinic and as a result often come when they declined because it limits the number of children a woman can get..." [KI number C]

4.5.3.4 Illiteracy

There is high rate of illiteracy in Garissa due to low school enrolment, school drop out, early marriage.

"...illiteracy persists...we need to encourage parents to take their children to school...talk to children to work hard in school..." [KI number A]

4.5.3.5 Lack of youth friendly services

At GPGH there are no tailor made services for the adolescent RH needs. All clients are seen together.

"The youth avoid the hospital clinics which include all. The youth are not comfortable to come to the facility. Youth are impatient and want first priority which may not be forth coming in the integrated services...[KI number E] *"...youth centres need to be established..."* [KI number F]

"... a youth centre would help...there is need to segregate youth...YFS.." [KI number A] *"..there is need for YFS providing access to all youth..."*[KI number D]

4.5 The study Null hypothesis read "There is no adherence to the Adolescent Reproductive Health & Development policy among Health Care Practitioners at the Garissa Provincial General Hospital". A large proportion of health care providers at GPGH adhered to the ARH&D policy. Out of the 119 participating HCP, 62.18% reported adhering to at least nine out of the 12 ARH components. This adherence was compared to a hypothesized rate of one in every four HCP (25%) adhering to ARH&D policy, representing relatively low adherence. This difference was significant by a one sample test of proportion (z statistic = 9.37, p value < 0.001). The study null hypothesis was therefore rejected and it was concluded that there is adherence ARH&D policy among HCPs at the GPGH.

CHAPTER FIVE: DISCUSSION

This study conducted in a Kenyan Provincial hospital is an important addition to the literature on HCP adherence to the ARH&D policy developed in 2003. The survey reports a HCP ARH&D policy adherence rate of 62.2% and general satisfaction with quality of RH services among the adolescent clientele at GPGH. The first part of this discussion is based on the seven dimensions of policy adherence namely: policy content, formulation and degree of policy dissemination, social economic and political factors that influence the policy implementation, leadership commitment to follow through, stakeholder involvement in policy implementation, implementation plan, coordination mechanisms, operation systems and capacity of individuals, and feedback on progress and results (USAID, 2010). The latter part of the discussion is based on minimal requirements of YFS (MOH-YFS, 2005) (facility characteristics, provider characteristics, service characteristics) and customer satisfaction issues.

5.1 ADHERENCE TO THE ARH&D POLICY AMONG HCPS

In the current study the estimated ARH&D policy adherence rate is lower than that reported in developed countries. For example RH adherence rate of 82% has been reported among HCPs in a US study (NOPIN, 2005). However, customer satisfaction was lower in the US study at 59%. This suggests that the customer expectation in the current set up was lower than that in the developed world. It further implies that policy adherence in the GPGH set up may not be as stringent as it is in the western world.

5.1.1 Formulation and Degree of Dissemination of the ARH&D Policy

This study revealed that the majority of HCPs had not read the ARH&D policy and copies of the policy were not in the institution. In fact those who had seen the policy had done so elsewhere which reflects a problem in policy dissemination. Similar findings were reported in another Kenyan based rapid study by USAID (2009) on operational barriers to integration of RH policy implementation. Here it was found that adherence to policy was adversely affected by poor policy dissemination and lack of knowledge on the policy implementers. In our study however, policy implementation was above average and customer satisfaction high even though only a minority of the policy implementers had been trained on ARH. This may suggest that the HCPs had taken other training sessions which cover ARH.

5.1.2 Social, Economic and Political Factors in Adherence to Policy

In our study, religious affiliation among HCPs showed a statistically significant association with ARH&D utilization (Fishers exact p = 0.006). Adherence to the ARH&D policy was higher among respondents who reported that they were Christians, 69.3% compared to the respondents indicating that they were Muslims 46.4% in our study. Previous research in NEP (USAID. APHIA II, 2009) indicates that the Somali community cohesion and cultural/religious influence have upheld FGM, early marriages to girls, illiteracy, religion, poverty, gender inequality, stigmatization of FP, stigmatization of HIV and AIDS, language barrier and fear of attending ANC. These have to an extent been barriers to implementation of the ARH&D policy in Garissa as revealed from the majority KIs. It is here suggested that, cohesion within the community and the strong influence of religious leaders if harnessed can act as motivators to policy ARH&D policy adherence. Despite the Christian HCPs being the majority in the health facility, they may initially be faced with low ARH&D uptake, the client being predominantly Muslim, but with the involvement of the religious leaders ARH&D policy implementation may be scaled up gradually.

5.1.3 Leadership Commitment to Follow Through Adherence to the Policy

The irregular manager supervision on adherence to the ARH&D policy reported at GPGH are consistent with those reported in the implementation of other older health policies (Pathfinder, Jamaica, 2002). This suggests that inconsistent supervision may have resulted in the low levels of ARH&D policy adherence. Statistical tests further confirmed the significance of the role of supervision in HCP adherence to the ARH&D policy. Congruent findings were reported in a Tanzanian based study (Pathfinder, 2003) with onsite supervision from lower cadre supervisors but ad hoc higher level supervision by non trained personnel. For newer policies like the Kenyan ARH&D policy, previous research in Botswana, Ghana, Tanzania and Uganda, indicated that supervision of a new YFS policy was inadequate and that managers needed to be trained on supervision of ARH services not just on frequency but on how to be facilitative during the supervisory visits (Senderowitz, 2003).

In the current study most of the HCPs had a cooperative work team and were self motivated, which acted as a lever to adherence to ARH&D policy. This is congruent with a USAID study (2009) based in China, Indonesia and Vietnam where RH policy implementers' motivation was high due to personal, organisational, or institutional motivation and commitment. These

facilitated the RH policy implementation process in those areas. However in the current study the institution or supervisors were not a source of motivation to the HCPs. This implies that there is need for the institution to cultivate motivational skills to build commitment in the employees and interpersonal relations of policy stakeholders at all levels to improve the adherence to the ARH&D.

5.1.4 Stakeholder Involvement in Policy Implementation

The importance of involving stakeholders in ARH&D policy implementation emerged strongly through key informant interviews. It was indicated that generally the ARH&D policy stakeholders were not adequately involved. It is therefore suggested that this is a contributor of the low policy adherence. On the contrary, previously in NEP, involvement of religious leaders in RH issues has played a leading role in creating awareness on HIV and AIDS and child spacing through cycle beads, and moonlight VCT (USAID, APHIA II, 2009). This thus emphasizes further the importance of involving stakeholders in policy implementation for increased adherence. During a project undertaken without adequate involvement of youth in design, implementation or evaluation of RH services Senderowitz et al (2003) established that such involvement helps to tailor health services so that they appeal to the youth. This directly contrasts with our study where majority clients stated that they had not been given an opportunity to express themselves before. This may mean services offered may not meet the needs of the adolescents and channels of feedback as indicators of levels of customer satisfaction are closed. Similar research findings are in a Tanzanian based research (Pathfinder, 2003) on YFS policy where the youth as stakeholders were minimally involved in the policy implementation plan.

5.1.5 Policy Implementation and Adherence Plan

In this study, the training level of the HCPs on the ARH was low at 13.45%, there was staff shortage, ARH services' supplies were inadequate which had all compromised ARH services. Inadequate guidance was also reported during the roll out YFS in the area. This may indicate a poor implementation plan of the ARH&D policy in the area. There is a contrasting study on youth RH policy in Jamaica employing various components in the implementation plan including training and involvement of music groups, and recreational organisations. Here the training, the strong community and social structure helped to scale up the policy utilisation (Pathfinder,

Jamaica, 2002). It implies that an implementation plan is required for successful implementation and adherence to the policy. Such plans should detail project resources, and capacity for policy implementation, the skills, training, and funding required for policy implementation and adherence. Although such components were part of the national roll out plan in the Kenyan ARH&D policy (MOH-YFS, 2005), it was evidently absent in our study, as part of the operations and services.

