YOUTH FRIENDLY HEALTH SERVICES IN KENYA: CHARACTERISTICS, KNOWLEDGE, ATTITUDE, PRACTICES AND EXPERIENCES

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Youth Friendly Health Services in Kenya: Characteristics, Knowledge, Attitude, Practices and Experiences

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other University.

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This thesis has been submitted for examination with our approval as the university supervisors.

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DEDICATION

This thesis is dedicated to my family; my late daddy, Mr. Tom Kitui Khakame, my friend Yonni, my darling daughters Gailyn Atieno, Myranda Audrey, Misha Shirnley and Khloe´ Hawi and finally 'The Kitui's Family (mums Rosepolly and Violet, sister Joan and Philis) for their support, perseverance and encouragement during my study years. 'I Love you So Much'.

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ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune - Deficiency Syndrome.
ARHD	Adolescent Reproductive Health and Development
ASRH	Adolescent Sexual and Reproductive Health
AYA	African youth alliance
CCC	Comprehensive Care Clinic
CPD	Commission on Population and Development
FRESH	Focus Resources on Effective School Health
HIV	Human Immune-deficiency Syndrome
KEMRI	Kenya Medical Research Institute
KSPA	Kenya service provision Assessment
MLKH	Mama Lucy Kibaki Hospital
MCRH	Mbagathi County referral hospital
MCH	Maternal Child Health Clinic
MOH	Ministry of Health
NCPD	National Council on Population Development
NGO	Non-Governmental Organizations
OPD	Outpatient Clinic
PCD	Partnership for child development

SPSS	Statistical Package for Social Sciences
SRH	Sexual and reproductive health services
STIs	Sexually Transmitted Infections
UN	United Nation
UNFPA	United Nations Population Fund
UHC	Universal Health Coverage
VCT	Voluntary Counselling and Testing
WBG	World Bank Group
WHO	World Health Organization
YFHS	Youth friendly health services
YFRHS	Youth Friendly Reproductive Health
YRH/ FP	Youth Reproductive Health and Family Planning.

DEFINITION OF TERMS

Accessible Able to be reached or entered.

Adolescent A young person in the process of developing from a child into an adult.

Adolescence The period between 10 and 19 years, there is major physical and psychological change, as well as great changes in social interactions and relationships.

Appropriate Suitable or right for a particular situation or occasion.

Clinic Department or a unit in the Hospital

Equitable Treating everyone fairly and in the same way (dictionary.cambridge.org)

Health Facility The health structure or organizations whose primary purpose and activities is to promote, restore or maintain health.

Health service provider a professional who provides reproductive health services.

Youth is the time of life when one is young, but often means the time between childhood and adulthood (maturity). In this study, there are people aged 10-24 years. They comprise WHO definition of adolescents (10-19) and youth as aged between 15-24 years.

Youth friendly health services / youth services Broad based health and related services provided to young people to meet their individual health needs in a manner and environment that attracts their interest and sustains their motivation to utilize such services. These services are described in the context in

which they are offered and accepted by the youth. That is, the type of environment in which youth services are offered, the services that are available, these services are acceptable and affordable, and finally who offers these services to the youth. The World Health Organization describes youth friendly health services as services that are accessible, acceptable, affordable, and appropriate for adolescents.

Universal Health Coverage This is where all individuals and communities receive the health services, they need without suffering financial hardship (WHO, 2018).

Utilization The ability to consume services and incorporate economics, geographic location, abundance of health services, physical and social resources, or usage of the youth friendly reproductive health services.

ABSTRACT

About 1.8 billion people in the world today are aged between 10 and 24years. The youth have unique needs that must be addressed. Youth friendly health services are able to effectively attract young people, meet their needs comfortably and responsively and succeed in retaining young clients for continuing care, as they meet their expectations and improve their health. Some of the reproductive health challenges faced by the young people include STIs, HIV/AIDS, unplanned pregnancies, unsafe abortion, female genital mutilation, drug abuse and sexual violence. The study was conducted for 4 months at Mbagathi County referral hospital and Mama Lucy Kibaki Hospital. Four hundred and twenty-two youth were sampled and one service provider in each health facility was the key informant. The broad objective was to assess characteristics, knowledge, attitude, practices, experiences and factors associated with youth friendly health services in selected health facilities in Nairobi County The study employed a convergent parallel mixed method study design. Data was collected from the youth using structured questionnaires and in-depth interviews With service providers. Data was analyzed using SPSS version 20 with $p \leq 0.05$ and thematic translation for qualitative data. Results revealed that, majority of the youth were aged 20-24 years (62.3%) with ages 10-14 years being 7.8%. Facility characteristics like convenient location, privacy and confidentiality at the clinics needed improvement to meet World Health Organization standards, except for Comprehensive Care Clinics (CCC). Youth have low knowledge of youth friendly health services (33.9%). Youth friendly health services were embedded in existing and readily available services at the facilities. The outpatient department had more first-time visits by youth in contrast to CCC and MCH, which had repeat visits. Service providers were reported to be respectful and friendly. Youth experienced comfortable sitting space, convenient working hours and short waiting time, these enhanced utilization of youth services. While experiences like lack of information, long waiting time, staff attitude and lack of funds were a hindrance to service utilization. Service provider experiences like poor training, inadequate space, shortage of staff, attitude by youth and long working hours were a hindrance to service provision. In conclusion, youth friendly service facility characteristics advocated by the World Health Organization were not adhered to. The recommendation is that youth friendly health services should be introduced or integrated into existing health services to increase availability. Facilities should be improved to meet the World Health Organization standards for youth friendliness, and health personnel should be well trained in youth services and collaboration by different agencies is paramount.

CHAPTER ONE

INTRODUCTION

1.1: Background Information

About 1.8 billion people in the world today are aged between 10 and 24 years. There are several reasons why the Sexual and Reproductive Health (SRH) of adolescents and youth should receive special attention (Morris, 2015), To begin with, the youth experience the following specific vulnerabilities that are unique to their age group: physiological vulnerability; high susceptibility to peer pressure; tendency to engage in risk-taking behavior; less ability to negotiate safer sex practices; and difficulty accessing reproductive health information and services. These unique needs should be addressed to promote social, economic and political progress.

In a study conducted by International Youth Foundation, it emerged that, despite the geographical, economic, and cultural diversity around the world, adolescents express similar concerns related to their education, economic life, and health. As part of the largest youth cohort in the history of the world, today's adolescents need information, services, and support to prevent unplanned pregnancies, unsafe abortion, HIV/AIDS and sexually transmitted infections (STI's). In addition to the negative physical consequences of poor reproductive health, adolescents also face social consequences from unplanned pregnancies and STI/HIV infection, including limited educational and employment opportunities. This ultimately leads to adolescents' inability to contribute to their communities and to society's progress. (Brock. 2007).

According to Susan and Rita , other facts about youth reproductive health are that 15 million young women aged 15 to 19 years give birth every year, worldwide nearly 4.5 million adolescents undergo abortion each year; 40 % occur under unsafe conditions, adolescents aged 15-19 are twice as likely to die during pregnancy or childbirth as those over age 20, girls under 15 are at 5 times greater risk of dying

from complications related to pregnancy or birth, more than 50% of all new HIV infections occur among people under the age of 25, nearly 11.8 million youth are living with HIV or AIDS and 62 % of infected youth are female (Brock, 2007)

In sub-Saharan Africa, adolescents face many significant SRH challenges such as limited access to youth-friendly services (YFS) including information on growth, unsafe abortion, gender-based violence, sexuality, and family planning (FP). This has led youth into risky sexual behavior resulting in high STI and HIV prevalence among young people, early pregnancy, and vulnerability to delivery complications (Ninsiima, 2021). Additionally, youth require modern contraceptives and condoms to protect against Sexually Transmitted Infections (STI) including HIV, Contraceptive need among sexually active school adolescents in the nine sub-Saharan African countries is high. Such a need calls for the development of country-specific and or the review of existing school-based sexual health education and youth-friendly sexual and reproductive health (James *et al.,* 2022).

Access to quality health services is paramount in achieving universal health coverage. Despite its importance, access to services has been hindered by many factors including financial affordability, physical accessibility and social and cultural acceptability, availability (Kieny, 2018) and equity of health services. Operational factors including operational policies or clinic characteristics can inadvertently serve to reduce access. This is because clinics may have long waiting time, long distance to clinics and insufficient time spent for consultation (Zombe, 2016). Some of the barriers that adolescents face in obtaining the health services they need also affect children and adults, this may be dealt with by embracing Universal Health Coverage.

The World Health Organization has advocated for countries to embrace Universal Health Coverage (UHC). Over the last few years, Universal Health Coverage (UHC) – defined as the capacity to provide all people with access to needed health services of sufficient quality to be effective, while also ensuring that the use of these services

does not expose the user to financial hardship has gained momentum at global level (Akhnif, 2018). This includes the full spectrum of essential, quality health services, from health promotion to prevention, treatment, rehabilitation, palliative care. UHC enables people to access services like treatment of disease and address other causes of death. UHC more so ensures that the quality of those services provided is good enough to improve the health of the people who receive them. As much as UHC advocates for access to services, it does not mean free coverage for all possible health interventions.

UHC also encompasses health services systems, health workforce, health facilities and communication networks, health technologies, information systems, quality assurance, governance and legislation. It ensures a progressive expansion of coverage of health services and financial protection. Apart from individual treatment services, population-based services such as public health campaigns are also included. Lastly, taking steps towards UHC means steps towards equity, development priorities, and social inclusion and cohesion (WHO, 2018). Some of these steps can be achieved by reinforcing health professional's training to protect adolescents and young peoples' sexual health, (Bomfim *et al.*, 2020)

Youth friendly health services in Kenya

In Kenya, the Kenya National Bureau of Statistics (2010) census report estimated Kenya's youth to be approximately 40% of the Kenya's population, of whom 36% are aged between 10 to 24 years (Kenya National Bureau of Statistics (KNBS) and ICF Macro, 2010). A study conducted by the National Council on Population Development, revealed that young people aged between 15 to 24 years in Kenya face a threatening reality considering the high vulnerability to a myriad of issues such as HIV and STIs infection, unintended early pregnancies, and consequent unsafe abortions" ((NCAPD), (MOMS), (MOPHS), (KNBS) [Kenya], ICF Macro. 2011).

There are also insufficient ‘youth friendly’ integrated reproductive health one stop facilities where the youth can access preventive services, maternal child health services, and HIV care and treatment and support. This is despite the commitment by the government in 2003 to have 85% of facilities offering ‘youth friendly’ services by 2015, ((NCAPD), (MOMS), (MOPHS), (KNBS) [Kenya], ICF Macro. 2011).

The 2010 Kenya service provision Assessment (KSPA) assessed the availability of youth- friendly HIV counseling and testing services. It also assessed the availability of guidelines, protocols, and trained providers to support the provision of these services. Overall, only seven percent of all facilities offer youth-friendly HIV testing services. In Kenya only seven percentage of all facilities offered youth-friendly services (YFS) for counseling and testing for HIV/AIDS (Table 1.1). Among these, there is the percentage with components supporting YFS, by background characteristics including the ownership of the facility (Kenya service provision Assessment, 2010)

Table 1.1: Youth friendly health services for HIV/AIDS counseling and testing in Kenya

Facilities offering youth-friendly services (YFS) for counseling and testing for HIV/AIDS and components supporting YFS, by background characteristics, Kenya SPA 2010						
Background characteristic	% of facilities offering YF HIV testing services	No. of facilities	% of facilities with:			No. of facilities offering YF HIV testing services
			Observed policy/ guidelines for YFS.	≥ 1 YFS trained staff.	All YFS items	
Managing authority						
Government	8	345	47	78	37	27
NGO	13	24	40	64	40	3
Private (for profit)	3	237	27	51	23	7
Faith-based organization	15	89	77	89	71	13
Province						
Nairobi	17	45	30	78	25	8
Central	2	125	39	43	14	2
Coast	7	81	58	83	58	6
Eastern	6	118	63	100	63	7
N. Eastern	0	24	-	-	-	0
Nyanza	11	83	52	55	23	9
Rift Valley	5	175	88	99	88	8
Western	24	44	32	65	29	11
Total	**7**	**695**	**52**	**77**	**44**	**51**

1.2 Statement of the Problem

Youth friendly health services are essential to ensure adolescents and young people are healthy. When health services are not accessible or affordable to all people, Universal Health Coverage cannot be truly universal. The WHO has developed tools to guide on how to make health services youth friendly. These tools contain essential components like equitability, accessibility, acceptability, appropriateness, and effectiveness of health services (Thompson, 2015).

Kenya has sparsely distributed youth friendly health centers yet a third (33%) of the population is made up of youth and adolescents (KNBS, 2019). This implies the

facilities that offer youth friendly health services are very few hence making the services inaccessible to many. The Kenya service provision Assessment (KSPA) 2004 indicated that only 12 % of facilities were able to provide youth friendly health services. The KSPA 2010 survey showed that only seven percent of all Kenyan Health Facilities provided YFS for HIV/AIDS services.

In Nairobi, only 17% of all health facilities offer youth friendly health services, out of which eight percent are government owned health facilities. This makes majority of the youth miss utilization of health services when need arises, the implication of this is visiting illegal clinics or depending on wrong health advice from their peers. There is need to establish more youth friendly Health services especially in government owned health facilities to care for the growing youth population due to their unique needs from the rest of the population (MOMS, MOPHS, KNBS, ICF Macro. 2011)

Although there has been increased attention to youth-friendly reproductive health services, little research has been conducted among adolescents in Kenya to assess youth friendly health services. Hence the need to carry out research: youth friendly health services utilization in some selected health facilities at Nairobi County.

1.3 Justification of the Study

Youth friendly health services integration in most health facilities in Kenya will improve access to youth friendly sexual and reproductive health services countrywide. There is need to address factors that impede the demand for and utilization of youth health services in Kenya. The National Reproductive Health Strategy 2009-2015 identified some of these factors within the health care system, they included weak management systems, inadequate skilled attendants, lack of needed equipment and maintenance, drugs and supplies, and poor referral and linkage systems.

Nairobi County has a large population hence the need to have adequate health facilities that offer YFHS. Most public heath institutions including Mbagathi County referral hospital and Mama Lucy Kibaki Hospital may not have well-established YFHS departments. The youths (aged 13- 24 years) are attended to in the same clinics as adults. This is a barrier to the uptake of youth health services because general clinics lack facility youth friendly characteristics like, convenient location and hours, affordable fees, competent and friendly clinicians.

In the era where adolescents are high in number and have services needs for HIV and other health problems, increasing availability of youth services and knowledge on youth services, and improving attitude and practices of YFHS will help attract adolescents, responsively meet their health needs, and succeed in retaining these young clients for continuing health care.

The findings from the study will inform MOH to improve on the youth friendly health service provision through improvement of physical facilities, staff training and services.

1.4 Research Questions

1. What are the characteristics of Youth Friendly Health Services in available services at Mbagathi County referral hospital and Mama Lucy Kibaki Hospital in Nairobi?
2. What is the knowledge, attitude and practice among youth and service providers regarding Youth Friendly Health Services in Mbagathi County referral hospital and Mama Lucy Kibaki Hospital Nairobi?
3. What are the experiences that arise in the course of seeking and providing Youth Friendly Health Services and what factors influence the utilization and provision of service in Mbagathi County referral hospital and Mama Lucy Kibaki Hospital in Nairobi County?

1.5 Objectives

1.5.1 Broad Objective

To assess characteristics, knowledge, attitude, practices, experiences and factors associated with youth friendly health services in selected health facilities in Nairobi County.

1.5.2 Specific objectives

1. To determine the characteristics of Youth Friendly Health Services in available services at Mbagathi County referral hospital and Mama Lucy Kibaki Hospital.
2. To determine knowledge, attitude, and practices regarding youth friendly health services at Mbagathi County referral hospital and Mama Lucy Kibaki Hospital.
3. To explore the experiences and factors that influence the utilization and service provision of Youth Friendly Health Services at Mbagathi County referral hospital and Mama Lucy Kibaki Hospital.

CHAPTER TWO

LITERATURE REVIEW

2.1 Youth Friendly Health Services

International Non-governmental Organizations like Pathfinder International and International Planned Parenthood Federation have defined Youth friendly health services as being able to effectively attract adolescents and young people, responsively meet their varying needs, and succeed in retaining these young clients for continuing care. Youth-friendly health services (YFHS) are a promising approach to delivering health services to meet the SRH needs of young people. These services should meet certain youth friendly characteristics to be effective for example, trained providers, convenient location and working hours, accessibility and young people should be involved in designing, implementing, and evaluating the program among others (Woldeyohannes, 2017).

The United Nations Population Fund (UNFPA) works towards an HIV free generation by promoting human rights and gender equality through, providing young people with information to acquire knowledge, providing young people with opportunities to develop life skills, providing young people with access to sexual and reproductive health services and commodities for pregnancy and HIV prevention and treatment, care and support, and Creating a safe and supportive environment that does not discriminate or hinder young people's access to services. They aim to reduce new HIV infection among the young people aged 15-24 by 30% by 2015 in 17 focus countries including Kenya (UN, 2011).

A systematic approach developed by the World Health Organization Department of Child and Adolescent Health and Development (WHO/CAH) currently supports countries in the use of the "four-S's" approach to strengthen the health sector's contribution to adolescent health and development (WHO, 2015) in:

- gathering and using strategic information
- developing supportive evidence-based policies
- scaling up health service provision and utilization
- Strengthening action in other sectors (such as education and the media.

The National SRH and HIV programmes should incorporate these key elements of the 4-S framework to strengthen the health sector response to adolescent health. These contribute to improving adolescent heath in two main ways: by recommending comprehensive, multisectoral and evidence-informed adolescent health approaches; and by delineating and supporting the critical contribution of the health sector, including the leadership role of health ministries (Fisher, 2011).

The World Health Organization further identified five key dimensions of youth friendly health services as: equitable, accessible, acceptable, appropriate and effective (Mazur, 2018). Accessible is where adolescents can obtain the health services that are available, services are acceptable if adolescents are willing to obtain the health services available, equitable services ensure all adolescents, not just selected groups, are able to obtain the health services that are available. Appropriate services are the right health services (the ones they need) and lastly effective is where the right health services are provided in the right way and make a positive contribution to the health of the youth (Mazur, 2018).

Mazur further broke down these WHO dimensions of youth friendly health services in their study as follows: Accessible was described as; convenient open hours, availability of transport, services that are affordable, awareness of location, hours and services that are available, education on youth services should be available and appointment for services is possible. Acceptable refers to; satisfactory services, client recommends clinic to a friend, community supports facility, client is willing to return to clinic, and lastly service expectations are met. Appropriate services

included service delivery or referral, choice of treatment options. Equitable refers to; all ages are welcome, all gender, races, religion, marital status, and sexual orientation. Lastly, effectiveness includes supplies and equipment are available, competent staff, client follows advice, quality improvement and correct treatment (Mazur, 2018)

Youth-Friendly Health Facility Characteristics include convenient location, adequate space, counseling areas that provide visual and auditory privacy, examination areas that provide visual and auditory privacy, comfortable surroundings, high quality adolescent health materials available, in all the languages that young people in the community speaks and for various reading levels, including low literacy, clear and visible information about youth clinic hours and location, automated voice messaging on telephones providing information about location, visiting hours, and telephone number for counseling, and displays of information and health education materials on issues related to adolescent sexual and reproductive health (Desiderio, 2014).

2.2 Needs of adolescents

Adolescence is a period of experimentation, but most adolescents grow through this period in a healthy way. However, many challenges have to be faced and handled for instance, one in 10, 18-year-olds in Europe suffers from depression. The region includes countries with the highest adolescent suicide rates in the world. One in four boys and nearly one in six girls drink alcoholic beverages once a week at age 15 (25 %). Of 15-year-olds have had sexual intercourse; in addition, in some countries, more than 30% of their youth are not using condoms or other forms of contraception, resulting in sexually transmitted diseases and unintended pregnancies. To protect children and adolescents, policies should be developed that consider their specific needs whilst adopting a rights-based approach. Concern about unintended pregnancy and sexually transmitted infections (STIs) (Madkour *et*

al.,2010). This necessitates the involvement of children and adolescents in the decision-making process in their care.

Additionally, not investing in the health and development of adolescents and youth contributes to the vicious cycle of ill health and socioeconomic deprivation (WHO, 2009). The international conference on Population and population Development (ICPD) drew attention to the special needs of adolescents regarding sexual and reproductive health. Statistics show that 1.7 million young women aged 15 - 19 years give birth every year, half of all new HIV infections are among people aged 15 - 24 years and over 6000 contract HIV virus daily (Braeken, Rondinelli, 2012). Sexual and reproductive health needs of young people: Matching needs with systems.

2.5 Reproductive Health Services

Few programs intended for adolescents and the youth have used research in the local communities to guide their design and development. Despite the enormous diversity of cultures, settings and norms on the African continent, surprisingly few interventions for young people have taken cultural context into account. With regard to physiological vulnerabilities, adolescent girls have biologically immature reproductive and immune systems, which make them particularly vulnerable to sexually transmitted infections (STIs) (Bearinger *et al.,* 2007.) In addition, early pregnancy and STIs (including HIV) threaten the health of adolescents more than at any other age group.

Most adolescent health programs have focused on risk factors that predispose the youth to health and social problems. This should not be the case as the youth should be motivated to make healthy decisions as regards their health. Integrated development and youth reproductive health and family planning (YRH/FP) programs help young people to develop skills, self-esteem, and motivation necessary for healthy sexual and reproductive behavior. Integration also offers them the

opportunity to develop educational, vocational, leadership and other life skills for adulthood (Brock, 2007).

The Programme of Action of the International Conference on Population and Development and the key actions for its further implementation clearly state the right of adolescents to the highest attainable standards of health, including sexual and reproductive health. This includes providing appropriate, specific, user-friendly and accessible services to address their reproductive and sexual health needs effectively (Fisher, 2018). In a study conducted a by the United Nations Population Fund in 34 countries, it was discovered that, "as many as 50% of pregnancies are unplanned, and 25% unwanted. Unwanted pregnancies are disproportionately among young, unmarried girls who often lack access to contraception (Book Review, 2007).

2.3 Provision of YFHS

The provision of youth friendly SRH services remains nascent and health services are underutilized by youth. The 2005–2009 National Youth Strategy focused on improving reproductive health services for youth, especially through information dissemination, premarital medical examination, and the provision of youth-friendly services, however, the policy lacks indicators and a well-defined monitoring strategy. Measuring provider attitudes towards the provision of youth friendly services is therefore critical to meeting Jordan's stated policy objectives and improving SRH service utilization among youth (Gausman, 2020).

Provision of health services requires human interaction and the quality of services finally boils down to skills and motivation of the frontline human resources. Greater attention will need to be made to addressing the perennial employer-worker disputes, strengthening the pipeline of pre-service and in-service training which will enable provision of high quality, evidence-based care. This will address the problems currently faced of poor quality of reproductive services; inequitable

coverage with reproductive health services among certain areas or population groups including adolescents (MOH, 2022).

2.4 Utilization of youth friendly health services

In low-and middle-income countries the utilization of sexual health services is generally low. In a study in Ghana, Benard and others found out that, contraceptive use and the utilization of YFHS were low among this urban youth. Awareness or knowledge about YFHS corner and its services and the cost of YFHS influenced the utilization of the YFHS among the youth. Knowing about the trend of the utilization of RH services is a prerequisite for the proper planning of appropriate health services for young people (Bernard, 2020).

In a study at Thika West Schools and colleges, it was found that; age, sex, level of education, knowledge of Youth Friendly Reproductive Health Services(YFRHS) had significant influence on utilization of almost all YFRHS such as family planning, counseling, voluntary counseling and testing for HIV and treatment of sexually transmitted infections while religious affiliation showed significant relationship to utilization of family planning ethnicity did not have any influence on utilization of all the above services. Parents and teachers had minimal participation in educating the youth about youth friendly reproductive health services. The facility factors found significant was mainly facility organization whereby both the school youth and the adults were being given service in the same area thereby causing long queues and unfavorable operation hours, which led the youth missing services due to closure of the facility (Obonyo, 2009).

2.6 Accessibility of SRH Services to Adolescents

Across the world, nearly 40% of International Planned Parenthood Federation's SRH services are provided to young people. Member Associations work in innovative ways to reach out to young people from diverse backgrounds who would

otherwise not receive information and services. In Vietnam, for example, the Vietnamese Family Planning Association made an agreement with local secondary schools to provide an in-school clinic once per month; and the Associations in Malawi and Bangladesh supported large-scale research conducted by young researchers, who interviewed their peers on their perspectives about the greatest barriers to accessing sexual and reproductive health services (International planned Parenthood Federation, 2008).

In many African countries like Uganda, Nigeria, and Botswana, sexual and reproductive health services for adolescents were reported to be of low quality, citing inconvenient hours of operation, long waiting time, and cost of services for adolescents. Reproductive health needs of young people were discovered to be largely ignored by existing health facilities, educational segments and other social programs (Ndayishimiye, 2020). Public and private health insurance coverage and public health programs should provide timely access to comprehensive, coordinated benefits that meet the physical, psychological, and development needs of adolescents, including preventive, primary, and specialty care services.

2.7 Global Standards for Quality Health-Care Services for Adolescents

Eight global standards define the required level of quality in the delivery of services. Each standard reflects an important facet of quality and in order to meet the needs of adolescents, all standards need to be met (Dayal, 2022).

Adolescents' health literacy (Standard 1); the health facility implements systems that ensure that adolescents are knowledgeable about their own health, and they know where and when to obtain health services.

Community support (Standard 2); There are systems that ensure that parents, guardians and the community members recognize the value of providing health

services to adolescents and support such provision and utilization of services by adolescents.

Appropriate package of services (Standard 3); there is a package of information, counselling, diagnostic, treatment and care services that fulfils the needs of adolescents. There are also Referral and outreach services provider's competence (Standard 4).

2.8 Quality of Health Services

Many health services are not youth friendly. Despite the provision of training, many health providers remain judgmental and lack the skills to work with adolescents in a sensitive and confidential way. Services are commonly oriented to adult women with children and do not reach out to the youngest, including first-time mothers and married adolescents without children. Laws and policies may restrict services available to unmarried adolescents (The UNFPA recommended that, "Policy frameworks should be multisector, bringing together relevant ministries, national institutions, donors and stakeholders to initiate an integrated approach to young people's issues, including health, education, employment, social integration and strategies for sustainable livelihoods" (UNFPA/WHO, 2012). A well-designed monitoring system has the potential to assist the management to improve the quality of services to young people and sustain the quality. Improving the quality of health services tailored to the needs of adolescents has the potential to address some of the challenges of health and the burden of disease associated with adolescent risky behavior (James *et al.,* 2018).

According to the KSPA 2004, many youths in need of sexual and reproductive health care are not comfortable accessing existing services because they are not youth friendly and may not meet their needs. Coupled with this, providers are often biased, uneasy, or not adequately trained to serve sexually active youth. There has been a push in recent times to sensitize all staff at health facilities on the provision of

YFHS and in making young people welcome. The proportion of facilities with youth friendly health services in any service site is unfortunately, very low (12%). However stand-alone VCT sites, NGO facilities, and facilities in Nairobi and Western provinces are more likely to provide youth-friendly services (MOMS, MOPHS, KNBS, ICF Macro. 2011)

In KSPA 2010, a study conducted on women receiving health services indicates that the women spoke about types of facilities mentioned government, private, mission hospitals, as well as health centers, dispensaries, and clinics. The most common comments about government facilities were that services are free or not expensive, doctors and nurses are trained, and drugs are in short supply. Private facilities were often described as untrustworthy because trainees staff them. Mission hospitals and dispensaries were described as more expensive but with far more reliable supplies of medicines, (MOMS, MOPHS, KNBS, ICF Macro. 2011) .

Quality of health care services to the youth and adolescents is an important issue to the WHO prompting them to develop and validate a tool (WHO, & UNAIDS. 2015) to be adapted to capture the global standards for Quality health-care services for adolescents. This is a guide on how to implement a standards-driven approach to improve the quality of health-care services for adolescents. In this guide 8 standards are dealt with. That is the appropriate, package of services, providers' competencies facility characteristics, equity and non-discrimination, data and quality improvement and adolescents' participation (WHO, & UNAIDS. 2015).

2.9 Barriers to the Youth's Access of Health Services

Many of the barriers that the youth face in accessing health services are unique to young people due to their stages in life and associated special needs, perceptions and abilities. These barriers may be geographical that include lack of local health facilities and lack of transport to health facilities, physical barriers may be inadequate access to buildings for service users with poor mobility or wheelchair,

psychological barriers like fear, anxiety, and depression. Other barriers may be financial barriers (Ghafari, 2014), cultural barriers and communication barriers like the service user not being able to understand the care workers.

Additionally, barriers that prevent youth from obtaining SRH services and exist within the health service delivery environment include the attitudes and practices of health service providers that may deter youth from accessing and utilizing SRH services. Youth may be afraid to approach health service providers in fear of judgmental attitudes, disrespect or stigmatization, poor quality of care and breaches of confidentiality. Providers may also unnecessarily restrict access to SRH services to youth by requiring parental or spousal permission where it is not required, refusing to provide services based on their own personal moral or religious beliefs, or enforcing non-existent or misunderstood policies or laws pertaining to the provision of specific services based on age, parity or marital status (Gausman, 2022).

2.10 Challenges Faced by the Youth in Accessing Health Services

Adolescent Reproductive Health and Development(ARHD) policy implementation has been limited due to a range of factors and the challenges, such as lack of awareness about the ARHD policy and the ARHD POLICY PLAN of action (POA); lack of coordination among implementers, low stakeholder involvement, including low policy implementation with research and youth involvement, limited leadership, lack of resources, substances abuse, poverty and unemployment among youth and limited availability of high quality Adolescent Sexual Reproductive Health (ASRH) services (Arije, 2022). Additionally, as mentioned, ASRH remains a contentious issue among some communities and some cultural and religious practices are barriers for implementation.

2.11 Recommendations on Youth friendly health services

Some of the recommendations by the NCPD were to revise the National youth friendly health services strategy to define, outline and standardize youth friendly health services provision with packages of basic and specialized services to prevent and respond to developmental issues for the youth headed households. These youth friendly health services should include the following issues: nutritional, sexual and reproductive health, mental health and problems resulting from violence, include youth in policy program development of youth friendly health services in the process of developing laws and youth friendly centers, as these need to be specifically designed to cater for the needs of the youth ((NCAPD), (MOMS), (MOPHS), (KNBS) [Kenya], ICF Macro. 2011).

The UNFPA recommended that, "Policy frameworks should be multisector, bringing together relevant ministries, national institutions, donors and stakeholders to initiate an integrated approach to young people's issues, including health, education, employment, social integration and strategies for sustainable livelihoods" (UNFPA/WHO, 2012). Additionally, reorienting health services to be youth-friendly is one strategy that has been shown to improve SRH service utilization among youth (Gausman, 2022).

CHAPTER THREE

MATERIALS AND METHODS

3.1 Study Site and Setting

The study was conducted for four months at Mbagathi County referral hospital and Mama Lucy Kibaki Hospital in Nairobi County. Nairobi County is the smallest ($696km^2$) yet most populous of the 47 Counties, with a population of 3.375M. At the hospitals, the questionnaires were filled and interviews were conducted at the maternal child and health clinic, the comprehensive care clinic, and the outpatient clinics by the principal investigator and the two research assistants.

Mbagathi County referral hospital is a government hospital situated in Lang'ata constituency. Currently it offers diverse services ranging from outpatient services, mother and child health services, to specialized clinics like the comprehensive care clinic, diabetes clinic among others. Langata constituency is 223 Sq. km with a population of 355,188 people (KNBS, 2013).

Mama Lucy Kibaki Hospital is situated in Embakasi constituency. It is a government county referral hospital serving the residents of Nairobi's populous Eastland. The institution is a key development, which was officially opened in 2013. The hospital has expanded health services in Kenya, not only to people in the Eastern part of Nairobi County in Kenya, but also to all Kenyans from all over. The hospital has a bed capacity of 112 offering specialized services for both outpatient and in-patient cases (Owuondo *et al.*,2015). These two hospitals serve a diverse population that is drawn from near and far places and will represent a substantial population of the youth of Nairobi County. They were purposively selected based on assumed similarity, as they are both Nairobi County referral hospitals.

3.2 Study Design

This is a convergent parallel mixed method study comprising the qualitative and quantitative research methodologies (Ozawa, 2013). Quantitative research reduced estimation error by examining the relationships among variables while qualitative research lessened discovery error by exploring and understanding the meaning individuals or groups ascribed to on a social or human problem. A mixed method design was used so that the strengths of both quantitative and qualitative research can provide the best understanding into this study. This was realized by generalizing the finding to a population (youth) and then developing a detailed view of the meaning of youth friendly health services for individuals. Specifically, convergent mixed method was chosen to provides a comprehensive analysis of the research problem (Creswell & Creswell, 2018) by merging the results of the quantitative and qualitative data. Both forms of data were collected at the same time but separately, analyzed separately, and then integrated the information in the interpretation of the results on youth friendly health services for better understanding. (Figure 3:1).

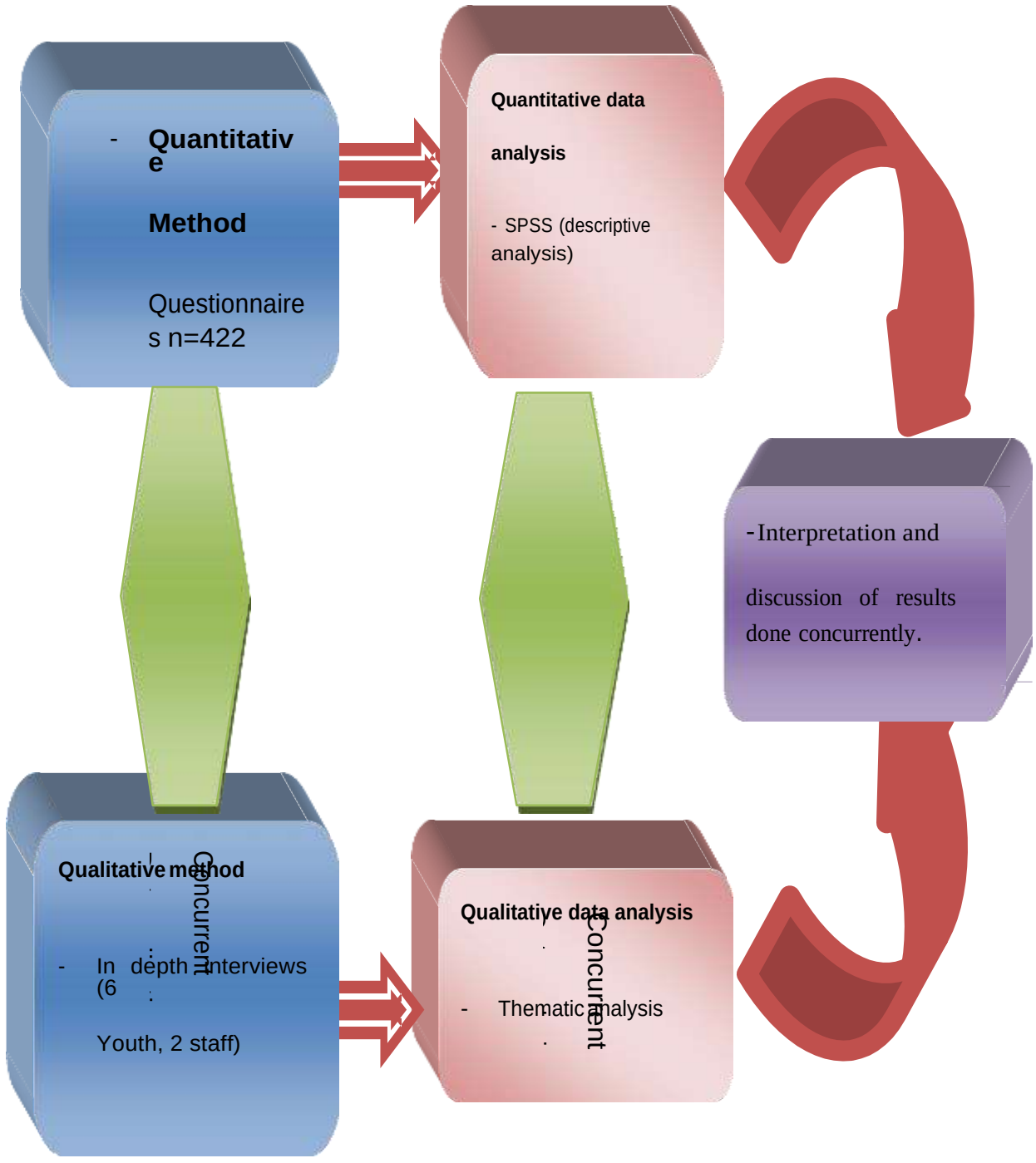

Figure 3.1: Convergent parallel mixed method Study design

3.3 Study population

The study population was the youth (male and female) aged 10-24 years attending outpatient, maternal child health and comprehensive care clinics at Mbagathi County referral hospital and Mama Lucy Kibaki Hospitals. Health service providers working in these institutions at the time of study were also interviewed for in-depth interviews.

Inclusion criteria

- Youth aged 10-24 years.
- Those who are 18 years and above consented to participate in the study.
- Youth under 18 years, who gave assent, and their parents gave a written consent.

Exclusion criteria

- Those who were less than 10 years or above 24 years,
- Those who neither consented nor parental consent acquired.
- The critically sick and those that were mentally challenged.

3.4 Sample size determination

Quantitative study

Cochran equation was used to calculate the sample. This equation is used for populations that are large, to yield a representative sample for proportions (Amugune, 2014).

Sample size for the youth $n=z^2*p\ (1-p)/d^2$

n=minimum required sample size

Z= standard normal deviation corresponding to conf. level at 95 % (1.96)

P= estimated proportion of participants giving favorable response on individual elements.

The estimates of the two hospitals were not known, therefore 50% (0.5) was used.

d= margin of error (precision).

Participants= 1.96^2 *0.5(1.0-0.5)/0.05^2=384.16.

The minimum sample size was therefore 385 participants. Allowing for 10% non-response, the sample size was adjusted upwards to 422 participants.

Qualitative study

Quota sampling was used to select youth and service providers. Non-overlapping groups of a predetermined number of individuals in each group were employed. Sampling proceeded until these totals or quota were reached. In this study, sampling continued until a representative of age distribution was achieved (LaMorte, 2016). To achieve this, one male and one female youth were selected from age groups 10-14 years, 15-19 years and 20-24 years as each quota forming a total of three quotas of youth participants in each facility. This was to represent all ages of the youth participants to be interviewed in equal ratios of 2:2:2 (1/3). The service providers with knowledge in youth services were key informants (one from each facility) forming the fourth quota. The study participants (youth and health providers) were drawn from the two health facilities. A total of 12 youth and 2 service providers were interviewed (Table 3.1).