5.1.6 Operations and Services in Policy Implementation and Adherence

This study found no organised ARH services in the GPGH. Record keeping and research on ARH was minimal. Channels to assess quality of care were not evident. This implies no planned coordinated mechanisms, haphazard operations that lack responsibility and accountability. It is suggested that good operations and services preparations are required to overcome the challenges of FGM, early girl marriage, drug dependence, illiteracy, religious affiliation, and low economic status, among others as aspects covered in the ARH&D policy. Increased accurate record keeping and research on ARH can specifically be useful to increase advocacy, monitor progress and give feedback to stakeholders on the policy adherence. In a contrasting pathfinder research (2003) in Tanzania, Dar es Salaam, the infrastructure was renovated, the staffs were trained including their managers, and careful selection of the staff was done before implementing the YFS policy. This resulted into quality services in a facility that serves as a good example of good operations and services preparation and high YFS policy adherence. Good accurate record keeping and frequent research provides evidence for improved performance and provides feedback on the progress of policy adherence results.

5.1.7 Feedback on Progress and Results

The study results found that there was poor record keeping and low research levels on ARH. This concurred with a research done in Uttarakhand, India where systematic linkages among monitoring, decision making and planning processes were lacking (USAID, 2010). In this study it was recommended that policy implementation and adherence assessment should be scaled up through regular information gathering; and dissemination, to assess progress towards achieving policy goals because this inspires action. In another research in Kenya based on evaluation of RH, HIV and AIDS policy implementation and aderence, monitoring and evaluation of these policies was reported to be poor and a new strategy of committing more resources to monitoring

and evaluation (M&E) was to be scaled up (Schueller, 2006). A Pathfinder (2003) study report on YFS policy in Tanzania states that record keeping in public sector was poor, recording systems were outdated, regular reports were missing, serious data gaps existed and there was no data analysis on ARH. The poor record keeping and low research levels in our study suggest lack of a strong basis for advocacy for resources, staff training, stakeholder involvement to scale up ARH&D policy adherence in NEP.

5.2.0 CHARACTERISTICS OF THE ADOLESCENT REPRODUCTIVE HEALTH SERVICES

5.2.1 Facility Characteristics

The current study found that about a third of the clients liked certain aspects of services in the hospital including a welcoming, caring, friendly staff, short waiting time, and integrated services. On the contrary about two thirds expressed issues they did not like about the health facility including dirty toilets, long waiting hours, male staff attending to female clients, delivering alone and high cost for services received. This implies that there are youth clients who may not return for services if they have an alternative care facility while other will return for care. The findings concur with previous research findings (Senderowitz, 2003, Pathfinder, 2003) where health facilities belonging to NGOs were more attractive to the youths because comparable government facilities were poorly maintained, had limited waiting area, low cleanliness levels, and high HCP burn out which resulted in low motivation to serve adolescent clients.

At GPGH, about a half of the clients reported that all the staff treated them in a friendly manner while the remaining said that some of the staff treated them in a friendly manner. This suggests a very high level of HCP unfriendliness to clients and poor interpersonal relations resulting to poor customer care. Our study compares with one done in Tanzania on YFS policy assessment, where 80% of adolescents attended in public health facilities were unhappy (Pathfinder, 2003) at the reception while all adolescents were happy with services offered in a private clinic in the neighbourhood.

The current study established convenient location for the GPGH except for the CCC/VCT clinic which is associated with being near the morgue and roofed red and believed to be an indication that clients being seen in the CCC/VCT clinic were on transit to the mortuary. This may imply some contributory reasons why some adolescents may not come for treatment in this place

(CCC/VCT). Our study issue on convenience of location concurs with a study by Shaw (2009) which states that youth patients preferred health services offered at convenient hours, convenient location, with sufficient privacy, and comfortable surroundings.

Our study findings revealed that GPGH, ARH health services operate between 8am-5pm week days. This means that the school going youth or working youth who can not get permission during these hours may not access ARH clinic services. These findings concur with a previous research (Shaw, 2009) which reported that youth clinics that opened between 8am and 5pm were problematic for youth who were in school. On the contrary, 100% of the GPGH clients said the GPGH hours (8am to 5pm) were convenient. This may imply that the Garissa youths do not go to school and do not work.

The GPGH study established that there were no study materials for the adolescents in their areas of treatment. To the contrary, in a study in Tanzania (Pathfinder 2003) findings indicated availability of study materials for youth to read while waiting and to carry home. The findings indicated that this was necessary because some adolescents are too nervous to retain information on a face to face session and often prefer to learn on their own.

5.2.2 Health Care Providers Characteristics

Most of the clients received the services they had come for and this is a positive indicator of customer satisfaction. Although adherence to the ARH&D policy was moderately low, it is non congruent with a high customer satisfaction level. It is suggested here that the customer expectancy level is low in Garissa.

Only a single client (1.87%) reported that she did not receive the ARH service sought. Although very low levels of customer dissatisfaction are reported in the current study, previous studies indicate that for every one complaint received, there are 24 people with unvoiced problems, six of which are serious and that >= 90% of customers who are dissatisfied with the health service they receive will not return to the facility (Taylor, 2008).

In the current study adolescents were dissatisfied with level of privacy and confidentiality given during service provision from both the clients and KIs. Similar findings in other studies indicated that clients preferred to be seen behind closed doors, in non labeled rooms where interruptions were avoided and records are stored in a confidential manner (Calves, 2002, Senderowitz, 2003,

Schueller, 2006). Further concurring reports were derived from a Tanzania based study where the youth reported the fear of the HCP sharing information with a relative and insisted that confidentiality and privacy should be honoured. About 62.7% of them preferred a separate place especially for first clinic attendants, the non-sexually active and the marginalised (Pathfinder, 2003). This study revealed lack of doors, multiple interruptions and doors being left open while consultations, examinations, counseling and treatment procedures were in process.

5.2.3 Management of the ARH Services

A variety of services are available at GPGH and the youth received maternal care, HIV counseling and HIV and STI testing and treatment, pap smear tests, sexuality counseling services and treatment for other gynecological needs. This implies that most ARH needs can be attended to in GPGH and this is a positive indicator of fulfillment of the principles of adhering to the ARH&D policy and YFS.

At GPGH, RH study findings indicated that services were affordable for the majority (84.91%) clients and for those who could not afford a waiver and credit facility were offered. This is supportive of adherence to the ARH&D policy and YFS. Similarly in a study by Pathfinder (2003), findings indicated that ARH services were affordable for the majority in public hospitals. The majority could not afford to pay in private clinics. However, in this study it was recommended that the youth needed to be made to pay for RH services given for them to value what is provided.

At GPGH most clients reported that they had previously been given an opportunity to express their opinion about the ARH services they received. This is good indicator of stakeholder involvement in policy implementation and adherence. In contrast, in a Tanzanian study (Pathfinder, 2003) youth involvement in own care was minimal.

At GPGH, the minority of clients felt the time spent at the clinic was too short, about a third said it was too long reflecting long waiting times . The remaining majority (about two thirds) felt that the time was just right. All the respondents, 100% reported that the clinic opening hours were convenient. This complies with the ARH&D policy and YFS requirements and is an indicator of adherence to the ARH&D policy. Contrasting previous research (pathfinder, 2003) findings indicated that youth clients waited for a half an hour to two hour and it was indicated that

adolescents were willing to wait even longer hours if their services were in a separate place from the adults.

My study established that about a quarter of the HCPs had held promotional activities in regards to ARH through health talks and health education, public awareness campaigns, counseling and mentorship and involving youth in social activities. Only a minority 1.68% had done research on adolescent reproductive. This implies a poor stakeholder involvement in terms of the community enlightenment, a poor indicator of HCP adherence to ARH&D policy. In a research with similar findings, (Pathfinder, 2003) in Tanzania, concerning ARH publicity, findings indicated that most clients had learned about the YFS through word of mouth and outreaches through peer educators.

ARH services unavailable at GPGH are sought elsewhere in private hospitals and KNH, a good indicator of adherence to the ARH policy but may be a hindrance due to affordability.

Shaw (2003) states that good HCP adherence to ARH&D policyindicators included affordability, youth involvement, services for both boys and girls, wide range of services available, referral system available, acceptable waiting time, policy support and publicity.