Table 3.1: Qualitative Sample

Participants	**Mbagathi County referral hospital**	**Mama Lucy Kibaki Hospital**
Girls		
10-14 years	1	1
15-19 years	1	1
20-24 years	1	1
Boys		
10-14 years	1	1
15-19 years	1	1
20-24 years	1	1
Sub-total	6	6
Service providers	1	1
Total	7	7

3.5 Sampling

Quantitative Sub-study Sampling

Mbagathi County referral hospital and Mama Lucy Kibaki Hospitals are public health facilities that were purposively selected based on similarity (these are level 5, public, Nairobi County referral hospitals). A sampling frame was developed at each facility based on the daily clients' turnover. Probability proportional to size allocation was applied to distribute the sample across the facilities. The study adopted a systematic sampling approach in selecting the participants. A sampling interval was determined at each facility by dividing the sampling frame by the distributed sample size. The first youth was selected using a simple random sampling procedure. Subsequently, every second youth was selected in a queue until the sample size was attained. (Table 3.2).

Table 3.2: Proportion of allocation of sample size cross the facilities

Health facility	No. of youth (N = 422)	Percentage/proportion of sample (%)
Mbagathi County referral hospital	211	50
Mama Lucy Kibaki Hospital	211	50

Qualitative Sub-study Sampling

The qualitative sub-study was deemed important to give a deeper understanding of the study results acquired through the quantitative study. This study was employed to get insight into partly objectives that had also been assessed quantitatively. After determining the quotas, youth were purposefully chosen from each quota by considering their age and knowledge on youth friendly health services. Only youth with knowledge of youth friendly health services were interviewed from each quota until data saturation was attained. Service providers with knowledge on youth friendly health services and provided these services were interviewed.

3.6 Data Collection Instruments

Quantitative Study

Structured questionnaires (Appendix II) consisting closed ended questions in both English and Kiswahili were formulated and pretested at Langata health Centre in collecting data. In addition to the questionnaire, an observation checklist guide was formulated both in English and Kiswahili to assess the facilities' youth friendly characteristics. This questionnaire and checklist were derived from a tool developed and validated by WHO (2015) to capture the global standards for quality health-care services for adolescents. This is a guide on how to implement a standards-driven approach to improve the quality of health-care services for adolescents. The guide

entails standards namely: Appropriateness, packaging of services, providers' competencies, facility characteristics, equity and non-discrimination, and adolescents' participation. To collect data using the checklist, the interviewer employed an observation method which is used as a method for data collection to systematically describe artifacts of a social setting. Observation helped us to learn how things are organized and prioritized in that setting. There was a total of three interviewers, the principal investigator and two data collection personnel. Training of the data collection personnel (interviewers) was conducted by the principal investigator to ensure consistency in gathering information.

Qualitative study

In-depth interview guides were formulated in both English and Kiswahili to collect data. In- depth interviewing (Appendix IV) is a qualitative research technique that involves conducting intensive individual interviews with a small number of participants to explore their perspectives on a particular idea, program, or situation. For example, asking the youth and staff visiting or working in a certain clinic about their experiences and expectations related to the services. In-depth interviews were conducted until saturation was attained. Audio recording and notes were taken where necessary. In-depth interviews were employed to gain increased knowledge on youth friendly health services and individual experiences with provision of youth friendly health services among the youth and health care providers.

3.7 Data Management

Quantitative study

Questionnaires for qualitative study were stored in a lockable drawer at the facilities for confidentiality. Quantitative data from the field was double entered into a computer database designed using MS-Access application. Files Back-up was regularly done to avoid any loss or tampering. Data cleaning and validation were performed to achieve a

clean dataset that was exported into a Statistical Package format (IBM Statistical Package for Social Sciences) for analysis.

Qualitative data was audio-taped and transcribed to English and Kiswahili that was employed during the interview, and then translated to English in cases where Kiswahili was used. Each interview was awarded a unique identification number and entered as unique files into a project folder in Microsoft word. This helped organize and explore the data, identify relationships, and show patterns in the information gathered.

3.8 Data analysis

Quantitative study

At the initial stage of data analysis, exploratory data techniques were performed to the structure of data and to identify outliers in IBM SPSS (version 21.0). Descriptive statistics (proportions) were used to summarize categorical variables. Pearson's Chi-square was used to test for the strength of association between categorical variables. 95% Confidence Interval (CI) were used to estimate the strength of association between independent variables and the dependent variable. The threshold for statistical significance was set at $p<0.05$.

To summarize all quantitative data collected, we calculated an overall score for each variable that was assessed. Scoring was based on a point system in which low points, '0' indicated lower quality performance and high points '1' are assigned to stronger or higher quality performance. To moderate the relative value of the observation versus other data sources a 'weighted' score was applied. A score per variable was presented as a percentage of the maximum possible score and was calculated by quantifying the information collected on the variable from each data source then averaging all the scores from each data source. The thresholds to judge the level of implementation of the quality assessed was set at:

Score 20% or less: - Not meeting standards.

Score 20%-50%: - Needs major improvement.

Score 50%-80%: - Needs some improvement.

Score 80% or more: - Meets standards (WHO & UNAIDS, 2015).

Qualitative study

Manual thematic analysis was applied following the five major steps: familiarization with the data, generation of initial codes, search for themes, revision of themes and interpretation.

Familiarization with the data: This phase started during data collection, where familiarization with the interview guides took place in the field. Post-field analysis involved reading repeatedly through all the transcripts of the audio- recorded information.

Generating initial codes: Familiarization entailed re-reading the text and coding the audio- recorded information (Njeru *et al.,* 2011). This stage of analysis began alongside the 'familiarization with the data' stage. A table was created on Microsoft word where the initial codes were noted down in long lists, this formed the initial codes. This list of initial codes allowed noting down the main topic and themes that emerged from the interviews.

Searching for themes: This stage involved both creating an increasing number of codes as well as collecting those that were considered similar. Reviews were conducted on the list of the codes that were generated in the previous stage and better lists of codes were created. In the left column was a list of major themes, in the middle section were the relevant narratives and on the right side the codes related to every quote were placed. The major themes remained similar to the topics under

study namely: availability, characteristics, knowledge, attitude, practices, experiences and factors that affect utilization of youth friendly health services.

Reviewing and defining the themes: This stage involved reading through themes that had been identified and refining these themes. Reading through the themes enabled generation of concise and clear names for each theme.

Interpretations: Interpretation continued throughout the entire analysis process and stages on to, 'identification of the more refined themes and codes' at later stages in the process. In cases where uncertainty arose, revision rounds involved more reading through the data and consultations with the supervisory teams.

3.9 Ethical Considerations

The youth who participated in the study were accorded the same care/ quality of services as those who did not participate. All participants signed an informed consent (Appendix 1). At all settings of the study, the objectives were explained, and the study population informed that participation is voluntary and may be withdrawn at anystage.

Ethical clearance was sought from KEMRI scientific and ethical review committee (Appendix VI). Permission to conduct the research at the health facilities was sought from the ministry of health- Nairobi County Health Services (Appendix VII).

Confidentiality was maintained during data collection by not obtaining the participants identification details. The study participants, participants and informants were assigned anonymized identifiers to ensure confidentiality. No individual was identified in the dissemination of results. During data storage the information collected was stored under lock and key so as not to be accessed by unauthorized persons.

CHAPTER FOUR

RESULTS

In this section, quantitative and qualitative findings are presented simultaneously where appropriate. The section starts off by presentation of the socio- demographic details of the study participant, followed by the characteristics results (facility, service and service provider characteristics) this also incorporates findings on the available services; followed by on the knowledge, attitude and practices of YFHS findings and lastly the section presents findings on experiences and factors that favored or hindered utilization of youth services.

4.1 Social demographic characteristics of the study participants

Four hundred and twenty-two participants were recruited, of whom, 30.1% were male and 69.9% were female. More than sixty-two percent were aged between 20-24 years, 29.9% were aged between 15-19 years while 7.8% were aged between 10-14 years. The mean age was 20years. About 71.1% of the youth were single while 28.2% and 0.7% were married and divorced/separated/separated/widowed, respectively. About 55.2% were Protestants, 38.8% were Catholics and 6.0% were Muslims/others. About 46.8% of the guardians/parents were self-employed while 36.7% and 16.5% were on paid employment and casual laborers respectively. About 39.6% of youth utilized outpatient services, 31.3% and 29.1% of youth utilized maternal child health and comprehensive care clinic services respectively. (Table 4.1)

Table 4.1: Social demographic characteristics of the participants

Description of variable	Frequency (N=422)	%
Gender		
Male	127	30.1
Female	295	69.9
Age		
10 – 14 years	33	7.8
15 – 19 years	126	29.9
20 – 24 years	263	62.3
Marital Status		
Single	300	71.7
Married	119	28.2
Divorced/Separated/ Widowed	3	0.7
Religion		
Catholic	163	38.8
Protestant	232	55.2
Muslim/other	25	6.0
Guardian'/parents' Education		
Primary and below	123	29.7
Secondary	171	41.3
Tertiary	120	29.0
Guardian'/parents' Employment		
Paid employment.	153	36.7
Self-employment	195	46.8
Casual	69	16.5
Departments		
Maternal Child Health	132	31.3
Comprehensive Care Clinic	123	29.1
Outpatient Clinic	167	39.6

4.1.1 Service utilization

Youth sought services from the three clinics under study according to their needs. All these clinics are situated in the hospital and are used by all population of the hospital as need.

Distribution of youth for of services: Out of the 422 youth participants, (39.6%) youth sought services in the OPD, (, 31.3%) and (29.1%) sought services from the MCH and CCC respectively (figure 4.1).

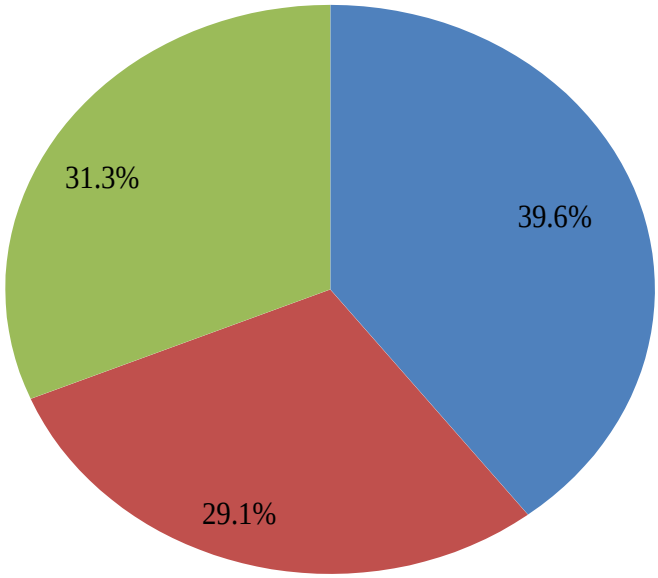

Figure 4.1: Service utilization

4.2 Youth Friendly Health Services in Mbagathi County referral hospital and Mama Lucy Kibaki Hospital

4.2.1 Facility characteristics

Data for facility characteristics was analyzed guided by the WHO outline, as presented in the following section. These include comfortable surroundings, separate and adequate space, convenient location and hours, sufficient visual and auditory privacy and displays of adolescent/youth information and health services.

Comfortable (Appealing) surroundings/ Environment.

All the six clinics were situated within the hospital. Our findings indicate that the CCC in Mbagathi County referral hospital and OPD in Mama Lucy Kibaki Hospital had comfortable sitting areas and all the two CCCs were welcoming as were MCH

at Mbagathi County referral hospital and OPD at Mama Lucy Kibaki Hospital. However, some study participants (youth) expressed that a comfortable environment entail having youth services facility outside the hospital as indicated below.

> *"The youth services should be outside the hospital facility for comfortable, convenience and accessibility…"* (Male aged 23, Mbagathi County referral hospital)

All six clinics' waiting areas and surroundings were clean as observed by the investigators. However, many youth did not agree to this finding saying that they felt that the place should be clean as expressed below.

> *"The place should be clean, beautiful and attractive"* (Male aged 15, Mbagathi County referral hospital).

All six clinics studied had functional toilets, safe storage and disposal of clinical waste and infectious waste. Further, adequate hand hygiene facilities located in or adjacent to the examination room were available at the CCC at both facilities.

Convenient location and hours

Convenient (facility) location: Majority of the study participants further expressed that services were conveniently offered within the hospital and near OPD to allow for access to a variety of available services as explained by this quote.

> *"I prefer that the youth Centre be within the hospital near the outpatient clinic so that services like pharmacy, laboratory or to see a specialist is not lacking…"* (Female aged 22, Mbagathi County referral hospital)

Convenient Times (special times for the youth, clear and visible information about youth clinic hours):

Convenient hours: Likewise, a majority of the youth (90.7%) said the current working hours for youth services were convenient with a minority (9.3%) saying the hours were non- convenient (Table 4.5.2). On probing further, almost half of the youth participants want the services on full day basis or morning to noon because most people can organize to come for services as indicated by this quote.

> *"…most people can arrange to come this time without many problems"* (24 years old male)

Weekend was the best choice of the day for services both for the youth with the support of the service providers because the youth are free from school and work engagements. However, some youth said the services can be on daily basis of the week.

> *"Weekend is best because most youth are free from school and a few are off from work*" (24 years old male)

> *Separate and adequate space:* Some youth however said that an appropriate environment was a standalone youth centre located far from the hospital as explained below.

> *"The youth should be kept away from other people and away from the hospital because in the hospital it reminds you the way you are also sick and this makes you feel bad, …"* (Male aged 15, Mbagathi County referral hospital)

> *Sufficient visual and auditory privacy:* SOPs and policies on confidentiality and privacy were present in the two CCCs at both facilities.

Privacy: Findings further revealed that there was private communication (verbal privacy) between the staff and patients at the waiting room of MCH and CCC at Mbagathi County Referral hospital, and CCC at Mama Lucy Kibaki Hospital.

Physical privacy was achieved by provision of screens and separate rooms for examination area from the consultation at MCH (Mbagathi County Referral hospital and Mama Lucy Kibaki Hospital), CCC (Mbagathi County referral hospital) and OPD (Mama Lucy Kibaki Hospital).

> *Free or affordable services:* SOPs and policies on free or affordable services were present in the two CCCs at both facilities. This was echoed by youth as follows:
>
> *"… Services should be free like offered in the comprehensive health clinic. The youth can also be given a special cost which can be lower than for the other groups of people"* (15 years old male).

Confidentiality: Information at the MCH and CCC was gathered in confidence during registration. All case records and registers were secured under lock and Key outside operating hours in all clinics.

Displays of adolescent/youth information and health education materials

Our results revealed a signpost was displayed in the facilities. However, none of the signposts give information on working hours and days for youth/adolescent services. Other displays present included pamphlets with youth information. In addition, more information was passed on through youth specific videos and television at the waiting areas of the CCC at Mbagathi County referral hospital.

The right for the youth to receive information regarding their care was observed in all six clinics (MCH, CCC and OPD). Further, information on youth referral was available on Referral guidelines at CCC of Mbagathi County Referral hospital, and MCH and Mama Lucy Kibaki Hospital.

Service Operating Procedure:

It was observed that SOPs on services provision were present in the comprehensive care clinics of both facilities. Many youth received appropriate services for example, HIV testing and administering Post Exposure Prophylaxis of HIV/ AIDS to the youth mostly on Monday after unprotected sex or condom burst over weekends as expressed by following quote explains this.

> *"…Like today is a Monday, the youth were many, and the leading reason to all these is condom burst and hence PEP leads in services sought for Then HIV testing follows closely"* (Service provider, Mama Lucy Kibaki Hospital)

There were service operation procedures on equitable service provision to all youth without discrimination irrespective of their ability to pay, age, sex, marital status or other characteristics in the comprehensive care clinics at both hospitals. However, there was lack of diversity of services provided including sports and fun activities only medical services were provided as indicated by these quotes.

> *"…Services should be diversified in the clinics so that one all youth get services unlike what is practiced in the Comprehensive Care Clinic which offers specific services"* (Female aged 22, Mama Lucy Kibaki Hospital)

SOPs on how to involve adolescents in the planning, monitoring and evaluation of health services were available at the comprehensive care clinic of both hospitals. Youth were involved in teaching, sharing and providing youth service as indicated below.

> *"… We chip in the idea on how our services should be, what the service provider does is to relay our ideas to the management for service improvement"*(female aged 22, Mbagathi County referral hospital)

> *"… We socialize, we talk about things we go through…You see there we are all peer of which we all come together and talk to others about everything*

concerning the services that can help us…" (Female aged 22, Mbagathi County referral hospital)

Overall: The CCC in both hospitals met the WHO standards of youth friendliness Mbagathi County Referral hospital (80.9%) and Mama Lucy Kibaki Hospital (76.1%). The rest of the clinics (the maternal child health clinics and the Outpatient Clinics) did not meet these standards. That is Mbagathi County Referral hospital (MCH (47.6 %), OPD (28.5%) and Mama Lucy Kibaki Hospital (MCH 42.8%), OPD (38.1%) (table 4.2).

Table 4.2: Facility characteristics checklist outcome

Characteristics	Mbagathi County Referral hospital			Mama Lucy Kibaki Hospital		
	MCH	CCC	OPD	MCH	CCC	OPD
	Response (Yes (1)/No (0))					
Signpost	1	1	1	1	1	1
Signpost mentions working hours	0	0	0	0	0	0
comfortable sitting at waiting area	0	1	0	0	0	1
Educational materials at waiting area	0	1	0	0	0	0
Welcoming waiting area	1	1	0	0	1	1
Clean waiting area	1	1	1	1	1	1
Functional toilets, safe waste management, clean surrounding	1	1	1	1	1	1
Adequate hand washing	1	0	0	1	1	0
Private communication	1	1	0	0	1	0
Physical privacy	1	0	1	1	0	1
Verbal privacy (consultation confidence ,	1	1	0	1	1	0
Secured records & register	1	1	1	1	1	1
Rights: to information	1	1	1	1	1	1
Policy on commitment of health providers	0	0	0	0	0	0
Policy on confidentiality & privacy, Free services	0	1	0	0	1	0
Referral guidelines Policy	0	1	0	1	1	0
SOP: on services provision	0	1	0	0	1	0
SOP: free/affordable service	0	1	0	0	1	0
SOP: equitable service	0	1	0	0	1	0
SOP: Involve adolescents	0	1	0	0	1	0
SOP: supervision	0	1	0	0	1	0
Friendliness (Total)	10	17	6	9	16	8
Percentage	47.6%	80.9%	28.5%	42.8%	76.1%	38.1%

Key: YES [1] NO [0]

*(1) Score < 25%: - Not meet standards *(2) Score 25%-50%:- major improvement

*(3) Score 50%-75%:- some improvement *(4) Score >75%: - Meets standards.

4.2.2 Services Availability

The results showed that Mbagathi County referral hospital and Mama Lucy Kibaki Hospital did not standalone Youth friendly center. These services were embedded in existing services like in the Comprehensive care clinic (CCC). A service provider confirmed this as expressed in the following quote:

> *"…The comprehensive care clinic (CCC) alone practices YFHS that I know of…" At the outpatient clinic and Maternal Health Clinic we don't have any particular YFHS…"* (Service provider, Mama Lucy Kibaki Hospital**)**

There were no policies on commitment of the health facility to provide health services to all adolescents. This was seen mostly at Maternal Child and Health Clinic and Outpatient Clinics where no particular youth services were provided. This was observed by both youth and services providers as explained by the following quote.

> *"Maternal and Child Health services and Outpatient services should have youth friendly health services everywhere …"* (Male aged 23 at Mbagathi County referral hospital)

About 89.1% of youth accessed services they sought while 10.9% were denied services. About 72.6% youth could access contraceptives whenever they needed it while 19.5% could not. There was provision of prescribed medicine to 94.5% of the youth whilst a 5.5% missed the drugs. About 94.3% youth accessed services because of availability of equipment whilst 5.7% did not (Table 4.3).

Table 4.3: Availability of youth friendly health services in Mbagathi County referral hospital and Mama Lucy Kibaki Hospital

Description of variable	Level	Frequency	Percentage	95% CI
Services sought	MCH	132	31.3	27.0,35.8
	CCC	123	29.1	24.9,33.6
	OPD	167	39.6	34.8,44.1
Availability of medicine	Yes	399	94.5	92.4,96.7
	No	23	5.5	3.3,7.6
Availability of equipment	Yes	398	94.3	92.2,96.7
	No	24	5.7	3.3,7.8
Accessed available services	Yes	364	89.1	85.9,92.0
	No	45	10.9	8.0,14.1
Accessed contraceptives	Yes	305	72.6	67.6,76.9
	No	82	19.5	15.4,23.5
	N/A	33	7.9	5.8,10.8
Can Access test for HIV	Yes	400	95.5	93.6,97.4
	No	19	4.5	2.6,6.4

Key: CCC: critical Care clinics; MCH: maternal and child health clinics; OPD: Outpatient Department

4.2.3 Service providers' characteristics

Our results showed that overall service providers in Mbagathi County referral hospital were trained on about 62.9% of information on youth services while service providers in Mama Lucy Kibaki Hospital had received 55.5% information on youth services. Disparities in training are explained by the following quotes.

> *"People being trained in dealing the youth can also enhance service delivery, but you find like for now there are no trainings on the youth going on".* (Mama Lucy Kibaki Hospital)

> *"These (facilitators) have been proved to us that they have been trained. Training is important because the service provider knows how to relate with the youth".* (Female aged 22, Mbagathi County referral hospital)

All six service providers had trained on policy in adolescent health care. However, some disparities were noted among the facilities on training of staff on different topics including; adolescent communication (staffs trained were 2 in Mbagathi County referral hospital, 1 in Mama Lucy Kibaki Hospital), adult communication skills(staffs trained were 3 in Mbagathi County Referral hospital, 2 in Mama Lucy Kibaki Hospital), clinical case management(staffs trained were 2 in Mbagathi County referral hospital, 1 in Mama Lucy Kibaki Hospital), awareness of the package on information(staffs trained were 2 in Mbagathi County Referral hospital, 2 in Mama Lucy Kibaki Hospital), awareness of respect of adolescent rights (staffs trained were 2 in Mbagathi County referral hospital, 2 in Mama Lucy Kibaki Hospital)and measures to protect clients' privacy and confidentiality that included; not disclosing adolescent information, case records kept securely, availability of curtains, presence of screens for physical privacy (staffs trained were 1 in Mbagathi County referral hospital, 2 in Mama Lucy Kibaki Hospital).

Many services providers (66.6%) (Table 4.4) observed that there were no systems for continuous updated for service providers as supported by the quote below:

> *"You find that most of us dealing with the youth have been forced to sponsor ourselves and be trained to deal with this group"* (service provider at Mama Lucy Kibaki Hospital).

Table 4.4: Service providers' characteristics

Service Provider Characteristics		Mbagathi County referral hospital	Mama Lucy Kibaki Hospital
	Response	n=3 (%)	n=3 (%)
Years of working in this facility	Below 1yr	1 (33.3)	0 (0.0)
	1 -5 years	0 (0.0)	3 (100)
	Above 5yrs	2 (66.7)	0 (0.0)
Trained on adolescent communication skills	Yes	2 (66.7)	1 (33.3)
	No	1 (33.3)	2 (66.7)
Trained on adult communication skills	Yes	3 (100)	2 (66.7)
	No	0 (0.0)	1 (33.3)
Trained on adolescent policy	Yes	3 (100)	3 (100)
Trained on clinical management of adolescent	Yes	2 (66.7)	1 (33.3)
	No	1 (33.3)	2 (66.7)
Importance of respecting adolescent rights	Yes	2 (66.7)	2 (66.7)
	No	1 (33.3)	1 (33.3)
Aware of policies for free affordable services	Yes	1 (33.3)	1 (33.3)
	No	2 (66.7)	2 (66.7)
Aware of the package of information	Yes	2 (66.7)	2 (66.7)
	No	1 (33.3)	1 (33.3)
System to attend CME is available	Yes	1 (33.3)	1 (33.3)
	No	2 (66.7)	2 (66.7)
Able to name measure to protect privacy	Yes	1 (33.3)	2 (66.7)
	No	2 (66.7)	1 (33.3)
Total number 'Yes' scores		17	15
Total 'Yes' and 'No' scores		27	27
Percentage		62.9%	55.5%

4.3 Knowledge, Attitude and Practices of Youth Friendly Health Services

4.3.1 Knowledge of Youth Friendly Health Services

A descriptive analysis was carried out on whether the youth; Have heard or knows of YFHS, knows other YFHS centres in Nairobi, knows other adolescent services, and knows where else to go for services, rights known by the youth, how many questions on HIV did the youth get correct, and have heard of STI to assess the knowledge youth have on different aspect of youth friendliness. Our results

showed that; out of 422 youth participants. About 30.8% youth knew what is meant by youth friendly health services whilst 69.2% did not know of these. Among these youth (the 30.8%), most of them and a service provider described youth services as services that favor the youth as follows:

> *"… They are services that favor the youth so that they don't feel neglected..." (23-year-old Male) "…YFHS is providing services that are favoring the youth…"* (Service provider at Mama Lucy Kibaki Hospital)

About 56.6% of youth had knowledge of other services provided to the youth in this facility whilst 43.3% lacked this knowledge. About 25.4% of youth knew other youth centres in Nairobi whilst 74.6% did not. Additionally, 86% of youth knew where else to go for services if the services were lacking in this facility while 14% were not aware.

Youth were asked to name rights, naming three or more rights was coded 'Yes' (knows their rights) while less than three rights was coded 'No' (did not know their rights). About 6.4% youth knew their rights while 93.6% did not. Furthermore, youth were asked five questions on HIV. Five correct answers were coded 'Yes' (had knowledge) while giving less than five correct answers were coded 'No' (No knowledge). Our results showed that 37.2% of the youth had knowledge on HIV while 62.8% of the youth did not. About 87.2% of the youth knew what STI are while 12.8% did not.

Finally, a total of an individual youth's 'Yes' scores on the variables above to assess general knowledge on youth services were computed. An individual with 1-3 'Yes' were coded as lacking knowledge while of 4-7 'Yes' were coded as having knowledge. Our results showed that 33.9% of the youth had knowledge on YFHS while 66.1% of the youth lacked knowledge (Table 4.5).

Table 4.5: Knowledge of youth friendly health services by the youth

Knowledge	Level	Frequency	%	95% CI
Heard and knows of what YFHS is	Yes	130	30.8	26.3,35.1
	No	292	69.2	64.9, 73.7
Knows other YFHS centers in Nairobi	Yes	107	25.4	21.3,29.6
	No	315	74.6	70.4,78.7
Knows other adolescent services	Yes	239	56.6	51.9,61.1
	No	183	43.4	38.9,48.1
Knows where else to go for services	Yes	363	86	10.9,17.5
	No	59	14	82.5,89.1
Rights mentioned (known)	Yes	27	6.4	4.3,8.8
	No	395	93.6	91.2,95.7
Correct HIV answers	Yes	157	37.2	33.2,41.7
	No	265	62.8	58.3,66.8
Heard and knows of STI	Yes	368	87.2	83.9,90.5
	No	54	12.8	9.5,16.1
Total score on Knowledge	Yes (4-7Yes)	143	33.9	29.4,38.6
	No (1-3 Yes)	279	66.1	61.4,70.6

4.3.2 Attitude of Youth Friendly Health Services at Mbagathi County referral hospital and Mama Lucy Kibaki Hospital

Youth gave views on the attitudes displayed by the staff and guardians during their use of youth services in these facilities. The Thurston scale was used where we employed the responses of ‘agree’ and ‘disagree’ the results showed that.

Friendly and respectful staff: About 91.9% of youth agreed that the staff were friendly while 8.1% youth disagreed. Likewise, 88.5% of the youth agreed that service providers were respectful but 11.5% of youth disagreed.

> *“…The service provider was available…friendly…, confidential and their attitude good…”* (22-year-old Female 2)

Confidentiality of information: About 50.6% of the youth agreed that they were assured of information confidentiality while 49.4% disagreed. More so, 77.3%

youth agreed that they felt confident that information confidentiality was observed as promised while 22.7% disagreed with this.

Youth involvement: About 70.6% youth agreed that they were involved in their care, however about a third (29.4%) of youth disagreed.

> *"We have introduced 'peers' in managing the youth"* (Service provider at Mbagathi County referral hospital)

Guardian support: Youth agreed that about 82.7% guardians supported their use of these facilities while 17.3% guardians rejected these facilities (table 4.6)

Table 4.6: Attitude on youth friendly health services at Mbagathi County referral hospital and Mama Lucy Kibaki Hospital

Attitude	Level	Frequency	%	95% CI
Friendly staff (n=418)	Agree	384	91.9	89.2,94.3
	Disagree	34	8.1	5.7,10.5
Respectful staff (n=418)	Agree	370	88.5	85.2,91.6
	Disagree	48	11.5	8.4,14.8
Assured of information confidentiality (n=417)	Agree	211	50.6	45.8,55.6
	Disagree	206	49.4	44.4,54.2
Confident of information confidentiality (n=419)	Agree	324	77.3	73.0,80.9
	Disagree	95	22.7	19.1,27.0
Youth involved (n=418)	Agree	295	70.6	66.3,74.9
	Disagree	123	29.4	25.1,33.7
Guardian support (n=415)	Agree	343	82.7	78.6,86.3
	Disagree	72	17.3	13.7,21.4

4.3.3 Practices of Youth Friendly Health Services at Mbagathi County referral hospital and Mama Lucy Kibaki Hospital

Practices included the way youth came to seek health services, how the environment was prepared and how the services were offered.

The number of visits to the facility was significant (P=0.0001) to the clinic that was being visited. We noted that repeat visits were mainly observed at CCC (82.3%), MCH (58.3%) and OPD (49.1%). First time visits by youth at OPD, MCH and CCC were about 50.9%, 41.7% and 17.7% respectively. The massive number of revisits may be because at the MCH, most clients are given appointments. Likewise, at the CCC, youth were grouped according to age groups and booked for appointments to come during the school holidays as elaborated by the following quotes.

> *"To make YFH services effective, we have booked youth on holidays for services … "…We want to open a Youth Friendly Health Services Centre as a drug rehabilitation Centre. We hope to have different (varied) services included in these Centre"* (Service provider, Mbagathi County referral hospital)

About 65.0% youth at CCC, 54.6% youth at MCH and 41.6 % at OPD came alone.

> *"Maybe I'm sick and don't want to let my parents know because they will want to accompany me"* (Female aged 21, Mama Lucy Kibaki Hospital)

Youth who came accompanied for visits were about 58.4%, 45.4%, and 35.0% to OPD, MCH and CCC respectively.

There was a significant difference (P=0.0002) in a youth being allowed time alone with the service provider during consultation among youth attending clinics. Interaction between the youth and the services provider at the MCH, CCC and OPD was 85.3%, 83.9% and 72.3% respectively.

"…I appreciate that I came and had enough time to pour all I have to the service provider." (Male aged 24, Mbagathi County referral hospital)

There was a significant association (P=0.0001) between the youth being accorded the services and the clinic they visited. About 93.0%, 97.5% and 79.9% youth were not denied service from MCH, CCC and OPD, respectively. About 63.5% of youth at CCC, 41.6% (OPD) and 40.2% (MCH) were informed of the available services for the youth to utilize (Table 4.7).

Table 4.7: Youth friendly health services practices among youth and service providers

Practices during consultation	Response	Maternal C.H Clinic		Department Comprehensive Care Clinic		Outpatient Clinic		P. value
		n	(%)	n	(%)	n	(%)	
Number of visits to the clinic (n =421)	First	55	(41.7)	22	(17.7)	84	(50.9)	0.0001
	Repeat	77	(58.3)	102	(82.3)	81	(49.1)	
Accompanied (n =414)	Yes	59	(45.4)	43	(35.0)	94	(58.4)	0.0001
	No	71	(54.6)	80	(65.0)	67	(41.6)	
Had time with the service provider (n = 412)	Yes	110	(85.3)	104	(83.9)	115	(72.3)	0.0020
	No	19	(14.7)	20	(16.1)	44	(27.7)	
Denied services (n = 412)	Yes	9	(7.0)	3	(2.5)	33	(20.1)	0.0001
	No	119	(93.0)	117	(97.5)	131	(79.9)	
Informed of available services	Yes	53	(40.2)	78	(63.5)	69	(41.6)	0.0001
	No	79	(59.8)	46	(37.5)	97	(58.4)	

4.4 Experiences and Factors influencing Utilization of Youth Friendly Health Services

Experiences entails what the youth saw and what they encountered during the visits. In this section the findings outline the experiences of youth as they utilized services in the six clinics of the two facilities. There were three identical clinics from each facility (MCH, CCC and OPD).

4.4.1 Youth experiences in utilization of services related to facility standards.

Facility characteristics also played a role in the experiences of the youth. These characteristics included displays, the condition of the facility in terms of cleanliness and setup. Experiences of the youth were both positive and negative as quoted below.

> *"… Some visits are ok because we are treated well and we meet friends and chat… we go home relaxed other times are not good"* (15-year-old Male).

Less than half of the youth (36.3%) saw a signboard that displayed working hours for youth services. Many youth (48.1%) had short waits for services while more than half (51.9%) had long waits for services. For finding of information on youth services, few (25.1%) youth got access to youth friendly health services information materials while many (74.9%) of them did not see these materials. The materials were mainly present at the CCC (35.8%). Less than half of youth (40.3%) did not see a display of youth rights in the facility, with the CCC having more than half (51.6%) youth saying they saw these rights than those at MCH (37.7%) and OPD (34.0%). Very few youth (18.6%) said that they saw a display offering services to youth without discrimination. Further, very few youth (15.7%) saw a display of confidential policy in the clinics.

The majority (84.4%) of the youth had comfortable seats while a minority (15.6%) had uncomfortable seats. Working hours were convenient to a majority of the youth (90.7%) with a minority (9.3%) saying the hours were non-convenient. A majority of the youth (93.5%) saw curtains on the windows and the doors for physical privacy while very few (7.7) youth said there were no curtains. Further, the majority of the youth (93.5%) said the surrounding was clean while very few youth (6.5%) said the surrounding was not clean. Some (65.1%) youth reported that the toilets were clean and functional while others (34.5%) said the toilets were not.

Table 4.8: Youth experiences within Mbagathi County referral hospital and Mama Lucy Kibaki Hospital

Characteristics	Response	Maternal child clinic	Comprehensive care clinic	Outpatient clinic	Total
		n (%)	n (%)	n (%)	n (%)
Signboard with working hours (N=422)	Yes	65(49.2)	33(26.6)	55(33.1)	153(36.3)
	No	67(50.8)	91(73.4)	111(66.9)	269(63.7)
Comfortable seating(n=418)	Yes	111(85.4)	98(81.0)	144(86.2)	353(84.4)
	No	19(14.6)	24(19.7)	22(13.3)	65(15.6)
Informational materials (n = 418)	Yes	31(23.8)	44(35.8)	30(18.2)	105(25.1)
	No	99(76.2)	79(64.2)	135(81.8)	313(74.9)
Youth rights displayed (n = 414)	Yes	49(37.7)	63(51.6)	55(34.0)	167(40.3)
	No	81(62.3)	59(48.4)	107(66.0)	247(9.7)
Display of services without discrimination (n = 419)	Yes	18(14.0)	33(26.6)	27(16.3)	78(18.6)
	No	111(86.0)	91(73.4)	139(83.7)	341(81.4)
Confidentiality policy display (n = 420)	Yes	15(11.5)	33(26.6)	18(10.8)	66(15.7)
	No	115(88.5)	91(73.4)	148(89.2)	354(84.3)
Convenient working hours (n =418)	Yes	122(93.8)	101(82.8)	156(94.0)	379(90.7)
	No	8(6.2)	21(17.2)	10(6.0)	39(9.3)
Short waiting time (n = 418	Yes	67(51.5)	78(63.9)	56(33.7)	201(48.1)
	No	63(48.5)	44(36.0)	110(66.3)	217(51.9)
Curtains on (windows & doors (n = 418)	Yes	124(95.4)	105(86.1)	157(94.6)	386(92.3)
	No	6(4.6)	17(13.9)	9(5.4)	32(7.7)
Clean surrounding (n = 418)	Yes	124(95.4)	118(96.7)	149(89.8)	391(93.5)
	No	6(4.6)	4(3.3)	17(10.2)	27(6.5)
Functional toilets (n = 416)	Yes	81(62.7)	94(77.0)	96(58.2)	271(65.1)
	No	48(37.3)	28(23.0)	69(41.8)	145(34.9)

4.4.2 Summary of youth experiences in relation to facility friendliness

The youth's response of 'Yes (1)' or 'No (0)'to the above characteristics were considered. Summation of an individual's 'Yes' response was done as n/12. Our findings showed that 60.7% of the youth observed 7-9 characteristics (50%-

75%). The performance of individual clinics was MCH (51.5%) CCC (69.1%), OPD (61.7%). A score of 50% -75% signified a need for slight improvement according to WHO standards. Youth who observed 4-6 (25% - 50%) of the characteristics were 25.6% with clinics scoring MCH (35.6%), CCC (9.8%) OPD (29.3%). A score of 25% – 50% signified that the clinics needed significant improvement to be youth friendly. Of importance is that very few youth (11.4%) observed 10-12 (over 75%) of these characteristics with individual clinics performing as follows MCH (10.6%), CCC (18.7%) and OPD (6.6%.). A score over 75% signified that the clinics were youth friendly.

Apart from experiences being discussed as under facility characteristics, good experiences are further discussed under factors that enhanced service utilization while bad experiences were captured under factors that hindered services utilization below. Therefore, further good experiences were convenient time, days, free/ affordable services, comfortable environment among other experiences. Likewise bad experiences are shortage of staff, lack of funds, lack of services, long waits among others.