5.2.4 Young People's Psychosocial Support

It was evident that the youth at Garissa lack psychosocial support on ARH issues. KIs reported that girls are forced to be circumcised, young girls are married off (consanguineous marriages) to elderly men who do not take good care of them. Caeserian sections are declined because they limit the number of children to be born and a wife who has less than ten children is not valued as a wife in the community. KIs also indicated that FP and HIV and AIDS were stigmatized. If it is known that one is HIV infected, he/she is neglected, looses friends/relatives and is looked at as a sinner. This suggests gender inequality, poor maternal/child outcomes, among others and certainly implies poor policy adherence in terms of social support for the adolescents. In contrasting study findings on an ARH policy study (Pathfinder, Jamaica, 2002) in Jamaica, the youth policy implementation and adherence plan was supported by social networks throughout the area. It is then reported that this helped to scale up the policy implementation and adherence. In contrast, in the EDC study (2009), it was reported that stigma attached to HIV in NEP was substantial and condom use was very low. A previous study indicates that FP prevalence in NEP was less than one percent. In that study women preferred to get at least 11 children while the

men preferred closer to ten (EDC, 2009). These are all indicators of poor adherence to the ARH&D policy.

Our study has established that FGM has now reduced in terms of the grade of infibulation, among the Somali people through health education by the HCPs and advocacy by the Islamic religious leaders. This suggests stakeholder involvement including the community and religious leaders does help scale up ARH&D policy adherence. In contrast, The EDC study (2009) findings indicated that female circumcision had been rampant in Garissa in numbers and severity. It further indicated that the proportion of Muslim women who were circumcised was about double that of Christian women, with FGM being most prevalent among the Somali (98%), the Kisii (96%), the Maasai (73%). The percentage of circumcised women declined steadily with the increase of wealth quintile (KNBS, 2010).

Despite all these, our study established that psychosocial support has comparatively improved resulting to less traumatic FGM among the Somali people. This is further supported by another study (USAID, APHIA II, 2009) done in NEP, which established that religious,/cultural values, moonlight VCT and Somali community cohesion had helped to reduce HIV and AIDS through involvement of the religious elders/leaders. This further emphasises the importance of stakeholder involvement to increase policy adherence.

5.3.0 FACTORS THAT INFLUENCE HCP UTILISATION OF THE ARH&D POLICY

5.3.1 HCP Age and Utilisation of the ARH&D Policy

This study revealed that the age of HCPs was significantly associated with adherence to the ARH&D policy. Rating of HCP adherence to the ARHD was lowest among HCPs aged 30-39 years (40.5%), followed by 40-49 years (65.6%). The highest adherence to the policy was reported in the youngest age group 20-29 years (75.5%). This implies that the younger HCPs who are beneficiaries of the ARH&D policy, support it. It may also indicate a better reading culture and less resistance to change. The young HCPs should thus form the bulk of the workers in the ARH facilities as much as possible. This finding concurs with those in a previous study (Schueller, 2006) to assess RH, HIV and AIDS policy implementation in Kenya. It was reported that the adolescents preferred to be attended to by young HCPs and that if the HCPs were older they needed to be trained to handle ARH issues.

5.3.2 HCP Religious Affiliation and Utilisation of the ARH&D Policy

In our study religious affiliation of HCPs showed a statistically significant association with adherence to the ARH&D policy. Adherence was higher among HCPs who were Christians (69.3%) compared to those who were Muslim (46.4%). The KIs indicated that FGM was seen as "sunna", a religious obligation in Islam by some while others indicated that FGM not a religious act but a cultural act. Studies with contrasting findings (Pathfinder, 2003, Schueller, 2006 & UNESCO & UNFPA, 2010, Adimora et al, 2009) were done in America, Kenya and Tanzania, addressing when cultures/religions interact in RH practice. They indicate that for effective RH policy adherence the HCP needs to acquire and institutionalize cultural/religious knowledge, and adapt to the cultural/religious values of the individuals and communities served. For sustained behaviour change among adolescents, information given should be culturally/religiously sensitive and customer tailor made. In Muslims Indians, research findings indicated that failure to practice or support family planning among Muslims is not a religious act but poverty and culture related (Ali. 2003).

5.3.3 HCP Supervision and Utilisation of the ARH&D Policy

Frequent supervision of HCP was significantly associated with increased adherence to the ARH&D policy at GPGH. This is congruent with the principles of policy implementation. This finding is somehow congruent with the Tanzanian study (Pathfinder, 2003) where adherence to the YFS policy was initially low before supervisors' training than after their training (Pathfinder, 2003). Adherence to ARH&D Policy generally promotes adolescent customer satisfaction.

5.4.0 ADOLESCENT CUSTOMER SATISFACTION

At the GPGH findings the majority, of HCPs spent less than minimum time recommended for adolescent consultation, although the clients were not asked their opinion on this issue. This may be due to the staff shortage and lack of training already elicited. This is a poor indicator to adherence to the ARH&D policy. Previous YFS assessment research (Pathfinder, 2003) in Tanzania, findings indicated that the youth required more consultation time than adults. Nearly 80% did not get adequate time with their HCP. About 90% felt providers did not listen. Adequate time was therefore needed for client and provider interaction.

In our study one client reported that she did not receive the service sought. This client had come for Pap smear test and cited health provider engagement in other duties as the reason for failure

to have the procedure done. Two other clients seeking HIV counseling and maternal care respectively reported receiving partial care. The client seeking HIV care felt that information tailored for male client needs was limited and the client seeking maternal care received only partial care because she had delivered before arriving at the health facility. These are indicators of patients' dissatisfaction and poor indicators of adherence to the ARH&D policy.

5.5 The study Null hypothesis read "There is no adherence to the Adolescent Reproductive Health & Development policy among Health Care Practitioners at the Garissa Provincial General Hospital". A large proportion of health care providers at GPGH adhered to the ARH&D policy. Out of the 119 participating HCP, 62.18% reported adhering to at least nine out of the 12 ARH components. This adherence was compared to a hypothesized rate of one in every four HCP (25%) adhering to ARH&D policy, representing relatively low adherence. This difference was significant by a one sample test of proportion (z statistic = 9.37, p value < 0.001). The study null hypothesis was therefore rejected and it was concluded that there is adherence ARH&D policy among HCPs at the GPGH.

5.6 Study limitations

The study was carried out only in one hospital and thus the findings may not be generalisable. Further studies are recommended to overcome this limitation.

The study question touched on potentially delicate and personal issues relating to attitudes and behavior of the HCPs and therefore the respondents may have held back some information. HCPs were requested to give honest truthful responses for effectiveness of interventions.

CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

The HCP adherence to the ARH&D policy was above average (62.18%). Adherence was higher among HCPs who were Christians, compared to those who were Muslims. The religious affiliation of the HCPs therefore plays a major role on the implementation of the ARH&D policy in NEP. The age of HCPs influenced adherence to the ARH&D policy. Adherence was lowest among HCPs aged 30-39 years, followed by 40-49 years. The highest adherence to the policy was reported in the youngest age group 20-29 years. In addition frequent supervision of HCP was associated with increased adherence to the ARH&D policy at GPGH

There was no ideal YFS clinic for the adolescent in GPGH. The youth are seen with the rest of the patients in the hospital. The various ARH services sought for by the adolescents were provided and affordable. The majority of HCPs at GPGH were however untrained on the ARH&D policy and on how to handle the youth. The staffing levels of the nurses, doctors, clinical officers, peer counselors, professional counselors and community health workers were short. Family Planning and HIV and AIDS are highly stigmatized at Garissa and this often leads to social seclusion and demonisation of the patient's life. FGM has now reduced in terms of the grade of infibulation, significantly among the Somali people. Among the Malakote people, however, the infibulation is still reported to be at grade 4. Other harmful practices noted in Garissa include early girl marriages, gender inequality, poverty, drug addiction especially miraa, among others. ARH operation hours were convenient to all the youth.

The adolescent client service satisfaction level was high although some HCPs were reported as unfriendly and client confidentiality and privacy was compromised. Male adolescent clients were few in the hospital and one of them complained that FP services were not tailor made for male adolescents.

6.2 Recommendations

Training and guidance of HCP on ARH: There is urgent need to train the HCPs at the GPGH on implementation of the ARH&D policy. Direction and guidance needs to be given to them on the same as youth population forms a bulk of the population in Garissa. Copies of the policy are

required urgently in the facility. This will scale up adherence to the ARH&D policy by the HCPs and consequently other policy stakeholders.

Youth friendly services: YFS are urgently required in the GPGH and its environs in order to provide tailor made services to the youth ensuring comprehensiveness and integration of all their needs. This will foster increased ARH&D policy adherence as a principle in the policy implementation.