Table 4.9: Characteristics of clinics as observed by the youth at Mbagathi County referral hospital and Mama Lucy Kibaki Hospital

Characteristics	DEPARTMENT									TOTAL	
	MCH			CCC			OPD				
Yes	n	%	(CI)	n	%	(CI)	n	%	(CI)	n	%
1 - 3	3	2.3	(0.0,5.3)	3	2.4	(0.0,5.7)	4	2.4	(0.6,4.8)	10	2.4
4 - 6	47	35.6	28.0,43.2)	12	9.8	(4.9,15.4)	49	29.3	(22.2,37.1)	108	25.6
7 - 9	68	51.5	(43.9,60.6)	85	69.1	(60.2,77.2)	103	61.7	(54.5,68.9)	256	60.7
10-12	14	10.6	(6.1,15.9)	23	18.7	12.2,26.0)	11	6.6	(3.0,10.2)	48	11.4

Key:

*(1) Score < 25%: - Not meet standards

*(2) Score 25%-50%: - major improvement

*(3) Score 50%-75%: - some improvement

*(4) Score >75%:-Meets standards

4.4.3 Factors that enhance Utilization of Youth Friendly Health services

Friendly treatment

The service providers were friendly (91.1%) and respectful (88.5%) service providers with only a few staff being unfriendly (8.1%) and disrespectful (11.5%) to them. At the beginning of consultations, youth were assured of confidentiality (50.6%) and by the end of services they were satisfied that privacy and confidentiality was maintained (77.3%) (Table 4.2.2). The staff informed clients on available services (41.6%) (Table 4.2.3)

A majority of the youth experienced friendly treatment by the service providers. This entailed getting explanations on health concerns in a manner that is appreciated and understood by the youth as expressed in the following quote:

> *"Like here (CCC), there are those doctors who know us, so we become friends. The staff also treats us well and they do not order us" (Female aged 21, Mbagathi County* referral *hospital) in addition, they explain issues to us nicely"* (Female aged 22, Mbagathi County referral hospital)

Work enjoyment

The service providers enjoyed involving the youth and youth peer workers in their services as explained by this quote.

> *"…I like working with them (youth), helping them and making them comfortable and assisted. We have introduced 'peers' in managing the youth and this has proved to be a good thing"* (Service provider, Mama Lucy Kibaki Hospital)

Service provider's knowledge: Understanding of the youth and training of service provider encouraged positive interaction between the service provider and the youth as narrated by the quote below.

"I'm very passionate about the youth and this has helped me in relating, serving and understanding them…they love my services. I have also had training which enhanced service delivery" (Service provider, Mbagathi County referral hospital)

Socialization during visits

The youth enjoyed going for appointments because they were treated well by the service providers, they meet with friends and new people and chat with them as quoted below.

"…Some visits are ok because we are treated well and we meet friends and chat…" (Male aged 15, Mbagathi County referral hospital) we also meet new people.*"* (Female aged 22, Mbagathi County referral hospital)

A comfortable environment:

A comfortable environment enhances service utilization because it makes the youth to feel cared whereas discomfort hinders service utilization as expressed in the following quote.

"…I like to see the youth comfortable, because once the youth are not comfortable in an environment they will not wait to be served.'' (Service provider, Mbagathi County referral hospital)

Cost of services

Guidelines/SOPs and policies for free or affordable service provision to adolescents were present in the comprehensive care clinics at both hospitals. Table 4.2.1. Furthermore, the youth were served free of charge at CCC as in the following quote.

"… Services should be free like offered in the comprehensive health clinic; if not free then the youth should be given a special cost which can be

lower than for the other groups of people (affordable).” (Male aged 15, Mbagathi County referral hospital)

Time for services

Results showed that, Guidelines/SOPs On services provision and Referral guidelines, and on how to provide services to adolescents with or without an appointment were present in the comprehensive care clinics at both hospitals. Here (CCC), youth were first attended to without an appointment then booked for their subsequent visits. Appointments were given as follows; ages 10-13 years came on Wednesdays, and ages 14-24 years came during school holidays (April, august and December) as in the following quote.

“We book adolescents in our clinic on holidays. We have clinics in August, April and December. So, we give them return dates in holidays so that we encourage them to come and bring them together” (Service provider, Mbagathi County referral hospital).

Day of services

The weekend was voiced by many youth as the best days for services because the youth are free from school and work engagements. This made it possible for them to come for health services.

“Weekend is best because most youth are free from school and work. Weekday is tricky because of the jam making some people late for services” (Male aged 24, Mbagathi County referral hospital)

Barriers to utilization of youth friendly health services

Factors that hindered utilization and provision of youth services included; Service Provider oriented (Lack of Staff training on Youth Friendly Health Services, Shortage of staff (overworking), Negative attitude, Rejection by youth) Youth factors (fear, long waits, boredom, lack of information), health system

factors (lack of youth services, lack of funds, inadequate space), and other factors (disruption of care).

Limited Staff training on Youth Services

This was a hindrance to service provision. The service providers in Mbagathi County Referral hospital lacked training on about 37.1% of information on youth services while those in Mama Lucy Kibaki Hospital did not receive 44.5% training information needed. About one service providers in each facility among the three staffs interviewed per facility was aware of a system for periodic attendance of Continuous Medical Education (CME) and training to update themselves on the services as indicated by this quote.

> *"…There is no periodic update and training on youth care and policies on youth health care …" (Service provider, Mama Lucy Kibaki Hospital)*
> *"Most of us dealing with the youth have had to self-sponsor for trainings on youth services…"* (Service provider, Mbagathi County referral hospital)

Shortage of staff (overworking)

There is a shortage of YFHS trained staff preceded by absence of scheduled training for the staff. Therefore, available staff worked for long hours and at multiple consultation rooms as quoted below.

> *"We are currently facing shortage of staff for youth services… hence I may be needed to work at two duty stations at one time …."* (Service provider, Mbagathi County referral hospital) therefore,
>
> *"More trained personnel should be hired to deal with the youth"* (Female aged 22, Mbagathi County referral hospital)

Negative attitude

Negative service providers' attitude hindered utilization of Youth Services by making youth who came for services feel like they are a bother as of this quote.

> *"...Not all the clinicians are youth friendly, some ... do not pay attention ...they are in a hurry to treat, they do not listen, they do not explain anything to me and make me feel like I'm a bother to them ...",* (Female aged 22, Mama Lucy Kibaki Hospital).

On the other hand, youth did not want to ask service providers for clarification and services but instead preferred asking the other youth as quoted below.

> *"Most of the youth still have negative attitude towards the service providers and therefore don't approach them readily for help"* (Service provider, Mama Lucy Kibaki Hospital)

Fear

The youth also experienced fear of service providers that was caused by the service providers not being good and friendly to them, the service provider was not concerned about a sick youth as quoted below.

> *"... The youth are made to fear the service providers by them not being good to us. Even when you are not feeling well, you are forced to wait on the line ..."* (Male aged 17, Mama Lucy Kibaki Hospital).

Additionally,

> *"Most of us are afraid to speak out because not all the clinicians are friendly..."* (Female aged 22, Mbagathi County referral hospital)

The setup of clinics elicited some fear from the youth because of services offered. Lack of diversity in services, for example at the CCC made youth

assume that people that saw them leave those premises would know what kind of service they were seeking.

> *"Services should be diversified so that one does not know which clinic another is coming for as is the case now when we come to CCC everyone knows we are HIV positive"* (female aged 21, Mama Lucy Kibaki Hospital)

Rejection by youth

Rejection of services was caused by youth experiencing discomfort towards staff and the environment as supported by these quotes.

> *"The youth are choosy on whom to care for them because they should feel comfortable with the care giver ..."* (Service provider, Mbagathi County referral hospital)

> *"Also, once the youth are not comfortable in an environment they will not wait to be served. They will walk away without the services."* (Service provider, Mama Lucy Kibaki Hospital)

Long wait

These were negative experiences for the youth during service utilization. At times youth were not treated in the order that they arrived at the clinics, making them to wait longer for services as explained by the following quotes.

> *"Queue was not being followed and there was no organization on how services should be offered, this made us wait for long. This is not good"* (female aged 19, Mama Lucy Kibaki Hospital)

> *"Youth also are always in hurry to get care, delay in giving the care made some of them go without the services."* (Service provider, Mama Lucy Kibaki Hospital)

Boredom

Youth got bored by health talks because of repetitive topics and lack of modern teaching aids. Some youth also complained of boredom due to lack of entertainment during visits as expressed below.

> *"… Youth get bored being lectured on drug, drug, and drug…"* (Female aged 22, Mama Lucy Kibaki Hospital)

> *"… It would have been better if we had a big screen to show the videos of what is being lectured." (Female aged 22, Mbagathi County* referral *hospital) More so, "games should restart because we are getting bored nowadays without them"* (Male aged 13, Mbagathi County referral hospital)

Lack of information/Youth Ignorance

During service provision, service providers discovered a lack of knowledge on health services among the youth; this interfered with youth utilizing some services. For example, they take ARV's for prevention of HIV infection after unprotected sex and youth lack knowledge on services like child delivery causing them to deliver at home as expressed in the following quotes.

> *"Most youth don't know that Antiretroviral (ARVs) are used for Post exposure prophylactics (PEPs). They therefore have unprotected sex then come for PEPs. Additionally, expectant youth don't know about pregnancy, delivery, childcare and breastfeeding. They thus do not come for these services hence deliver at home by the 'Mkunga' (traditional birth attendants (TBAs)."* (Service Provider, Mbagathi County referral hospital)

Lack of youth services

Not all facilities/ clinics offered YFHS. For instance, at both facilities the CCC was youth friendly whereas the OPD and MCH were not. In addition, most youth were

issued with medicine while some missed out getting the medicine as indicated below.

> *"In this facility, clinics are not the same in caring for the youth, there are no youth services and no drugs at OPD. The Comprehensive care clinic offers better services"* (Female aged 22, Mbagathi County referral hospital)

Lack of funds

Many facilities lacked funds to set up youth centers; this denied the youth access to youth friendly services. More so, most youth are in college and schools, they lack money to pay for youth services as indicated by these quotes.

There is

> *"…No funding so that we can set up a youth Centre that has adequate space to care for the youth …"* (Service provider, Mbagathi County referral hospital)

> *"… I'm in college. I lack money to come to hospital, I may be sick but I do not want to ask for money from my parents* (Female aged 21, Mama Lucy Kibaki Hospital)

Inadequate space

Rooms were not enough in number and size to accommodate all the services that are needed by the youth. Only HIV positive youth have a place to be attended. Furthermore, there is not enough space in the comprehensive care clinic to accommodate youth during youth days as illustrated by the following quote.

> *"HIV positive youth have a clinic; however, there is no specific place to attend to youth coming for services like psychiatric care and counseling. I keep moving around the hospital looking for a place to offer these services that is from the adult outpatient, Pediatric outpatient, special*

clinic and even the wards" (Service provider, Mbagathi County referral hospital)

"During youth clinic day, the available space is not enough to accommodate the youth" (Female aged 21, Mbagathi County referral *hospital) this makes "the clinic to be overstretched and overcrowded …"* (Service provider, Mama Lucy Kibaki Hospital)

Disruption of care

During school days, especially for youth in boarding school, services were severely disrupted because of lack of Youth Friendly Health Services in schools. In addition, some school activities like preps time interfered with the time of taking drugs especially for those on daily medication as in the following quote.

"…there are no youth services in schools; hence, there is the disruption of care once the youth go to school. In addition, the time of taking their medicines (ARVs) is disrupted by other schools' activities like morning and evening preps and lessons…" (Service provider, Mama Lucy Kibaki Hospital)

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Discussion

Socio demographic characteristics

The participants from both the hospitals constituted about half of the total population. Slightly more participants were from the outpatient department, this might be explained by the fact the outpatient offers a variety of services to people of all genders and ages as compared to comprehensive care clinic and the Maternal and child clinics who offer services to a specific group of people. Most of the participants were aged 20-24 (130) (Saratu, 2016), (Otwombe *et al.,* 2015). These findings however contradicted with a study conducted in East Ethiopia where most of the participants were aged 15-19 years (Motuma *et al.,* 2016). This may be due to regional disparity in the population curve. The youngest group of 10-14 years constituted the least participants. Youth participants were majorly single as most of these ages are school and college going youth, (Motuma *et al.,* 2016). More females than males (Otwombe *et al.,* 2015) (Barden-O'Fallon, 2020) were realized in this study since the maternal and child health clinic offers services that are mostly for females (129 youth). The Protestants were many followed by Catholics and Muslims / others respectively contradicting a study conducted in East Ethiopia where most of the participants were Muslims / others (Motuma *et al.*,2016). This may be because Ethiopia is dominated by Muslims/ others while Kenya is dominated by Protestants and Catholics. Educated guardians/ parents will be able to advise the youth and may assist in offering information on health to the youth. Most guardians/ parents were on self or paid employment; therefore, they are likely to offer financial assistance needed in seeking health services. However, a few youth may have no money to pay for services and may only gain from free or affordable services as quoted below.

"… Services should be free like offered in the comprehensive health clinic. The youth can also be given a special cost which can be lower than for the other groups of people" (15 years old male).

Characteristics of Youth Friendly health services

Facility Characteristics

UHC encompasses health services systems, health workforce, health facilities and communication networks, health technologies, information systems, quality assurance, governance and legislation. (WHO, 2018). Likewise, Youth-friendly services are a combination of health facility characteristics, service provision approach, and personnel offering services. To assess these characteristics, the global standards for quality health-care services for adolescents developed by the World Health Organization have been assessed to find out if they are met or not. In addition to these standards the WHO 'quality of care' framework that provides a useful guide to work on improving youth health service provision and utilization were also incorporated.

According to World Health Organization, the ideal facility characteristics entails: comfortable surroundings, separate and adequate space, convenient location and hours (special times for the youth, clear and visible information about youth clinic hours and location), sufficient visual and auditory privacy, and displays of adolescent/youth information and health education materials (WHO, 2012). The comprehensive care clinics met the WHO standards mentioned above hence viewed as providing youth friendly health services. In contrast, the Maternal Child health clinic and outpatient did not meet these standards hence they were not perceived to be youth friendly. All these clinics needed some improvement to meet standards of youth friendliness as supported by Renju and others that concluded that their facilities needed improvement to facilitate the provision of Youth Friendly Services (Renju, 2010).

The surrounding environment under which youth services are offered was viewed as an important component of youth services. A comfortable

environment was also described by youth as an appealing environment (beautiful, attractive, and friendly), clean and allowed youth to express themselves freely. Cleanliness of the environment was paramount and offered with support of adequate functional toilets, safe storage and disposal of clinical waste and adequate hand washing facilities next to the consultation rooms. All these measures were put in place to prevent discomfort (James, 2012)

The location of the services within existing facilities is in line with USAID (2015) where it raised the need of advancing existing health services to youth friendly instead of stand-alone (having a separate space) facilities to offer services to adolescents and youth. This is supported by the fact that youth generally preferred receiving SRH services to be co-situated within clinical facilities (Adhiambo, 2022). They supported having services within Mbagathi County referral hospital and Mama Lucy Kibaki Hospital as being in a convenient place as they would not lack any medical services they came for. However, this contradicts most youth who voiced that youth facilities within the hospital were not in an appropriate environment for their age. They wanted a standalone youth Centre, far from the hospital with diverse services (wide range) of integrated services available in one place, (Pandey 2019) so that not only medical services are offered. Other reasons that arose for having the facility far was to avoid people be far from the church and far from the judiciary with no rules and regulations. Raising such views, these youth did not put into consideration the issue of access to diverse services.

Facility signboards that did not mention the working hours for adolescents' services contrasted with the WHO guidelines and made it hard to access these services. The signpost did not provide youth with information on available youth services, the time and place that the services were offered and charges for youth services. This though did not change the perspectives of the youth that said that the working hours were convenient (Suleman *et al.,* 2015), and days were convenient too (Ghiwot *et al.*, 2014)

Confidentiality and privacy are important elements considered by youth seeking youth services and enhanced service utilization. Each comprehensive care clinic had service operating procedures and policies on confidentiality and privacy. Of importance too is the fact that many staff were trained on how to observe privacy during service provision. Some of the ways used to observe privacy included private communication (verbal privacy) between the staff and patients at the waiting room. Additionally, observing information confidentiality (Barden-O'Fallon, 2020) was practiced by keeping case records and registers under lock and key outside operating hours, to prevent unauthorized access to these records. Lastly, Physical privacy was achieved by provision of screens to separate the examination area from the consultation or use of separate rooms. Curtains on windows and doors were also necessary to block passersby from looking at the client.

Despite the lack of a signpost that gives information on youth services that is essential in promoting service utilization; other ways were used to pass relevant health information to the youth included availing educational materials for adolescents. Education materials included pamphlets, youth specific videos and television at the waiting areas of the CCC at each facility. There were also service operating procedures that were displayed to give direction on how services should be offered to the youth.

Service provider characteristics

Some service providers were trained; these were supported by a majority of the youth who appreciated that service providers were trained on youth services (International Planned Parenthood Federation, 2008.) (Awuondo *et al*., 2015). Accordingly, training may help strengthen the knowledge and skills of health service providers, build positive attitudes and motivation, and improve their performance and thereby the adolescent-responsiveness of health services. A huge number of disparities were noted among the facilities on training of staff on different topics like adolescent communication skills, adult communication,

allocating adequate time for the client and providers, clinical case management, awareness on package of information.

Service providers had been equipped with skills through training. Research in Northern Tanzania supports our findings and other studies in emphasizing the need to train more staff (both clinical and non-clinical) per facility in order to ensure youth-friendly services delivery they were respectful (Renju, 2010). Trained services providers knew what youth needed for instance they knew keen to provide privacy and confidentiality, they allocated enough time for interaction with a client and they trained peer counsellors for service delivery. In another study conducted in Sweden trained service providers working in youth clinics were perceived as motivated, interested and knowledgeable about youth (Thomée, 2016). Even though training was done to a less extend, there was limited knowledge on availability of training schedules and low awareness on some parts of policies (free/affordable services) with some service provider having no training at all (Awuondo *et al.*,2015.).

> *"You find that most of us dealing with the youth have been forced to sponsor ourselves and be trained to deal with this group*" (service provider at Mama Lucy Kibaki Hospital).

The facilities fell short of proposals by the National Adolescent Sexual and Reproductive Health Policy (2015) on capacity building of health providers to provide youth services through continuous medical education, in-service and on job training.

Availability

Availability is an important element of measuring coverage of health services. There was no standalone Youth friendly centre but services were embedded in existing services like in the Comprehensive care clinic (CCC). There were no policies on commitment of the health facility to provide health services to all adolescents mostly at Maternal Child and Health Clinic and Outpatient Clinics where no particular youth services were provided. Services offered were not

tailored to specifically meet the needs of young people but for everyone needing these services. Services were readily available with very few youth being denied services due to a variety of reasons. These Adolescents' perceptions of the friendliness of services further confirmed inconsistent implementation of youth services (Chandra-Mouli *et al.*,2013).

This was better demonstrated by many youth being sure that they will access contraceptives when need arose. Many youth got medicines prescribed and many more others accessed services due to availability of equipment. Other readily available services were HIV counselling and testing among others also readily available to majority.

Knowledge, attitude and practices on youth friendly health services

Knowledge

Knowledge is still a problem to most youth (Saratu O, 2016) (Otwombe *et al.*, 2015). It is apparent that very few youth had general knowledge of youth friendly health services (Bernard, 2020). This is in line with findings in Albuko where less than 50 % youth were aware of youth friendly health services (Ghiwot *et al.*,2014), (Motuma *et al.*,2016). Some of the knowledge that youth had included being aware of what is meant by youth friendly health services, knowing other youth services that are provided to the youth in this facility, knowing other youth centres that are situated in Nairobi and knowing where else to go for services that were lacking in their facilities. This contradicts with the study by WHO in Moldova where young people did not know where to go for help (Bernard, 2020, WHO, 2020). Youth had very little knowledge on HIV in line with the findings by TCI university (http://tciurbanhealth.org, 2018) where 49 % of 15- 19 year old young women and 60% of 20-24 year olds had comprehensive knowledge of HIV. Despite the evidence of little knowledge on Youth services, there was a lot of awareness on alternative facilities offering services that were lacking, methods of contraception, access of contraceptives by youth, and about sexually transmitted diseases.

Attitude regarding youth friendly health services

Friendly and respectful service providers support service provision. Majority of the staffs were friendly and respectful, this agrees with findings by pathfinder International (2017) (Barden-O'Fallon, 2020) where a significant number of young people were treated respectfully by service providers.

> *"…The service provider was available…friendly…, confidential and their attitude good…"* (22 year old Female).

There were however a few service providers that displayed unfriendly attitudes. At the beginning of consultation, some of the youth were assured by the service providers of confidentiality. By the end of consultation, most youth felt that confidentiality was maintained as promised earlier. Furthermore, many youth felt involved in their care, youth involvement in health care is an important indicator in youth health. There was plenty of support by guardians of the youth. Unfriendly health staff attitudes

Practice regarding youth friendly health services

Practices included the way youth came to seek health services, how the environment was prepared and how the services were offered. Many youth coming to clinics were informed of available services for utilization in line with a study in Malawi (Barden-O'Fallon, 2020). Coming to clinic for the first time was mostly seen in most outpatient clinics with fewer patients booked for reviews. This contrasts with the Comprehensive care clinic and Maternal and Child Health where many services offered required further visits necessitating for an appointment. Appointments automatically increased the number of repeat visits to these clinics.

The nature of services sought influenced the chances of youth coming alone or accompanied by a parent, friend or spouse. This was evidenced by the fact that many youth coming to Comprehensive care clinics and Maternal and Child Health preferred coming alone. The services in these clinics are more sensitive

than those in Outpatient which offers diverse and general services for all. Being accompanied or not did not intensely affect the privacy of the youth because majority of youth enjoyed having time alone with the service provider during consultation.

Experiences and factors influencing utilization of youth friendly health services.

Youth had both bad and good experiences. Youth enjoyed being treated well, listened to and understood by the services provider, they encountered friendly and respectful staff with only a few staff being unfriendly (Suleman et al.,2015) and disrespectful. This was revealed in a study in Nakaseke, Uganda where youth said the primary deciding factors for using voluntary health teams were whether privacy would be respected and the respectfulness of care given (Kalyesubula, 2021). Staff training was noted to be an integral part in enhancing service delivery because the staff were equipped with skills to care for youth. Concern for the youth was apparent with youth being informed of available services so that they did not miss on services. Some other good attitudes include passion, interest in youth and other service provider characteristics (Tilahun, 2012). Support from parents/guardians is essential to service utilization by the youth.

In addition, enhancers to youth service utilization further included maintain privacy and confidentiality. Some ways to ensure privacy and confidentiality was maintained was by availing screens, curtains and proper storage of clients' records. Further, good, affordable or free services enhanced service utilization. This was best demonstrated using an example of free services at the comprehensive care clinic during youth clinic days where youth came in larger numbers as compared to decreased numbers during support groups when there are some funds needed for snacks and other events. Days and times that youth services were offered enhanced service utilization if offered in days that are favorable for the youth like weekends as quoted by this youth below.

> *"Weekend is best because most youths are free from school and work. Weekday is tricky because of the jam making some people late for services."* (Male aged 24, Mbagathi county referral hospital)

However, there are ways that service providers may contribute to hindrance of service provision and utilization. Some staff were not trained (Juma, 2022) on youth services and worked without attaining all necessary skills needed to serve the youth (Godia *et al.,*2013). Moreover, the service provider experienced shortage of staff that caused them to be overworked voicing the need for adequate service providers. Having overworked and untrained service providers resulted to the staff not allocating enough time to the youth and having a bad attitude towards the youth (Bernard, 2020) hence poor services. Lack of training resulted from lack of training schedule for the staff and lack of training funds. Like their counterparts in Kenya who go through these challenges, service providers in other countries also go through similar challenges like low pay, modest working conditions, and lack of necessary skills (Ninsiima, 2021).

The lack of youth friendly characteristics in the facility hindered service utilization. These characteristics included a signboard showing adolescent service hours, adolescent materials, display of right to services, display showing offering of services to adolescents without discrimination, confidential policy, convenient working hours, short waiting time, curtains in doors and windows comfortable seating in the waiting area, clean surrounding, clean consultation room and functional and clean toilets. Very few youth observed that the clinics met the above characteristics. The comprehensive care clinics met these characteristics at 18.7% more than other clinics OPD and MCH at 6.6% and 1.6% respectively. This therefore, made youth dissatisfied with the services because the services didn't meet their needs and expectations. This was true at the maternal child health clinic and outpatient which were noted to be lacking youth services (Godia *et al.,*2013), (Ghiwot *et al.,*2014). This was supported by the observation by the investigators.

Other hindrances to service utilization were the lack of space to accommodate all youth that turned up for care especially during youth days. These huge numbers of youth led to overcrowding, causing over half of the youth to experience slow services hence long waits (Otwombe *et al.,*2015). These findings contradicted experiences by youth in Tunza clinic where only one focused group mentioned the problem of long waits (Barden-O'Fallon, 2020). Experiencing slow services that cause long waiting hours (Godia, *et al.,*2013) caused a few youth leave without services while others may never come back for appointments because of boredom. To relief boredom, services should incorporate games, sport and other fun activities like watching television. This is in line with a study conducted in sub-Sahara Africca that showed that you people go to youth centres to play games (Ninsiima, 2021) along with seeking for services.

Lack of knowledge hindered youth services utilization. Most youth lacked knowledge (Godia *et al.,* 2013) on youth services. For example, they sought post exposure prophylaxis without knowing that these are Anti-Retroviral drugs thus misusing these drugs. A moderate number of the youth were aware of other Youth Friendly Health Centers in Nairobi and very few youths were aware of youth services (Bernard, 2020) and utilized the right services. Further health service utilization was hindered by fear. The youth feared (Suleman *et al.,* 2015) telling their parents their health issues (Benard, 2020) so that they are not accompanied to hospital.

Lack of youth friendly health services (Godia *et al.,* 2013), (Ghiwot *et al.,* 2014) hindered youth service utilization. Absence of youth services in a clinic caused youth visiting these clinics not to access services for example the OPD and MCH. Moreover, lack of youth services in school further interfered with youth friendly follow-up services. There were no strategies to promote youth-friendly health clinics and a formal Referral system between schools and youth-friendly health clinics (Thongmixay *et al.,*(2019).

Financial constraints also posed a hindrance to utilization of youth services. Youth were mainly students and lacked finances (Awuondo *et al.,*2015), (Godia,

*et al.,*2013) to pay for their services, therefore they depended on parents for payment. In a study in Rwanda, youth believed that it is only at public facilities that adolescents can access SRH services at an average cost and not private facilities (Ndayishimiye, 2020). Financial shortness was further noted in facilities who could not afford to set up youth clinics with enough space to accommodate the youth during visits. This was supported by a study by WHO in Moldova where it was noted that insufficient financial support for youth clinics is an occasional concern (Ninsiima, 2021). Furthermore, financial constraints contributed to lack of resources and infrastructure. Additionally, Lack of funds (Suleman *et al.,* 2015) also prevented training of service providers on youth friendly health services and hiring of newly trained service providers to deal with the shortage of staff.

5.2 Conclusions

Characteristics that make youth friendly health services as identified and documented by the World Health Organization were not adhered to. Among the characteristics were facility characteristics, services provider characteristics and service characteristics. At Mbagathi and Mama Lucy Kibaki Hospitals, only the comprehensive care clinics met some of the facility characteristics while the maternal child health clinic and outpatient clinics needed major improvements to meet these standards. Additionally, service providers' characteristics including training on youth friendly health services were not met. Knowledge of youth services by youth was limited as evidenced by the fact that some youth did not know what is meant by youth friendly services. Attitudes and perceptions among the service providers and the youth have greatly influenced the practice of utilization and provision of youth friendly health services. Increasing good practices of youth services through training on skills to deal with youth in addition to assuming a positive attitude during service provision will boost youth services utilization. Enhancers to youth service utilization and provision included service providers' respect, concern and friendliness to youth, enlightening youth on available services, promptly offered services, maintained privacy and confidentiality, free or affordable services. Hindrances to service utilization and

provision included lack of training for service providers, lack of space for youth friendly health services provision, lack of scheduled trainings for service providers, lack of funds, shortage of staff and lack of knowledge.

5.3 Recommendations

1. The MOH should put in place effective monitoring and evaluation strategies that will ensure that facilities are supported to adhere to WHO standards and requirements.
2. Facilities should be improved to meet the WHO standards of youth friendliness and improve the quality of youth services. This can be done by involving youth services trained personnel, involving the youth, resource and financial allocation by relevant administrators. This will increase on availability of youth services should be intensified by setting up youth centres that offer diverse youth services (clinical and recreational activities).
3. Further research study should be conducted to prove ‘how knowledge on youth friendly health services could enhance or hinder utilization of these services.
4. Hindrances to utilization of youth services can be eliminated through cooperation of the services providers, youth, facility management, the county government, national government non-governmental organization and schools to ensure that policy and guidelines on youth services are adhered to.

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APPENDICES

Appendix I: Consents (For youth and guardian)

Study title: Youth friendly Health Services in Nairobi, Kenya

Introduction

Good morning/ Afternoon. My Name is Lydiah Kitui. I am a Master of Science Public Health

student at Jomo Kenyatta University of Agriculture and technology. Today I am here to carry out a study youth friendly health services in Nairobi County. This form will give you the information you need, so that you can decide on whether to participate not in the study. There is no right or wrong answers. You will be given time to consider if you will like you to be a part of this study. Please read the form and ask questions on what you do not understand. Be honest and truthful in answering the questions. I assure you that the information you give will be kept in confidence. You will not be required to identify yourself by your names. However, an identification number will be assigned to your questionnaire.

Your participation is voluntary and you decline to answer any question or terminate the interview without any consequences.

The purpose of the study is to assess youth friendly health services with the intention of improving the same.

Risks/ Benefits

During the interview, there will be no physical harm. In addition, there will be neither monetary benefits nor costs incurred by you. Being in the study gives you a chance to ask any questions you may have.

Confidentiality

You will not be identified in any report.

Instructions

Read the instructions and the consent before you sign. Do not sign up if you do not understand any section. Ask for clarification first. Please feel free to contact us in future.

I wish to take part/ allow my child to take part in the study to assess youth friendly health services in Nairobi County. During the interview, I may withdraw at any time without consequences. I have understood the information given; therefore, I do here agree to participate.

If you have agreed to participate, please sign below in the spaces provided. Respondent code……. Signature……..Date…….

Contacts

For any questions, call Lydiah Kitui

Tel: 0711155993

Appendix II: Questionnaires

Adolescent clients exit interview tool

A: Demographic information

	Department Visited	Maternal Child Health Clinic Comprehensive Care Clinic Outpatient Clinic
1.	Age	10 - 14 years 15 - 19 years 20 - 24 years
2.	Gender	Male Female
3.	Marital status	Single Married Divorced, separated, widowed
4.	Religion	Catholic Protestant Muslim/ Other
Social economic status		
5.	Parents or guardians' educational level	Illiterate, Primary Secondary Tertiary
6.	Parents or guardians' occupation	Paid employment Self employed Casual laborer

B: Observation tool and checklist for facility inventory (Characteristics of health facility)

	Item	Response
1	Is there a signboard in the facility?	Yes……1 No……0
2	Does it mention hours for adolescent health clinics?	Yes……1 No……0
Does the waiting area:		
3.	Have adequate and comfortable seating?	Yes……1 No……0
4.	Has information, education and communication materials specifically developed for adolescents?	Yes……1 No……0
5.	Seem welcoming overall?	Yes……1 No……0

6.	Does the waiting area and surrounding seem clean overall?	Yes……1 No……0
Check for basic amenities.		
7.	Is there a functional toilet?	Yes……1 No……0
8.	Does the facility have safe storage and disposal of clinical waste and potentially infectious waste that requires special disposal – such as disposable of equipment that may have come in contact with body fluids?	Yes……1 No……0
9.	Does the facility have adequate hand hygiene facilities that are located in or adjacent to the office/examination room	Yes……1 No……0
Check for visual and auditory privacy features		
10.	Communication between reception staff and visitors is private and cannot be overheard, including from the waiting room.	Yes……1 No……0
11.	In the offices/examining rooms, there is a screen to separate the examination area from the consultation area	Yes……1 No……0
12.	No one can see or hear an adolescent client from the outside during the consultation or counselling.	Yes……1 No……0
Check for confidentiality procedures and their application in practice		
13.	Information on the identity of the adolescent and the presenting issue are gathered in confidence during registration	Yes……1 No……0
14	Case records are kept in a secure place, accessible only to authorized personnel. The registers are kept under lock and key outside operating hours.	Yes……1 No……0
Check if the following information items are displayed in the facility		
15	The rights of adolescents to information, non-judgmental attitude and respectful care	Yes……1 No……0
16	The policy commitment of the health facility to provide health services to all adolescents without discrimination and to take remedial actions if necessary	Yes……1 No……0
17	The policy on confidentiality and privacy	Yes……1 No……0
18	The policy on free or affordable service provision for adolescents	Yes……1 No……0
Check to see if there are the following guidelines/SOPs:		
19	Referral guidelines	Yes……1 No……0
20	SOPs on how to provide services to	Yes……1

	adolescents with or without an appointment	No……0
21	Guidelines/SOPs on applying policies for free, or affordable, service provision to adolescents	Yes……1 No……0
22	Guidelines/SOPs on equitable service provision to all adolescents irrespective of their ability to pay, age, sex, marital status or other characteristics	Yes……1 No……0
23	SOPs on how to involve adolescents in the planning, monitoring and evaluation of health services and service provision	Yes……1 No……0
24	Guidelines/SOPs on supportive supervision in adolescent health care	Yes……1 No……0

Questions to Youth on Friendliness

1.	Did you notice any signboard mentioning the operating hours of the facility?	Yes……1 No……0
2.	Did you see informational materials for adolescents, (including Pamphlets, video, or TV) in the waiting area?	Yes……1 No……0
3.	Was there comfortable seating in the waiting area?	Yes……1 No……0
4.	Have you seen any display with your rights?	Yes……1 No……0
5.	Is there a display mentioning that services will be provided to all adolescents without discrimination?	Yes……1 No……0
6.	Have you seen a display of the Confidentiality policy?	Yes……1 No……0
7.	Were the working hours convenient for you?	Yes……1 No……0

Were the following sufficiently clean

33	Surrounding	Yes……1 No……0
34	Consultation area	Yes……1 No……0
35	Toilets, which were functional and clean?	Yes……1 No……0

Availability

1.	Today, what services did you come for? (*reffer to no 9 list)*	Yes……1 No……0

2.	Today, did you find that the facility has:	Yes……1 No……0
3.	Did you get the services that you came for?	Yes……1 No……0
4.	Did you get the services because of there were medicines you wanted?	Yes……1 No……0
5.	Did you get the services because of there was equipment /available?	Yes……1 No……0
6.	Do you get contraceptives when you needed it? *(Ask 15–19-year-olds only.)*	Yes……1 No……0
7.	If you wanted to undergo HIV test, would you be able to get tested?	Yes……1 No……0
Knowledge		
1.	Do you know or have you heard of (today or in other occasions) what 'Youth Friendly health services" are?	Yes……1 No……0
2.	Do you know any (other) youth Friendly health services centers/health facilities in Nairobi?	Yes……1 No……0
3.	Do you know (today or in other occasions,) what other services you can obtain in this facility?	Yes……1 No……0
4.	If you will need services that are not provided here, do you know where else to go, or who will you ask?	Yes……1 No……0
5.	Do you know what your rights are? If yes, mention some.	Yes…….1. No…….0. Code "yes" if he/she mentions atleast 3 from the list provided. Considerate, respectful and non-judgmental attitude……A Respect for privacy (at consultations, and treatments) ……...B Protection from physical and verbal assault……C Confidentiality of information…… D Non-discrimination…… E Participation……F

		Adequate and clear information……G
6.	Do you know answer to the following questions on HIV?	Yes……1
		No…….0
		(Code "yes" if all five questions are Answered correctly) Can the risk of HIV transmission be reduced by having sex with only one
		uninfected faithful partner……A
		Can the risk of getting HIV be reduced by using a condom with every sexual encounter....B
		Can a healthy-looking person have HIV?.....C
		Can mosquito bites cause HIV?.....D
		Can a person get HIV by sharing food with an infected person?..... E
7.	Do you know/ (have you ever heard) of 'diseases that can be transmitted through sexual intercourse'?	Yes……1
		No…….0
	(Ask 15–19-year-olds only.)	
Attitude		
1.	Was the service provider friendly?	Yes……1
		No……0
2.	Was the service provider respecting your needs?	Yes……1
		No……0
3.	Did the service provider assure you (at the beginning of the consultation) that information about you will not be shared with anyone without your consent?	Yes……1
		No……0
4.	Are you confident that the information you shared (with service provider today) will not be disclosed to anyone else without your consent?	Yes……1
		No……0
5.	Were you involved in the decisions	Yes……1
	regarding your care? (For example, you could to express your opinion or preference for the care provided, and you were heard?)	No……0
Practices		
1.	Is this your first visit to this facility?	Yes……1
		No……0
2.	Did you come alone or you were accompanied by the following?	I came

		alone……... A Parent/guardian, friend……B
3.	If accompanied, did you have some time alone with the service provider?	Yes……1 No……0
4.	Were you denied any services?	Yes……1 No……0

C: Health-care provider interview tool

1.	For how long you have been working at this health facility?	Years Months
2.	Have you received the following training in adolescent health care	Yes……1 No…….0
3.	Communication skills to talk to adolescents?	Yes……1 No…….0
4.	Communication skills to talk to adult visitors/community members?	Yes……1 No…….0
5.	The policy on privacy and confidentiality?	Yes……1 No…….0
6.	Clinical case management of adolescent patients?	Yes……1 No…….0
7.	Aware of the importance of respecting the rights of adolescents to information and health care that is provided respectfully, non-judgmental, and non- discriminatory manner?	Yes……1 No…….0
8.	Policies and procedures to ensure free or affordable service provision	Yes……1 No…….0
9.	Is there a system so that you can regularly (at least 5 yearly) attend continuous training in adolescent health care?	Yes……1 No…….0
10	Can you please name any measures to protect the privacy and confidentiality of adolescents? (Probe for measures in the list provided.)	(Code 'Yes' if atleast the first three items on the list are mentioned) a) Case records are kept in a securely. b) Curtains in windows and doors, a screen separating the consultation area from the examination area. c) Prevents unauthorized access to electronically stored information. d) Information on the youth is gathered in

confidence during registration.