Monitoring and evaluation of the ARH services: Comprehensive clear record keeping on ARH services needs to be adhered to for accountability and research purposes. Research on ARH&D policy needs to be encouraged among the ARH&D policy custodians in order to form a strong basis for the policy adherence advocacy.

Staffing levels of the HCPs: The staff numbers need to be increased in order to meet the reproductive needs of the youth in Garissa. Special attention needs to be given to CHW, peer counselors and interpreters in order to give tailor made services to the adolescents as stipulated in their policy.

Community and religious involvement: It is necessary to involve parents/guardians, community leaders and their followers, politicians, religious leaders to benefit from their influence to be effective in providing ARH in Garissa. Posters, bill boards, radio and other media announcements, especially in the local languages are recommended to inform beneficiaries of the elements of the ARH&D policy and other stakeholders. The economic status of the Garissa people needs to be improved for children and adolescents to go to schools and colleges. Sexual education should be strengthened in schools and colleges at all levels, being made part of the syllabus and part of the tests/exams so as to ensure coverage. Networks and support systems need to be scaled up to fight drug addiction, early marriages, gender inequality and female genital cutting in Garissa, for the purposes of adolescent development all as part of the requirements of the ARH&D policy..

Research on ARH services: Further research should be done to establish why training of HCPs was not associated with ARH&D policy adherence, why male adolescents do not frequent the GPGH facility, to confirm the emerging issue about modification of infibulation among the Somali, confirm staff shortage because the baseline statistics indicates very large numbers in

comparison to the actual numbers on the ground. Replica studies need to be undertaken in other Provincial General Hospitals to overcome the limitation of lack of generalisability earlier cited.

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APPENDICES

Appendix IA: Health Care Practitioner Informed Consent

Dear respondent,

My name is Christine Mwikali Musee. I am a student at the University of Nairobi currently undertaking a master's degree in nursing management and administration. One of the requirements of the award of this degree is to carry out a research study. In regard to this I am carrying out a research on **"adherence of Health Care Workers to the Adolescent Reproductive Health & Development policy at the Garissa Provincial General Hospital".**

In order to obtain the necessary information, I have deployed a questionnaire to be filled by health care workers. Participation is voluntary and there is no penalty for declining to participate. There are no risks involved. The information you will provide will be treated with total confidentiality as required by the law and medical ethics. You are not required to write any identification information. You are free to withdraw from the study at any stage without any fear of victimisation.

The results of the study will improve health care decision making, patient outcomes and inform policy on policy formulation, implementation and evaluation and help in training needs assessment. If you wish to know the results they will be availed to you. You may ask any questions about your rights as a participant or anything else about the research. You can contact me on cell phone number **0722592569 or email christinemusee@gmail.com**

Kenyatta National Hospital/Ethics Research Committee Contact is 0722829101 ext 4410 or 07226300 ext 4410

Thank you for your time

Respondent's consent

I have read and understood the above details about the research. I voluntarily agree to participate in the study.

Respondent's sign_____Date_____

Investigator's sign_____Date_____

Appendix IB (Kiambatisho 1b): Waraka Wa Idhini Wa Wafanyikazi Wa Kutoa Huduma Za Afya

Mpendwa mshiriki,
Jina langu ni Christine Mwikali Musee. Mimi ni mwanafunzi katika Chuo Kikuu cha Nairobi na kwa sasa nafanya shahada ya pili katika usimamizi wa uuguzi na utawala. Mojawapo ya mahitaji ya tuzo ya shahada hii ni kutekeleza utafiti. Kuhusu hii mimi nafanya utafiti wa **"Uzingatiaji wa Wafanyikazi wa Huduma ya Afya kwa Afya ya Uzazi ya Vijana & Sera ya Maendeleo katika Hospitali Kuu ya Mkoa ya Garissa"**

Ili kupata taarifa muhimu, mimi nitatumia maswali yaliyoandikwa kwenye hojaji na yatajazwa na wafanyakazi wa huduma za afya. Kushiriki ni kwa hiari na hautaadhibiwa kwa ajili ya kukataa kushiriki. Hakuna hatari yoyote kwa ajili ya kushiriki. Habari utakayotoa itashughulikiwa kwa njia ya siri kama inavyotakiwa na sheria na maadili ya matibabu. Wewe hautahitajika kuandika taarifa yoyote itakayokutambulisha. Wewe uko huru kujitoa kutoka kwa utafiti huu wakati wowote bila ya hofu yoyote ya kuhangaishwa.

Mtokeo ya utafiti huu yataboresha maamuzi ya huduma ya afya, matokeo ya mgonjwa na taarifa juu ya uundaji wa sera, utekelezaji na tathmini na kusaidia katika kutathmini mahitaji ya mafunzo. Kama utataka kujua matokeo ya utafiti utapewa. Unaweza kuuliza maswali yoyote kuhusu haki zako kama mshiriki au kitu chengine chochote kuhusu utafiti huu. Unaweza wasiliana na mimi kwenye simu ya mkononi nambari **0722592569 au barua pepe** christinemusee@gmail.com

Mawasiliano kwa Kamati ya Maadili na Utafiti ya Hospitali ya Taifa ni haya 0722829101 ext 4410 au 07226300 ext 4410

Asante kwa kutumia muda wako.

Idhini ya Mshiri

Nimesoma na kuelewa maelezo yaliyoko hapo juu kuhusu utafiti huu. Mimi nakubali kushiriki katika utafiti huu kwa hiari.

Sahihi ya Mshiriki: _____ Tarehe: _____

Sahihi ya Mtafiti: _____ Tarehe: _____

Appendix II: Questionnaire for the Health Care Practitioners

Questionnaire No._____Interviewer_____ Date_____

Research On Adherence of Health Care Practitioners to the Adolescent Reproductive Health and Development Policy at the Garissa Provincial General Hospital

"I am conducting this interview to assess the quality of reproductive health for the youth and hope to use the information to scale up these services. I hope that you can help us by agreeing to fill the questionnaire today. Participation is voluntary". **Please tick against your honest choice where indicted.**

SECTION ONE

NO	QUESTIONS AND FILTERS	Please tick or circle your choice
Q1a	Your profession	1. Doctor 2. Nurse 3. Clinical officer
Q1b	Designation	1. Nurse-specify level- 2. RCO-specify level- 3. Doctor-specify level-
Q2a	Gender	1. Male 2. Female
Q2b	Age in years in **completed years**	Specify-

NO	QUESTION AND FILTERS	Kindly tick or circle your choice where indicated
Q3	Religion	1. Christianity 2. Islam 3. Other Specify-
Q4	District of origin	Specify-
Q5	Professional qualification-**only one choice**	1. Certificate holder 2. Diploma holder 3. First degree holder 4. Masters degree holder 5. PHD holder
Q6	Duration of service as a professional in **completed years**	Specify-
Q7	Have you read the Adolescent Reproductive Health & Development policy?	1. Yes 2. No
Q8	If your answer to Q7 is "Yes" what can you remember about the policy?	Specify-

NO	QUESTION AND FILTERS	Please tick or circle your choice where applicable
Q9	If your answer to Q8 is "Yes" do you support this policy?	1. Yes 2. No 3. Partially
Q10	If your answer to Q9 above is "No or Partially" explain.	_____ _____
	SECTION TWO	
Q11	Do you have a cooperative work team between colleagues and the supervisors where you work?	1. Yes 2. No
Q12	If your answer to Q11 is "No" explain	_____ _____
Q13	(a) Are you trained in adolescent reproductive health and development health care?	1. Yes 2. No
	(b) Have attended any continuous medical education (CME) on adolescent reproductive health?	1. Yes 2. No
	(c) Have heard about youth friendly services?	1. Yes 2. No
Q14	When you are attending an adolescent patient/client, what is the MAXIMUM amount of time you give to each?	1. 20 minutes 2. 40 minutes 3. About one hour 4. Other-specify