Appendix III: Mwongozo Wa Kuhoji Vijana

A: Habari ya wahusika

Swali	**Jibu**
1. Umri (miaka)	10-14 15-19 20-24
2. Jinsia	Mume Kike
3. Hali ya Ndoa	Sijaoa/ kuolewa Nimeoa, nimeolewa Talaka,Tengana,
4. Dini	Katoliki Muislamu Kiprotestanti
Hali Ya Uchumi Na Jamii	
5. Wazazi au walezi; Kiwango cha elimu	Ha andika Shule ya msingi Secondari Elimu ya kuu
6. Ajira ya Wazazi au walezi	Wmeajiriwa Wamejiajiri Mfanyikazi wa kawaida (casual)
Upatikanaji Wa huduma	
1. Ulikuja kwa ajili ya huduma gani leo?	
2. Je ulipata huduma leo?	Ndio……1 La……0
3. Leo ulikosa huduma kwa ajili ya ukosefu wa dawa?	Ndio……1 La……0
4. Leo ulikosa huduma kwa sababu ya ukosefu wa vifaa ama vifaa vilikuwa hazifanyi kazi?	Ndio……1 La……0
5. Je, unaweza pata njia ya kupanga uzazi wakati wowote unapohitaji kutumia?	Ndio……1 La……0
6. Je, Unaweza kupimwa Virusi Vya Ukimwi wakati wowote unapohitaji hiki kipimo?	Ndio……1 La……0
B: Ufahamu	
1. Je umewahi kwa muda wowote ule pewa habari yeyote kuhusu huduma za	Ndio……1

	afya kwa vijana(YFHS)?	La……0
2.	Unaweza nitajia vituo vingine za huduma za afya bora kwa vijana katika jiji la Nairobi?	Ndio……1 La……0
3.	Je unaweza taja huduma zingine za afya zinatolewa kwa vijana? (sisitiza uone kama atataja huduma zingine)	Ndio……1 La……0
4.	Kama siku moja unahitaji huduma ambazo si zinazotolewa katika kituo hiki , unajua wapi pa kwenda, au nani wa kuuliza?	Ndio……1 La……0
5.	Je, unajua haki zako?	Ndio……1 La……0
6.	Je, unaweza taja haki zako ?	Ndio……1 La……0 (“Ndio” iwapo atataja mbili au zaidi kwa orodha ifwatayo) Kuongeleshwa kwa upole,heshima bila kuhukumu……..A Kuongeleshwa kwa upole,heshima bila kuzingatiwa kwa usiri katika mashauriano na pia matokeo ya matibabu……..B Kutoshambuliwa kimwili au kwa matusi……C Usiri wa habari na maelezo……...…D Kutobaguliwa……... E Uhuru wa kushirikiswa…… F Kupata habari kamilifu na sahihi……G
7.	Unaweza tafadhali jibu maswali yafuatayo juu ya VVU?	Ndio……1 La……0 “Ndio iwapo atajibu sahihi maswali matano y afwatayo
	Je, unajua magonjwa yanayo ambukizwa kwa ngono?	Je, maambukizi ya Virusi Vya Ukimwi (VVU) yanaweza punguzwa kwa kufanya ngono na mpenzi mmoja tu ambaye hajaambukizwa na asiye na mpenzi mwingine?...A je, kutumia mipira kila?..B Ndio……1 La……0
C: Mtazamo		
1.	Je,katika wakati wa mashauriano na nasaha:	Ndio……1 La……0
2.	Je, mhudumu alikujukisha kuhusu huduma zinazo tolewa?	Ndio……1 La……0

3.	Je, mhudumu alikutibu kwa njia nzuri?	Ndio……1 La……0
4.	Je, mhudumu aliheshimu mahitaji yako?	Ndio……1 La……0
5.	Je, mtoa huduma alikuhakikishia mwanzoni mwa kushauriana kwamba taarifa yako haitapatiwa mtu yeyote bila idhini yako?	Ndio……1 La……0
6.	Je, una uhakika kwamba taarifa yako haitapatiwa mtu mwingine bila idhini yako?	Ndio……1 La……0
7.	Je, mhudumu alikuuliza kama ulikubaliana na matibabu/utaratibu na mapendekezo?Kwa ujumla, je, unahisi kwamba ulihusishwa katika maamuzi kuhusu huduma yako ? Kwa mfano, ulipewa nafasi ya kutoa pendekezo lako na je pendekezo hili lilitiliwa maanani?	Ndio……1 La……0
8.	Je, mlezi wako (mzazi / mke) wanaunga mkono utumizi wa hiki kituo cha afya?	Ndio……1 La……0

Kinachoendelea

1.	je, ni mara ya kwanza kuzuru hiki kituo cha huduma?	Ndio……1 La……0
2.	Je kama uliandamana na mtu yeyote kuja kupokea huduma, ulipata nafasi ya kuona mhudumu pekee yako?	Ndio……1 La……0
3.	Kama uliandamana na mtu kukuja kupata huduma, je ulipata nafasi ya kuon a muhudumu wa afya pekee yako?	Ndio……1 La……0
4.	Je, muhudumu wa afya alikueleza huduma zinginezo zinazopeanwa kwa vijana?	Ndio……1 La……0
5.	Je, ulikosa kupewa huduma yeyote ya afya uliyokuwa unahitaji?	Ndio……1 La……0

Hali ya kituo cha afya kulingana na vijana

1.	Umewahi ona sera ya usiri(confidentiality policy)?	Ndio……1 La……0
2.	Je, unafikiri kama unaweza pata moja kama inahitajika? *(walio kati ya miaka 15-19)*	Ndio……1 La……0
3.	Je uliona kibao chochote kinachotoa taharifa kuhusu saa ya kutoa huduma katika kituo?	Ndio……1 La……0

4.	Je uliona taarifa yoyote kwa vijana kwa video ama televisheni katika eneo la kusubiri kabla ya kupokea huduma?	Ndio……1 La……0	
5.	Muda mchache katika hali ya kusubiri ili kupata huduma(muulize mteja alisubiri kwa muda gani)	Ndio……1 La……0	(“Ndio ikiwa alisubiri dakika 30 au chini)
6.	Kulikuwa na pazia katika milango na madirisha hivyo kwamba hakuna mtu anaweza kuona wakati wa uchunguzi ?	Ndio……1 La……0	
7.	Mahali pazuri pa kuketi wakati wa kusubiri	Ndio……1 La……0	
Je sehemu zifuatazo zilikuwa safi:			
1.	Mazingira	Ndio……1 La……0	
2.	Mahali pa kushauriana	Ndio……1 La……0	
3.	Vyoo ambavyo vinatumika	Ndio……1 La……0	
4.	Je unafikiri kwamba ulinyimwa huduma muhimu za afya katika hiki kituo?	Ndio……1 La……0	
	Hali ya kituo cha afya		
1.	Je kuna ubao/bango linalo onNdioha masaa ya utenda kazi wa kituo?	Ndio……1 La……0	
2.	Je huo ubao unataja saa ya kutozwa kwa huduma kwa vijana?	Ndio……1 La……0	
3.	Je mahali pa kusubiri ili kupokea huduma pana viti nzuri na za kutosha?	Ndio……1 La……0	
4.	Kuna vifaa za habari na mawasiliano kuhusu kuendeleza ukuzaji wa vijana?	Ndio……1 La……0	
5.	Inaonekana mahali pa kupendeza kwa ujumla?	Ndio……1 La……0	
6.	Kwa ujumla ni pasafi?	Ndio……1 La……0	
7.	Hali ya Huduma za msingi	Ndio……1 La……0	
8.	Je kunapo pahali pa kujisaidia(choo)?		

9.	Pahali pazuri pa kuhifadhi na sehemu salama ya kutupa taka la kliniki inayoweza ambukiza magonjwa?	Ndio……1 La……0
10.	Je kituo kina vifaa vya kuzingatia afya ya mikono katika ama karibu na ofisi ama vyumba vya kufanyia uchunguzi wa matibabu?	Ndio……1 La……0
11.	Je mazingira ya kituo cha afya ni safi?	Ndio……1 La……0
Hali ya sehemu za faragha		
12.	Mawasiliano kati ya wapokezi na wageni ni wa usiri na hauwezi sikikana yeyote ata ukiwa katika chumba cha kusubiri.	Ndio……1 La……0
13.	maeneo ya uchunguzi/ofisi na ya mashauriano yametenganishwa vizuri.	Ndio……1 La……0
14.	Hakuna anayeweza kuona au kusikia vijana kutoka nje wakati wa mashauriano au ushauri wa nasaha.	Ndio……1 La……0
15.	Utekelezaji wa taratibu za usiri	Ndio……1 La……0
	Registration.taarifa na maswala ya vijana inakusanywa kwa njia nzuri	
16.	Uchunguzi na sajili za vijana zinahifadhiwa mahali pazuri naunapatianwa kwa idhini. (sajili zinawekwa pahali pazuri na wakati unaofaa).	Ndio……1 La……0
17.	Angalia kama habari ifuatayo imeonNdiohwa katika kituo	Ndio……1 La……0
18.	haki ya vijana kupata habari pasipo na unanguzi wala kejeli yoyote.	Ndio……1 La……0
19.	kutoa huduma za afya kwa vijana wote bila ubaguzi na hatua zinaochukuliwa kwa wanao bagua	Ndio……1 La……0
20.	sera ya usiri na faragha.	Ndio……1 La……0
21.	Sera kuhusu huduma za bure au kwa gharama nafuu kwa vijana	Ndio……1 La……0
22.	Hakikisha iwapo mwongozo ufuatao umefuatwa katika kituo /SOPs:	Ndio……1 La……0
23.	Miongozo ya rufaa	Ndio……1 La……0
24.	mwongozo wa kutoa huduma kwa vijana walio na wasio na tarehe ya kurudi	Ndio……1 La……0

25.	mwongozo wa sera zitazotumika kupeana huduma za afya kwa vijana za bure ama kwa gharama nafuu.	Ndio……1 La……0
26.	Miongozo juu utoaji huduma kwa usawa kwa vijana wote	Ndio……1 La……0
27.	bila kujali uwezo wao wa kulipa , umri, jinsia, hali ya ndoa au sifa nyingine.	Ndio……1 La……0
28.	miongozo juu ya jinsi ya kuhusisha vijana katika kupanga, kufuatilia na kutathmini huduma za afya na utoaji wa huduma	Ndio……1 La……0
29	Mwongozo juu ya usaidizi na usimamizi ili kusaidia ubora wa afya kwa vijana	Ndio……1 La……0
	Mwongozo Wa Kuhoji Mhudumu Wa Afya	
	Je, umehudumu kwa muda gani katika hiki kituo?	Miaka……... Miezi……
	Je , umepata mafunzo yafuatayo kuhusu afya kwa vijana:	Ndio……1 La……0
	Ujuzi wa mawasiliano ya kuzungumza na vijana?	Ndio……1 La……0
	Ujuzi wa mawasiliano ya kuzungumza na vijana?	Ndio……1 La……0
	Ujuzi wa mawasiliano ya kuzungumza na watu wazima/jamii	Ndio……1 La……0
	The policy on privacy and confidentiality?	Ndio……1 La……0
	usimamizi na matibabu ya vijana wangoja	Ndio……1 La……0
	Mwelekeo juu ya umuhimu wa kuheshimu haki za vijana ya kupata habari na huduma za afya zinazotolewa katika heshima na kwa njia isiyokuwa na ubaguzi namna ?	Ndio……1 La……0
	Sera na utaratibu wa utoaji wa huduma kwabei nafuu au bure?	Ndio……1 La……0
	Ukusanyaji wa takwimu , uchambuzi na matumizi kwa ajili ya kuboresha ubora?	Ndio……1 La……0
	Je, unafahamu huduma, nasaha, ushauri na huduma za matibabu zinazotolewa	Ndio……1

kwa vijana katika hiki kituo? Maoni Je , unaweza tafadhali taja hatua zozote zinazotumiwa ili kulinda usiri wa habari zinazotolewa na vijana wakati wa kutafuta huduma? (sisitiza hatua katika orodha)	La……0 (“Ndio” iwapo atataja tatu ama Zaidi kwenye hii orodha.) 1.Wafanyakazi hawafichui habari yoyote waliyopewa kutoka kwa vijana kwa watu kama familia, waalimu shuleni au Waajiri bila ruhusa ya vijana. 2. Rekodi za uchunuzi zinawekwa salama na zinapatikana tu na wanaoruhusiwa 3. Kuna pazia katika madirisha na milango , eneo la kushauriana limetenganishwa eneo la uchunguzi ili kudumisha faragha wakati wa mashauriano. Kuna hatua na mikakati ya kilana habari zilizo hifadhiwa kwa njia ya kielektroniki ili kuzuia yeyote asipate bila ruhusa Taarifa juu ya utambulisho wa vijana inakusanywa kwa njia ya usiri

Appendix IV: In-depth interviewing (IDIs)

Youth participants (qualitative study interview guide)

1. How old are you?
2. Tell me about youth friendly health services?
3. Are these services available in this health institution?
4. Suggest days and times that you would like to seek these services.
5. Describe the environment that is ideal for YFS.
6. What factors will make you seek YFSs at a youth friendly health facility?
7. What factors will hinder you from seeking YFS?

Interview guide for key informant for the health service providers

1. What do you understand by youth friendly health services?
2. Which YFS are mostly sought?
3. What days do you offer youth friendly health services?
4. Share with us the experiences you have had when offering YFS to the youth
5. What factors enhance your provision of YFSs in this health facility?
6. What factors will hinder you from providing YFS?

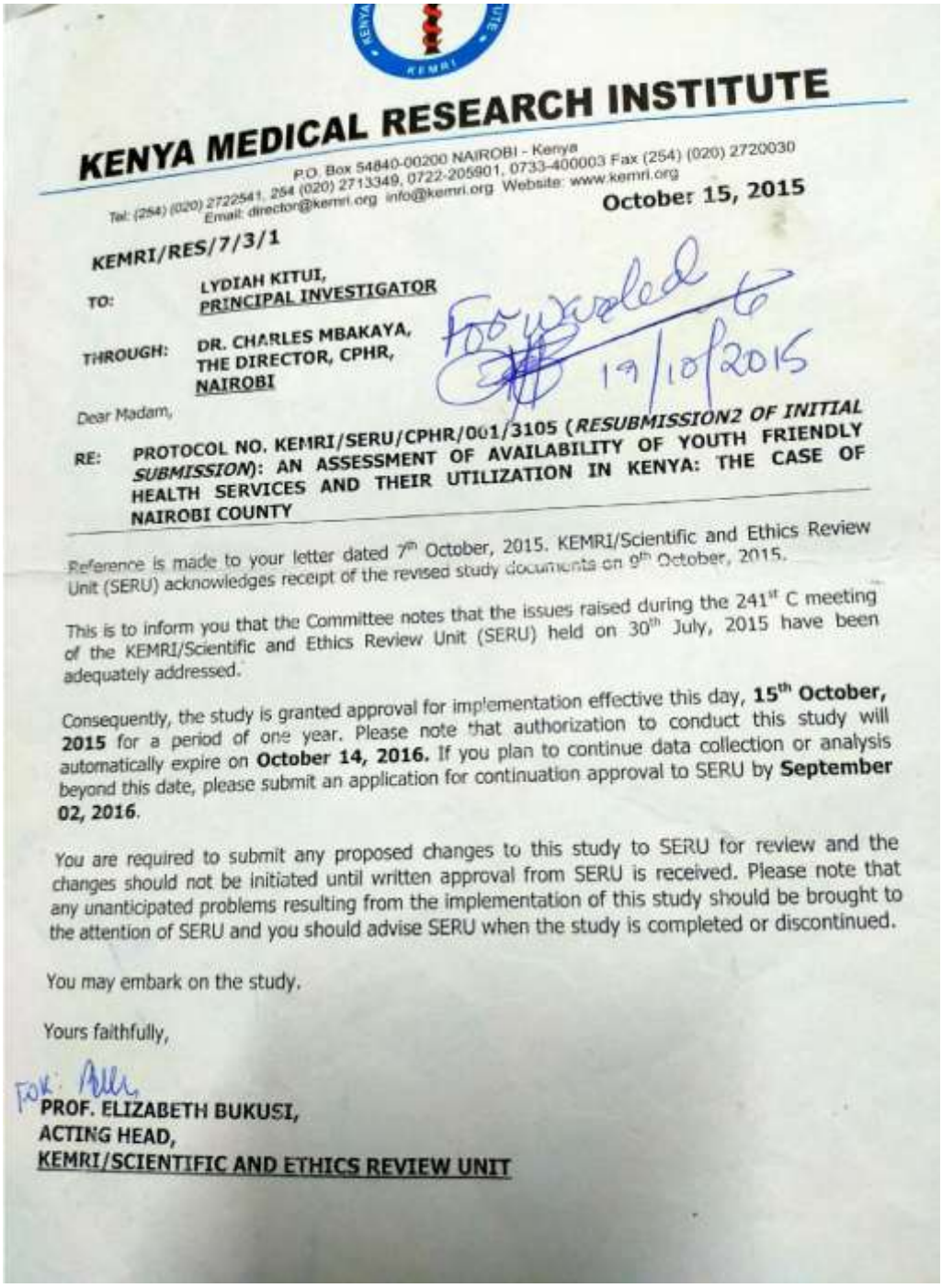
Appendix V: Mwongozo wa Mahojiano

1. Je una umri gani?
2. Je hizi huduma zinapatikana katika taasisi hii ya afya?
3. Pendekeza siku na muda ambao ungependa kupata huduma za kiafya.
4. Elezea mazingira bora ya utoaji huduma za afya.
5. Ni vitu gani zitakuvutia kutafuta huduma bora za afya kwa vijana katika kituo chochote?
6. Je ni vitu ama hali gani itakufanya usitafute huduma bora za afya kama kijana?

Maswali kwa waakilishaji wa wahudumu wa afya

1. Je, unafahamu kivipi huduma bora za afya kwa vijana?
2. Je, ni huduma zipi za afya zinazo tafutwa na vijana mara kwa mara?
3. Je, ni siku gani za unazotoa huduma kwa vijana?
4. Je, kupitia ni maswala gani umesoma kupitia kutangamana na vijana wakati wa utoaji wa huduma?
5. Je ni hali/vigezo gani zinazokuchochea utoaji huduma katika hiki kituo?
6. Je ni vigwazo gani zitakuzuia kutoa huduma za afya bora kwa kijana

Appendix VI: KEMRI scientific and ethical review committee approval



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October 15, 2015

KEMRI/RES/7/3/1

TO: LYDIAH KITUI,
PRINCIPAL INVESTIGATOR

THROUGH: DR. CHARLES MBAKAYA,
THE DIRECTOR, CPHR,
NAIROBI

Forwarded
19/10/2015

Dear Madam,

RE: PROTOCOL NO. KEMRI/SERU/CPHR/001/3105 (*RESUBMISSION2 OF INITIAL SUBMISSION*): AN ASSESSMENT OF AVAILABILITY OF YOUTH FRIENDLY HEALTH SERVICES AND THEIR UTILIZATION IN KENYA: THE CASE OF NAIROBI COUNTY

Reference is made to your letter dated 7th October, 2015. KEMRI/Scientific and Ethics Review Unit (SERU) acknowledges receipt of the revised study documents on 9th October, 2015.

This is to inform you that the Committee notes that the issues raised during the 241st C meeting of the KEMRI/Scientific and Ethics Review Unit (SERU) held on 30th July, 2015 have been adequately addressed.

Consequently, the study is granted approval for implementation effective this day, **15th October, 2015** for a period of one year. Please note that authorization to conduct this study will automatically expire on **October 14, 2016.** If you plan to continue data collection or analysis beyond this date, please submit an application for continuation approval to SERU by **September 02, 2016**.