NO	QUESTION	FILTERS
Q15	Are you adequately staffed where you give adolescent health services from?	1. Yes 2. No 3. I do not know
Q16	If your answer to Q15 is "No" what additional categories of staff do you need to be effective in these health care services?	1. Doctors 2. Nurses 3. Clinical officers 4. Administrators 5. Professional counsellors 6. Peer counsellors 7. Others-specify
Q17	If your answer to Q15 is "No" are there aspects of adolescent reproductive health that have been ineffective due to understaffing?	1. Yes 2. No 3. I do not know
Q18	If your answer to Q17 is "yes" indicate which of the adolescent reproductive health services have ineffective **–tick all applicable answers**	1. Counseling services 2. Contraceptive use 3. Sexual violence/ assault and post rape care 4. Post abortion care 5. Maternal/Child health inpatient and outpatient services 6. Pregnancy in the youth 7. Drugs and substance abuse 8. HIV/AIDS counseling/testing and treatment services 9. Cervical cancer, breast cancer screening and treatment services 10. Infertility screening and treatment services 11. Combining gender equality and reproductive health services 12. Others-specify-

SECTION THREE		
NO	**QUESTION AND FILTERS**	**Kindly tick or circle your choice where applicable**
Q19	Do your personal values allow you to do the following openly with anyone?-**tick all applicable answers.** a) -Discuss sexuality	a) 1. Yes 2. No
	b) -Discuss HIV and AIDS	b) 1. Yes 2. No
	c) -Discuss family planning	c) 1. Yes 2. No
	d) -Give family planning methods to those who are married	d) 1. Yes 2. No
	e) -Provide family planning methods to those who are unmarried	e) 1. Yes 2. No
	f) -Give artificial family planning methods to unmarried youth and school going children	f) 1. Yes 2. No
	g) Support masturbation	g) 1. Yes 2. No
	h) Support banning of female circumcision	h) 1. Yes 2. No
	i) Ban male traditional circumcision	i) 1. Yes 2. No
	j) Fight gender violence	j) 1. Yes 2. No
	k) Professional post abortion care for the unmarried	k) 1. Yes 2. No
	l) A separate place for adolescent reproductive health service	l) 1. Yes 2. No
Q20	If any part in Q19 is "No" explain.	_____ _____

NO	QUESTION	FILTERS
Q21	Which factors help you to be effective in providing adolescent reproductive health services?-**tick all applicable answers**	1. Self motivation 2. My training, experiences 3. Adequate supplies 4. Management motivates me 5. adequate staffing ratios 6. Clean safe environment with good ventilation 7. Management always listens to us 8. Management chain of command is good 9. Management provides supervision, mentorship, guidance 10. Others-specify
Q22	How frequently do your supervisors visit your work station?	1. Every day 2. Once a week 3. Several times a week 4. Once every two weeks 5. Once a month 6. Never 7. Other –specify-

NO	QUESTION	FILTERS
Q23	Do you get adequate supplies to use in youth reproductive health?	1. Yes 2. No
Q24	If your answer to Q23 is "No" which aspects of youth reproductive health services are ineffective due to the shortage?-**tick all applicable answers**	1. Counseling services 2. Contraceptive use 3. Sexual violence/ assault and post rape care 4. Post abortion care 5. Maternal/Child health inpatient and outpatient services 6. Pregnancy in the youth 7. Drugs and substance abuse 8. HIV/AIDS counseling/testing and treatment services 9. Cervical cancer, breast cancer screening and treatment services 10. Infertility screening and treatment services 11. Combining gender equality and reproductive health services 12. Others-specify-
Q25	Do you keep permanent records on adolescent reproductive health services?	1. Yes 2. No
Q26	What categories of these records do you keep?-**tick all applicable answers**	1. Patient's/clients file 2. Computers 3. Outpatient records 4. Inpatient cardex 5. Oral reports 6. Others-specify-

NO	QUESTION	FILTERS
Q27	Do you hold promotional activities in regards to adolescent reproductive health?	1. Yes 2. No
Q28	If your answer to Q27 is "Yes" specify	
Q29	Have you personally done any research on reproductive health or youth friendly services in this institution?	1. Yes 2. No
Q30	If your answer to Q29 is "Yes" specify your titles, year and if it was published	Title: Year: Published:
Q31	(a) Do you need any training on adolescent reproductive health and development	1. Yes 2. No
	(b) Kindly give any comments you may have	_____ _____ _____

THANK YOU FOR YOUR TIME AND PARTICIPATION

Appendix IIIA: Informed Consent for the Youth

Dear respondent,

My name is Christine Mwikali Musee. I am a student at the University of Nairobi currently undertaking a master's degree in nursing management and administration. One of the requirements of the award of this degree is to carry out a research study. In regard to this I am carrying out a research on **"adherence of Health Care Workers to the Adolescent Reproductive Health & Development policy at the Garissa Provincial General Hospital".**

In order to obtain the necessary information, I have deployed a questionnaire to be filled by youth clients/patients. Participation is voluntary and there is no penalty for declining to participate. There are no risks involved. The information you will provide will be treated with total confidentiality as required by the law and medical ethics. You are not required to write any identification information. You are free to withdraw from the study at any stage without any fear of victimisation.

The results of the study will improve health. If you wish to know the results they will be availed to you. You may ask any questions about your rights as a participant or anything else about the research. You can contact me on cell phone number **0722592569, email address** chistinemusee@gail.com .

Kenyatta National Hospital /Ethics Research Committee Contact is 0722829101 ext 4410 or 07226300 ext 4410

Thank you for your time

Respondent's consent

I have read (been explained to) and understood the above details about the research. I voluntarily agree (on behalf of the participant who is under 18 years of age agree that he/she) to participate in the study.

Respondent's sign (parent's or guardian's sign)_____Date_____

Relationship_____

Investigator's sign_____Date_____

Appendix IIIB (Kiambatisho) Waraka Wa Idhini Wa Vijana

Mpendwa mshiriki,

Jina langu ni Christine Mwikali Musee. Mimi ni mwanafunzi katika Chuo Kikuu cha Nairobi na kwa sasa nafanya sha
hada ya pili katika usimamizi wa uuguzi na utawala. Mojawapo ya mahitaji ya tuzo ya shahada hii ni kutekeleza utafiti. Kuhusu hii mimi nafanya utafiti wa "**Uzingatiaji wa Wafanyikazi wa Huduma ya Afya kwa Afya ya Uzazi ya Vijana & Sera ya Maendeleo katika Hospitali Kuu ya Mkoa ya Garissa**"

Ili kupata taarifa muhimu, mimi nitatumia maswali yaliyoandikwa kwenye hojaji na yatajazwa na wateja vijana/wagonjwa vijana. Kushiriki ni kwa hiari na hautaadhibiwa kwa ajili ya kukataa kushiriki. Hakuna hatari yoyote kwa ajia kushiriki. Habari utakayotoa itashughulikiwa kwa njia ya siri kama inavyotakiwa na sheria na maadili ya matibabu. Wewe hautahitajika kuandika taarifa yoyote itakayokutambulisha. Wewe uko huru kujitoa kutoka kwa utafiti huu wakati wowote bila ya hofu yoyote ya kuhangaishwa.

Mtokeo ya utafiti huu yataboresha huduma ya afya. Kama utataka kujua matokeo ya utafiti utapewa. Unaweza kuuliza maswali yoyote kuhusu haki zako kama mshiriki au kitu chengine chochote kuhusu utafiti huu. Unaweza wasiliana na mimi kwenye simu ya mkononi nambari **0722592569 au barua pepe christinemusee@gmail.com**

Mawasiliano kwa Kamati ya Maadili na Utafiti ya Hospitali ya Taifa ni haya 0722829101 ext 4410 au 07226300 ext 4410

Asante kwa kutumia muda wako

Idhini ya Mshiri

Nimesoma (nimeelezewa) na kuelewa maelezo yaliyoko hapo juu kuhusu utafiti huu. Mimi nakubali (kwa niaba ya mshiriki ambaye ako na umri wa chini ya miaka 18 nakubali yeye ashiriki) katika utafiti huu kwa hiari.

Sahihi ya Mshiriki(Sahihi ya Mzazi au Mlezi): _____ Tarehe: _____

Uhusiano: _____

Sahihi ya Mtafiti: _____ Tarehe:_____

Appendix IV: Questionnaire: Adolescent Exit Interview

Questionnaire No._____Interviewer_____ Date_____

"I am conducting this interview to assess the quality of care at this clinic and hope to use this information to improve services. I am asking clients about their satisfaction with the services provided. We hope that you can help us by agreeing to let me interview you today. I will not take your name. Your participation or refusal to participate in this interview will not affect the services you receive in any way. The interview will take about 10–15 minutes and will be kept completely confidential."

NO	QUESTION	FILTERS **Kindly tick or circle your choice where applicable**
Q1	How old are you in **completed years?**	
Q2	Gender	1. Male 2. Female
Q3	Is this your first time at this clinic?	1. Yes 2. No
Q4	What is your marital status	1. Single 2. Married 3. Divorced/Separated 4. Widowed
Q5	Do you think the cost of the service you received was acceptable?	1. Yes 2. No
Q6	If your answer to question 5 above is "No", what would you recommend as the hospital fee?	_____ _____ _____

NO	QUESTION	FILTERS **Kindly tick or circle your choice where applicable**
Q7	What kind of service did you come for today?- **tick all applicable choices**	1.Contraceptives (pills, intrauterine device, injections etc) 2.Condoms 3.Emergency contraceptives 4.HIV counselling 5.HIV and sexually transmitted infection testing and treatment 6.Pregnancy testing 7.Maternal care 8.Smear test 9.Treatment for other gynaecological matters 10.Services relating to experiences of sexual, physical or emotional violence 11.Miscarriage treatment services 12.Pre- and post-abortion care 13.Treatment for male sexual and reproductive health concerns 14.Sexuality counselling services 15.Other – please specify_____

NO	QUESTION	FILTERS
		Kindly tick or circle your choice where applicable
Q8	Did you get the services you came for?	1. Yes 2. No 3. Partially
Q9	If your answer to Q8 is "No or Partially" explain	_____
Q10	Did you receive any information on the following? (a) On safer sex options	(a) 1. Yes 2. No
	(b)On the prevention of HIV, sexually transmitted infections and unwanted pregnancy	(b) 1. Yes 2. No
	(c) On contraception (how it works, side-effects etc)	(c) 1. Yes 2. No
	(d) On emergency contraception	(d) 1. Yes 2. No
	(e) On relationships and sexual enjoyment	(e)1. Yes 2. No
	(f) On other concerns such as body image, genital hygiene, menstruation, masturbation, wet dreams	(f) 1. Yes 2. No
	(g) On where to go for services which this hospital does not provide	(g) 1. Yes 2. No
	(h) Other – please specify	(h) 1. Yes 2. No

NO	QUESTION	FILTERS
Q11	Did the health care provider clarify any concerns you had?	1. Yes 2. No 3. I had no concerns 4.
Q12	If your answer to Q11 is "Yes" or "No" explain	_____
Q13	What did you do while waiting to be seen?-**tick all the choices applicable**	1. Talk to other clients 2. Watch an educational video 3. Listen to health talks 4. Read educational materials 5. Other – please specify
Q14	Give any suggestions about how you could better spend your waiting time while waiting to be seen in future?	_____ _____
Q15	Are the clinic opening hours convenient for you?	1. Yes 2. No
Q16	If your answer to question 15 is "No", what would be the best day and time for you to come to the clinic?	1. Monday 2. Tuesday 3. Wednesday 4. Thursday 5. Friday 6. Saturday 7. Sunday 8. Others-specify- Time:_____

NO	QUESTION	FILTERS
Q17	Have you had any problems or difficulties as a result of services you received from this clinic?	1. Yes 2. No
Q18	If your answer to question 17 is "Yes", what type of problem?	_____ _____ _____
Q19	If you were unhappy with the visit were you aware of what you could do?	1. Yes 2. No
Q20	When you were receiving counselling or a physical examination, did you feel comfortable when other people were present in the room?	1. Yes 2. No 3. Not applicable
Q21	If your answer to question 20 above is "No", describe what you observed:	_____ _____ _____
Q22	Did the health care providers reassure you that any information concerning your personal situation and the service you received will remain confidential?	1. Yes 2. No 3. Not applicable
Q23	Do you feel that the time you spent at the clinic was?	1. Too long 2. Just right 3. Too short
Q24	Do you think that the waiting place is comfortable?	1. Yes 2. No
Q25	If your answer to question 24 above is "no", explain your answer	_____ _____

NO	QUESTION	FILTERS
Q26	Did the clinic staff treat you in a friendly manner?	1. Yes, all of them 2. Yes, some of them 3. No, none of them
Q27	In the past, were you given opportunities to express your opinion about the services provided in this clinic?	1. Yes 2. No 3. Not applicable
Q28	Have you been informed about the following? (i) When to return for your follow-up visit.	1. Yes 2. No
	(ii) That you can return at any time if you have questions or problems.	1. Yes 2. No
Q29	What suggestions can you make to improve this clinic and the services provided here?	_____ _____ _____
Q30	Was there anything in particular that you liked about the clinic?	1. Yes 2. No
Q31	If your answer to question 30 is "Yes", specify	_____ _____ _____
Q32	Was there anything in particular that you disliked about the clinic?	1. Yes 2. No
Q33	If your answer Q is 32 is "Yes" explain	_____ _____

NO	QUESTION	FILTERS
Q34	Would you recommend the clinic to a friend or relative?	1. Yes 2. No
Q35	If your answer to question 31 is "No", explain?	_____ _____ _____

THANKYOU VERY MUCH FOR YOUR PARTICIPATION

Appendix V: Observational Check List on YFS Characteristics

Questionnaire No._____Observer_____ Date_____

HEALTH PROVIDER AND STAFF			
Characteristics	**1. Yes**	**2. No**	**3. Comments**
1. Staff is friendly and responsive to youth clients			
2. Staff is (respectful) calls patient by name			
3. Staff ensures privacy of youth clientele			
4. Staff is understanding of and knowledgeable about youth concerns and needs			
5. Staff is specially trained to work with the youth			
6. Counselor health provider spend adequate time with youth clients (40 minutes and above)			
7. Medical workers spend adequate time with youth clients(40 minutes and above)			
8. Information on need for and timing of follow up visit(s) is given and is clear- ----------Date –time -place			
9. Peer counselors available			

POLICIES AND PROCEDURES			
Characteristics	**1. Yes**	**2. No**	**3. Comments**
10. Youth drop ins are welcome and accommodated			

11. Services are offered to both male and female clients			
12. Facility provides information to youth clients			
13. Facility provides audiovisual materials on RH services and youth concerns			
14. Group talks/discussions available			
15. Youth services are linked to other health services			
16. Programme network and necessary referral available			
17. Cost of RH services if affordable			

ENVIRONMENT AND FACILITIES

Characteristics	**1. Yes**	**2. No**	**3. Comments**
18. ARH services are provided at convenient (and separate) hours for youth clients			
19. Décor and surroundings are inviting to youth clients (that is, non medical)			
20. Counseling and examination rooms ensure privacy for youth clients			
21. Facilities are conveniently located for youth easy access			
22. Education materials are displayed			
23. Educational materials are available to youth clients to take away			
24. Peer youth education outreach programme available			
25. Youth involved in decision making on youth friendly services provision			
26. Any other need or comments			

Appendix VI: Guidelines for Key Informant Interview

Questionnaire No._____Observer_____ Date_____

"I am conducting this interview to assess the quality of reproductive health for the youth in this place and hope to use the information to scale up these services. Thank you very for agreeing to participate I will guide through the interview. All information generated will be handled in confidence".

1. **What are the key needs and concerns facing the health of the youth in Garissa?**
2. **What do you think could be done to scale up implementation of the adolescent reproductive health and development policy?**
3. **How can the local community be involved more in adolescent reproductive health?**
4. **What can you say about female circumcision in this region?**
5. **What challenges do you face in adolescent reproductive health?**
6. **Do you have any other comments?**

THANK YOU VERY MUCH FOR YOUR PARTICIPATION

Appendix VII: Work plan Gantt Chart

Year	2011				2012							
Month	Sept	Oct	Nov	Dec	Jan	Feb	Mar/ April / May	Jun	July	Aug	Sept	Oct
Proposal Development												
Submission of proposal to ethic committee/ development												
Preparation of research tools												
Permission from institution of research												
Recruitment and training												
Pretesting of research tools												
Data collection												
Data analysis and report writing												
Dissemination of research findings												
Publishing												
Research defense												

Appendix VIII: Budget

Component	Activity Description	Item	Unit Of Measurement	Cost Per Unit	Total Cost
Proposal Preparation	Search for literature/information from libraries	Transport and accommodation	30 days	800	24000
		Air time	30 days	100	3000
	Internet services	Modem air time	30 days	1000	30000
	Stationary	A4 note books	3 pieces	100	300
		Pens	24 pieces	20	480
		Pencils	6 pieces	15	90
		Erasers	6 pieces	15	90
		Proposal typing	3 drafts	400	1200
		Photocopying	6 drafts	400	2400
	Lab top purchase	Purchase fee	1	63000	63000
	UON/ERC	Fee	1	1000	1000
	Ministry of higher education	Fee	1	1000	1000
SUBTOTAL					**126560**
Research Implementation And Data Analysis Phase	Research tool pre-testing	Transport and accommodation	1 day	3000	3000
		Printing and photocopying	10 copies	50	500
	Questionnaires, observational check lists, key informant guidelines, consent forms	Data collection, data entry and data analysis	30 days	800	24000
		Transport and accommodation			
		Photocopying	1050 copies	5	10500
Personnel	Salaries and allowances	Biostatician	Whole job basis	10000	10000
SUB TOTAL					**26400**
Report Writing	Draft reports	Transport and accommodation	30 days	1000	30000
		Typing	200 pages	400	400
		Photocopying	6 copies	400	2400
		Binding	6 copies	250	1500
SUB TOTAL					**34300**
Contingencies					9363
GRAND TOTAL					**196623**

Appendix IX: Letter to the University of Nairobi-Kenyatta National Hospital Ethics Committee

Christine M. Musee,

School of Nursing Sciences,

College of Health Sciences,

University of Nairobi.

31st January, 2012

The Chairperson,

UON-KNH Ethics Research Committee,

P.O. Box 20723, 00202,

Nairobi.

Dear Sir/Madam,

Request for permission to conduct research

I am applying to request for permission to carry out a research at the Garissa Provincial General Hospital between the months of March and June this year.

I am a postgraduate student at the University of Nairobi pursuing Master of Science in Nursing Management and Administration. I am preparing to conduct research as part of the requirements for the award of the degree.

The study will conducted on health care practitioners who attend to adolescents at the hospital and the adolescent patients/clientele themselves. The research title is **"adherence of the health care practitioners to the ARH&DARH&D at the Garissa Provincial General Hospital".**

I would be grateful for your consideration.

Yours faithfully,

Signature_____

Christine Mwikali Musee cellphone number 0722592565, email christinemusee@gmail.com

UNIVERSITY OF NAIROBI
COLLEGE OF HEALTH SCIENCES
P O BOX 19676 Code 00202
Telegrams: varsity
(254-020) 2726300 Ext 44355

KNH/UON-ERC
Email: uonknh_erc@uonbi.ac.ke
Website: www.uonbi.ac.ke
Link:www.uonbi.ac.ke/activities/KNHUoN

KENYATTA NATIONAL HOSPITAL
P O BOX 20723 Code 00202
Tel: 726300-9
Fax: 725272
Telegrams: MEDSU P, Nairobi

Ref: KNH-ERC/A/94

30th April 2012

Christine Mwikali Musee
School of Nursing Sciences
College of Health Sciences
University of Nairobi

Dear Christine

RESEARCH PROPOSAL: "ADHERENCE OF HEALTH CARE PRACTITIONERS TO THE ADOLESCENT REPRODUCTIVE HEALTH AND DEVELOPMENT POLICY AT THE GARISSA PROVINCIAL GENERAL HOSPTAL, KENYA" (P75/02/2012)

This is to inform you that the KNH/UoN-Ethics & Research Committee (ERC) has reviewed and approved your above revised research proposal. The approval periods are 30th April 2012 to 29th April 2013.

This approval is subject to compliance with the following requirements:

a) Only approved documents (informed consents, study instruments, advertising materials etc) will be used.
b) All changes (amendments, deviations, violations etc) are submitted for review and approval by KNH/UoN ERC before implementation.
c) Death and life threatening problems and severe adverse events (SAEs) or unexpected adverse events whether related or unrelated to the study must be reported to the KNH/UoN ERC within 72 hours of notification.
d) Any changes, anticipated or otherwise that may increase the risks or affect safety or welfare of study participants and others or affect the integrity of the research must be reported to KNH/UoN ERC within 72 hours.
e) Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. (*Attach a comprehensive progress report to support the renewal*).
f) Clearance for export of biological specimens must be obtained from KNH/UoN-Ethics & Research Committee for each batch of shipment.
g) Submission of an *executive summary* report within 90 days upon completion of the study This information will form part of the data base that will be consulted in future when processing related research studies so as to minimize chances of study duplication and/or plagiarism.

For more details consult the KNH/UoN -ERC website www.uonbi.ac.ke/activities/KNHUoN

Appendix X: Letter to the Garissa Provincial General Hospital

Christine Mwikali Musee,

School of Nursing Sciences.

College of Health Professions.

University of Nairobi.

31st January, 2011

The Hospital Medical Superintendent,

Garissa Provincial General Hospital.

Dear Sir/Madam,

Re: request to be allowed to conduct research

I hereby apply to conduct a research at your hospital, Garissa Provincial General Hospital between the months of March and June this year.

I am a postgraduate student at the University of Nairobi pursuing Master of Science degree in Nursing Management and Administration.

The study will be conducted on health care practitioners attending to adolescent patients at the Garissa Provincial General Hospital and the adolescent patients/clientele themselves. My research title is **"Adherence of the Health Care Practitioners to the Adolescent Reproductive Health and Development Policy at the Garissa Provincial General Hospital".**

I would be grateful for your consideration.

Yours faithfully,

Signature_____

Christine Mwikali Musee-cellphone number 0722592569, email christinemusee@gmail.com

APPENDIX 1X: LETTER TO THE GARISSA PROVINIAL GENERAL HOSPITAL

Christine Mwikali Musee,

School of Nursing Sciences,

College of Health Professions,

University of Nairobi.

31st January, 2011

The Hospital Medical Superintendent,

Garissa Provincial General Hospital.

Approved 7/6/12
Dr Ayonga

Dear Sir/Madam,

Re: request to be allowed to conduct research

I hereby apply to conduct a research at your hospital, Garissa Provincial General Hospital between the months of March and June this year.

I am a postgraduate student at the University of Nairobi pursuing Master of Science degree in Nursing Management and Administration.

The study will be conducted on health care practitioners attending to adolescent patients at the Garissa Provincial General Hospital and the adolescent patients/clientele themselves. My research title is **"Adherence of the Health Care Practitioners to the Adolescent Reproductive Health and Development Policy at the Garissa Provincial General Hospital".**

I would be grateful for your consideration.

Yours faithfully,

Signature_____

Christine Mwikali Musee-cellphone number 0722592569, email christinemusee@gmail.com

Appendix XI: Letter to the National Council for Science and Technology

Christine Mwikali Musee,

School of Nursing Sciences'

College of Health Professions,

University of Nairobi

8th February, 2011

The Permanent Secretary,

Ministry of Higher Education,

P.O. Box 30623, 00100,

Nairobi.

Dear Sir/Madam,

Re: request to be allowed to conduct research

I hereby apply to conduct a research at the Garissa Provincial General Hospital between the months of March and June this year.

I am a postgraduate student at the University of Nairobi pursuing Master of Science degree in Nursing Management and Administration.

The study will be conducted on health care practitioners attending to adolescent patients at the Garissa Provincial General Hospital and on the adolescent patients/clientele themselves. My research title is **"Adherence of the Health Care Practitioners to the Adolescent Reproductive Health and Development Policy at the Garissa Provincial General Hospital".**

I would be grateful for your consideration.

Yours faithfully,

Signature_____

Christine Mwikali Musee-cellphone number 0722592569, email christinemusee@gmail.com

REPUBLIC OF KENYA

NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telephone: 254-020-2213471, 2241349
254-020-310571, 2213123, 2219420
Fax: 254-020-318245, 318249
When replying please quote
secretary@ncst.go.ke

P.O. Box 30623-00100
NAIROBI-KENYA
Website: www.ncst.go.ke

Our Ref: **NCST/RCD/14/012/105**

Date: **22nd June 2012**

Christine Mwikali Musee
University of Nairobi
P.O Box 30197
Nairobi

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Adherence of health practitioners to the adolescent reproductive health and devepoment policy at the Garissa Provincial General Hospital"*** I am pleased to inform you that you have been authorized to undertake research in **North Eastern Province** for a period ending **29th April, 2013.**

You are advised to report to **the Provincial Director of Education, the Provincial Commissioner** and **the Provincial Director of Medical Services, North Eastern Province** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

DR. M. K. RUGUTT, PhD, HSC.
DEPUTY COUNCIL SECRETARY

Copy to:
Provincial Director of Education
Provincial Commissioner
Provincial Director of Medical Services
North Eastern Province.

PAGE 2

PAGE 3

Research Permit No. *NCST/RCD/12A/012*

THIS IS TO CERTIFY THAT:

Date of issue *22nd June, 2012*

Fee received *KSH. 1,000*

Prof./Dr./Mr./Mrs./Miss/Institution
Christine Mwikali Musee
of (Address) University of Nairobi
P.O.Box 30197-00100, Nairobi.
has been permitted to conduct research in

Location
North Eastern District
Province

on the topic: Adherence of health practitioners to the adolescent reproductive health and development policy at the Garissa Provincial General Hospital.

Applicant's Signature

Secretary
National Council for Science &Technol

for a period ending: 29th April, 2013.

Appendix XII: Letter to Kitui District General Hospital

Christine Mwikali Musee,

School of Nursing Sciences,

College of Health Professions,

University of Nairobi.

8th February, 2011

The Hospital Superintendent,

Kitui District General Hospital,

P.O Box, 22-90200

Kitui.

Cellphone number 0724036822.

Dear Sir/Madam,

Re: request to be allowed to pre-test two research questionnaires in your hospital

I hereby request to pre-test two different research questionnaires, a key informant guide and a check list in your hospital. I will be conducting a research, Garissa Provincial General Hospital between the months of March and July this year.

I am a postgraduate student at the University of Nairobi pursuing Master of Science degree in Nursing Management and Development.

The study will be conducted on health care practitioners attending to adolescent patients at the Garissa Provincial General Hospital and on the adolescent patients/clientele themselves. My research title is **"Adherence of the Health Care Practitioners to the Adolescent Reproductive Health and Development Policy at the Garissa Provincial General Hospital".**

I would be grateful for your consideration.

Yours faithfully,

Signature_____

Christine Mwikali Musee-cellphone number 0722592569, email address christinemusee@gmail.com

UNIVERSITY OF NAIROBI
COLLEGE OF HEALTH SCIENCES
P O BOX 19676 Code 00202
Telegrams: varsity
(254-020) 2726300 Ext 44355

KNH/UON-ERC
Email: uonknh_erc@uonbi.ac.ke
Website: www.uonbi.ac.ke
Link:www.uonbi.ac.ke/activities/KNHUoN

KENYATTA NATIONAL HOSPITAL
P O BOX 20723 Code 00202
Tel: 726300-9
Fax: 725272
Telegrams: MEDSUP, Nairobi

Ref: KNH-ERC/A/94

30th April 2012

Christine Mwikali Musee
School of Nursing Sciences
College of Health Sciences
University of Nairobi

Dear Christine

RESEARCH PROPOSAL: "ADHERENCE OF HEALTH CARE PRACTITIONERS TO THE ADOLESCENT REPRODUCTIVE HEALTH AND DEVELOPMENT POLICY AT THE GARISSA PROVINCIAL GENERAL HOSPTAL, KENYA" (P75/02/2012)

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This approval is subject to compliance with the following requirements:

a) Only approved documents (informed consents, study instruments, advertising materials etc) will be used.
b) All changes (amendments, deviations, violations etc) are submitted for review and approval by KNH/UoN ERC before implementation.
c) Death and life threatening problems and severe adverse events (SAEs) or unexpected adverse events whether related or unrelated to the study must be reported to the KNH/UoN ERC within 72 hours of notification.
d) Any changes, anticipated or otherwise that may increase the risks or affect safety or welfare of study participants and others or affect the integrity of the research must be reported to KNH/UoN ERC within 72 hours.
e) Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. (*Attach a comprehensive progress report to support the renewal*).
f) Clearance for export of biological specimens must be obtained from KNH/UoN-Ethics & Research Committee for each batch of shipment.
g) Submission of an *executive summary* report within 90 days upon completion of the study
This information will form part of the data base that will be consulted in future when processing related research studies so as to minimize chances of study duplication and/or plagiarism.

For more details consult the KNH/UoN -ERC website www.uonbi.ac.ke/activities/KNHUoN

Figure 9: **THE MAP OF GARISSA**

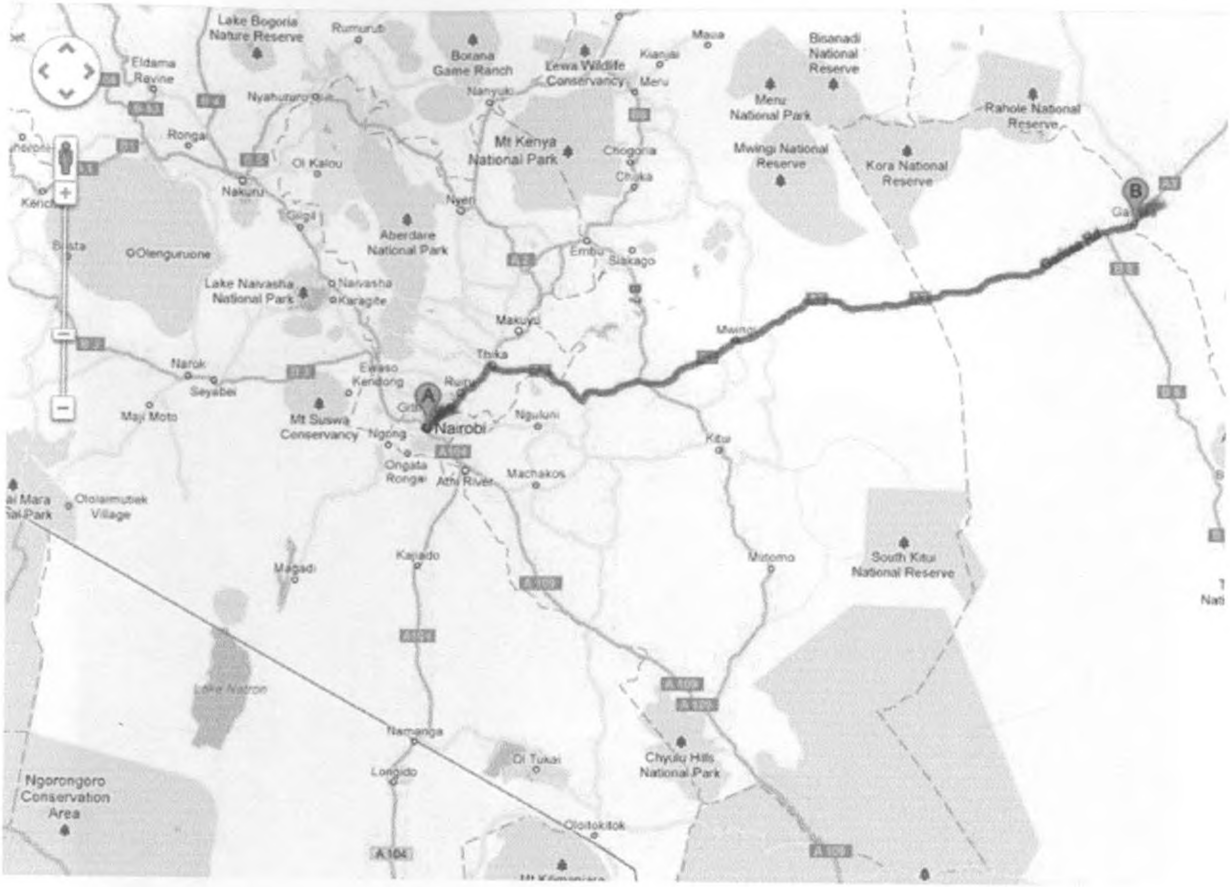

Figure 10: PHOTOGRAPH OF GARISSA PROVINCIAL GENERAL HOSPITAL