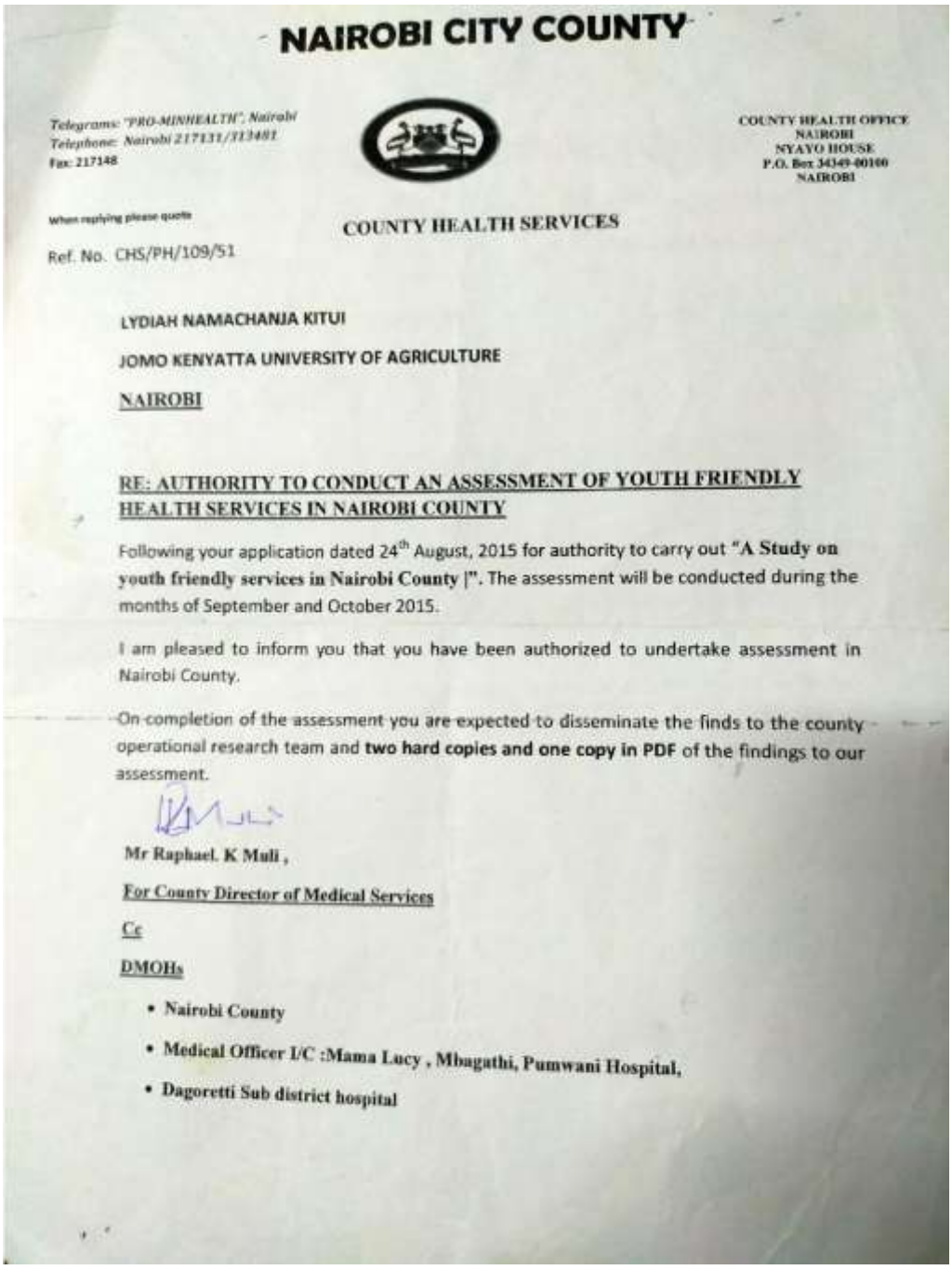
You are required to submit any proposed changes to this study to SERU for review and the changes should not be initiated until written approval from SERU is received. Please note that any unanticipated problems resulting from the implementation of this study should be brought to the attention of SERU and you should advise SERU when the study is completed or discontinued.

You may embark on the study.

Yours faithfully,

FOR:
PROF. ELIZABETH BUKUSI,
ACTING HEAD,
KEMRI/SCIENTIFIC AND ETHICS REVIEW UNIT

Appendix VII: Ministry of health- Nairobi County Health Services permission for research



NAIROBI CITY COUNTY

Telegrams: "PRO-MINHEALTH", Nairobi
Telephone: Nairobi 217131/313481
Fax: 217148

COUNTY HEALTH OFFICE
NAIROBI
NYAYO HOUSE
P.O. Box 34349-00100
NAIROBI

When replying please quote

COUNTY HEALTH SERVICES

Ref. No. CHS/PH/109/51

LYDIAH NAMACHANJA KITUI

JOMO KENYATTA UNIVERSITY OF AGRICULTURE

NAIROBI

RE: AUTHORITY TO CONDUCT AN ASSESSMENT OF YOUTH FRIENDLY HEALTH SERVICES IN NAIROBI COUNTY

Following your application dated 24th August, 2015 for authority to carry out **"A Study on youth friendly services in Nairobi County |"**. The assessment will be conducted during the months of September and October 2015.

I am pleased to inform you that you have been authorized to undertake assessment in Nairobi County.

On completion of the assessment you are expected to disseminate the finds to the county operational research team and **two hard copies and one copy in PDF** of the findings to our assessment.

Mr Raphael. K Muli ,

For County Director of Medical Services

Cc

DMOHs

- Nairobi County
- Medical Officer I/C :Mama Lucy , Mbagathi, Pumwani Hospital,
- Dagoretti Sub district hospital

Appendix VIII: Publication

Imperial Journal of Interdisciplinary Research (IJIR)
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Availability, Knowledge, Attitude and Practice of youth friendly health service at Mbagathi and Mama Lucy Kibaki Hospitals at Nairobi County – Kenya

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ABSTRACT

Background: *About 1.8 billion people in the world are aged 10 to 24 years: they have unique needs and face a threatening reality considering the high vulnerability to a myriad of health issues that must be addressed. Governments led efforts are underway in a number of low and middle income countries including Kenya to make health services adolescent/ youth friendly. This study assessed the: availability of youth friendly services and the knowledge, attitude and practices of these services in Nairobi County with a view to support planning for these services*

Methods: *This was a concurren parallel mixed methods design that employed both quantitative and qualitative study methods.*

Results: *Youth friendly health services were available only in the Comprehensive Care Clinic, majority (62.3%) of the youth were aged 20 – 24 years, 15 – 19 years (29.9 %) and 10 – 14 years (7.8%). Most (88.5%) youths said that the service provider was respectful. At the outpatient clinic youths were coming for the first visit (51.2%) while at the comprehensive care clinic and the maternal child health, they were coming for a repeat visit.*

Conclusion: *Youth friendly services are present at the comprehensive care clinic. The maternal child health clinic and the outpatient clinics lack these services for the youths.*

1. BACKGROUND

The youth experience specific vulnerabilities that are unique to their age group (1; 2). Early pregnancy and STIs (including HIV) threaten the health of adolescents more than at any other age group (3), 15 million young women aged 15 to 19 years give birth every year (4) . In sub-Sahara Africa, most youth encounter significant obstacles to receiving sexual and reproductive health services (5). Most reproductive health programmes are educational (6) and still promotion of services and publicity on the clinic's location and hours is inadequate, (7)

South Africa is experiencing a 'youth health crisis', partly due to under-nutrition, early child-bearing, high incidence of HIV infection, substance abuse, violence and injuries (8) this has resulted in a desire by young people in to improvement of services with a focus on quality, friendliness, and cleanliness (9). In Malawi the government, recognized that young people are exposed to a broad range of sexual and reproductive health (SRH) challenges that include unwanted pregnancies, sexually transmitted infections (STIs), and HIV/AIDS (10) .In Ethiopia, the youth friendly health providers explained that although youth's RH needs are immense, there are obstacles to access health services (11). Some of the pressures adolescents are under, or the choices they make, can change the course of their young lives, or even end them (12).

Implementing YFHS contributes to better health among young people none the less; health systems worldwide have failed to implement this approach (13). Laws and policies may restrict services available to adolescents (14) therefore policies should be developed taking into account their specific needs (15) including the need for health services. The world health organization describes youth friendly health services (YFHS) as services that are accessible, acceptable, affordable and appropriate for the adolescents, (16)

In Kenya, the Young people [aged between 15 to 24 years] face a threatening reality considering the

high vulnerability to a myriad of health issues" (17) for example general health problems, malnutrition, menstrual problems, female genital cutting, nearly and unprotected sex, early forced marriages, abortions, sexually transmitted infections, drug and substance abuse, accidents and violence, sexual abuse and mental health problems (2).There are also insufficient 'youth friendly' integrated reproductive health [one stop] facilities where the youth can access preventive services, maternal child health services, and HIV care and treatment and support. (18).. Only 12 % of the facilities provided youth friendly health services (YFHS). In Nairobi, 17 percentages of total health facilities offer YFHS, while only 8% of government owned health facilities provided these services. Therefore there is need to establish more YFHS especially in government owned health facilities (19). Mbagathi District Hospital and Mama Lucy Kibaki hospitals like other public health institutions may not have well-established youth friendly health services. Lack of knowledge about where to access these services and what services are available are the main underlying factors for the adolescents not using sexual and reproductive health services (20). We carried out this study to assess the: knowledge, attitude, practices, associated with YFHS in Nairobi county health facilities using a case of Mbagathi District Hospital and Mama Lucy Kibaki Hospital.

2. METHODS

2.1. Research design

This was a convergent parallel mixed method study design (21), that employed both qualitative and quantitative research methods. The data for both studies were collected and analysed concurrently, then the researcher converged quantitative and qualitative data in order to provide a comprehensive analysis of the research problem.

2.2. Study setting and area

The study was done in Nairobi County, at Mbagathi District Hospital (MDH) situated in Langata constituency. This hospital serves a majority of low income earners from one of the biggest informal settlements (Kibera) consisting about 170070 by 2009 and Mama Lucy Kibaki Hospital Situated in Embakasi constituency which serves some of the other low income earners. These two hospitals serve a diverse population that represented a substantial population of the youth of Nairobi County.

2.3. Study population: The study targeted youths aged between 10-14 years that were attending these facilities and health service providers that were working in these facilities at the time of study

2.3.1Quantitative

Sample Size Determination: Fishers' formula was used to calculate the sample of 384. Allowing for 10% non-response, the sample size was adjusted upwards to 422 respondents.

Sampling procedures: The facilities were purposively selected on the basis of assumed similarity as per the Ministry of health. A sampling frame was developed at each facility based on the daily clients' turnover multiplied by the number of days we were planned in the field (study Duration). Probability proportional to size allocation was applied to distribute the sample size across the facilities as presented. The first youth between ages 10-24 was selected using simple random sampling (SRS) procedure then subsequently, every 4-th youth was selected in a queue until the sample size was attained. Quantitative sample was attained through quota sampling based on the participants' age and gender to represent all age groups and gender.

Data Collection Instruments: Quantitative data was collected using client exit questionnaires consisting closed ended questions. These were formulated using a tool developed and validated by (22) to capture the global standards for Quality health-care services for adolescents. The tools were pretested in collecting data, desired results were ensured by training interviewers and interviewing 10% of the sample.

Data Management and Analysis: Data from the field was entered MS-Access application. Files Back-up done. Data cleaning and validation were performed. The data exported into a Statistical Package Social Sciences version 21.0 for analysis. Descriptive analysis and Pearson's Chi-square were performed. Statistical significance was set at $p<0.05$.

2.3.2. Qualitative

Data collection methods: In-depth interviews were conducted among 12 of youth and 2 of health providers. To gain increased knowledge on availability, knowledge, attitude and practises of youth friendly health services. The study guide was pretested prior to conducting the study.

Recruitment procedures: This sample for qualitative study will not be drawn from those interviewed in the quantitative study. Quota sampling which is a non-probability sampling method used to select study participants or

informants based on the researcher's judgment was carried out taking into consideration the age of the youth participants. The youth were divided into 10-14 years, 15-19 years and 20-24 years as each quota. This was to represent all ages of the youth participants to be interviewed in equal ratios of 1:1:1 (1/3). The services providers were considered as a different quota.

Data analysis: Qualitative data was transcribed and translated to English where Kiswahili was used. Each interview was coded and entered as unique files into Microsoft word. This helped organise and explore the data, identifying relationships and showed patterns in the information gathered. Thematic analysis was performed manually following the five major steps: familiarization with the data, generation of initial codes, search for themes according to their relevance, revision of themes to build up categories and interpretation to explain the events that were emerging from the study.

Ethical consideration: Ethical approval was obtained from the KEMRI scientific and ethical review committee. Permission to conduct the research at the health facilities was obtained from the ministry of health- Nairobi County.

3. RESULTS

3.1.Percentage of departmental services sought by the youths

Out of the 422 youths interviewed, 39.3% visited the outpatient clinic, 31.3 % the maternal and child health clinic and 29.4% the comprehensive Care Clinic

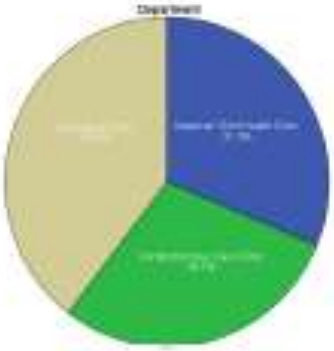

Figure 1. Percentage of departmental services sought by the youths

Table 1: Social-demographic Characteristics of youths at Mbagathi and Mama Lucy Kibaki hospitals

Variable	RESPONSE	Frequency	(%)
Age group of participants (n=422)	10 years - 14 years	33	(7.8)
	15 years - 19 years	126	(29.9)
	20 years - 24 years	263	(62.3)
Gender (n=422)	Male	127	(30.1)
	Female	295	(69.9)
Marital status of the participant (n=414)	Single	294	(71.0)
	Married	117	(28.3)
Religion	Catholic	163	(8.8)
	Protestant	232	(5.2)
	Muslim	22	(5.2)
	Other	3	(.7)
Guardians education level (n=414)	Primary	96	(23.2)
	Secondary	169	(40.8)
	Tertiary	119	(28.7)
	Illiterate / Don't know	30	(7.2)
Guardians occupation (n=414)	Paid - employment	152	(36.7)
	Self - employment	194	(46.9)
	Casual labourer	68	(16.4)

3.2. Social-demographic Characteristics

A total of 422 youth participants were interviewed, majority (62.3%) of the youth were 20 – 24 years, 15 – 19 years were almost a third (29.9 %) and few of them (7.8%) were 10 - 14 years. Females were more (69.9%) than males (30.1%). Most (71.0%) youths were single and some (28.3%) were married. Majority of the guardians/ parents had some education with, primary education, secondary and tertiary education at (23.2%), (40.8%), and (28.7%) respectively, very few (7.2%) were illiterate. Slightly below half (46.9%) of the guardians were self-employed, those on paid employment were slightly above a third (36.7%) and few (16.4%) were casually employed.

Table 2. Socio-demographic characteristics of youths by facility departments

Variable	Department			P value
	Maternal Child n=132 n (%)	Comprehensive Care n=123 n (%)	Out Patient n=167 n (%)	
Age group (years)				
10 -14	1 (.8)	10 (8.1)	22(13.2)	0.00
15-19	21 (15.9)	53(43.1)	52(31.1)	
20 -24	110 (83.3)	60(48.8)	93(55.7)	
Gender				

Male	3 (2.3)	57(46.3)	67(40.1)	0.00
Female	129 (97.7)	66(53.7)	100(59.9)	
Marital status				
Single	56 (42.4)	114(92.7)	130(77.8)	0.00
Married	75 (56.8)	9 (7.3)	35(21.0)	
Divorced	1 (.8)	0 (0.0)	2 (1.2)	
Religion				
Catholic	34(25.8)	51 (41.8)	78(47.0)	0.01
Protestant	90 (68.2)	60 (49.2)	82(49.4)	
Muslim	8 (6.1)	8 (6.6)	6 (3.6)	
Other	0 (0.0)	3 (2.5)	0 (0.0)	
Guardians education level				
Illiterate	14 (10.8)	4 (3.3)	12(7.3)	0.01
Primary	41 (31.5)	24(19.5)	31(18.9)	
Secondary	45 (34.6)	57(46.3)	69 (42.1)	
Tertiary	30(23.1)	38(30.9)	52 (31.7)	
Guardians occupation				
Paid-employed	36 (27.7)	46(37.4)	71(43.3)	0.00
Self-Employed	77 (59.2)	60(48.8)	58(35.4)	
Casual	17 (13.1)	17(13.8)	35(21.3)	

The maternal child and health clinic was attended mainly by the older (83.3%) female (97.7%), married (56.8%), Protestants (68.2%) youths. The outpatient clinic was attended by the younger (13.2%), single (77.8%) with more females (59.9%) than males (40.1%). Majority of the youths at the comprehensive care clinic were single (92.7%), older youths of 15- 19 (43.1) and 20-24 years (48.8%) with more females (53.7%) than males (46.3%).

Table 3. Availability of youth friendly health services at Mbagathi and Mama Lucy Kibaki Hospitals by facility departments.

Variable Response	Department			Total	P value
	Maternal child clinic n=132, %	Comprehensive Care Clinic n=123, %	Out Patient Clinic n=167, %	N=422	
Heard of youth friendly Health Services					
Yes	32(24.2)	60(48.8)	38(22.8)	[illegible]	0.00
Services came for					
Developmental /Immunization /Counselling	5(3.8)	4(3.3)	5(3.0)	14(3.3)	0.00
STI / HIV	21 (15.9)	87 (67.7)	41 (24.6)	145(34.4)	
Family Planning	4(3.0)	2(1.6)	5 (3.0)	11 (2.6)	
Ante Natal / safe delivery	53 (40.2)	2 (1.6)	9(5.4)	64 (15.2)	
Treatment	49 (37.1)	32 (26.0)	107(64.1)	188(44.5)	
Knows Youth Friendly H. centres					
Yes	29(22.0)	35(28.1)	41(24.6)	107(25.4)	0.00
Knows other youth services					
Yes	68(51.5)	81(65.9)	99(59.3)	278(65.9)	0.25
Displayed rights (n=179)					
Yes	39(29.5)	64(52.0)	59(35.3)	172(40.1)	0.00
Display of services in office (179)					
Yes	19(14.4)	32(26.0)	28(16.8)	79(18.8)	0.0
Confidentiality policy (n=422)					
Yes	15(11.4)	33(26.8)	18(10.8)	66(15.7)	0.00
Signpost service hours					
Yes	67(50.8)	91(74.0)	111(66.5)	269(63.7)	0.00

3.3. Availability of Youth Friendly Health Services.

The quantitative study results indicate that more youths attended comprehensive care clinic 48.8% were told what youth friendly health services are as compared to those attending maternal child health clinic 24.2% and outpatient clinic 22.8% respectively. This concurred with the qualitative findings that revealed youth friendly health services as available only in the Comprehensive Care Clinic. No youth friendly services were available at the Maternal and child health clinic and the outpatient clinic as expressed in the following quote:

> *"...The comprehensive care clinic (CCC) alone practices YFHS that I know of..." As the outpatient clinic and Maternal Health Clinic_we don't have any particular YFHS..."* (S.P002)Some respondents said that Youth Friendly Health Services were unavailable in both health facilities

Most of these youths at the comprehensive care clinic: sought STI/HIV services (67.7%), knew of other services available to adolescents in their facilities (65.9%) and noticed a signpost mentioning operating hours (74.0%). About half (52.0%) of youths attending comprehensive care clinic saw a display with their rights. More (40.2%) youth respondents who came to the maternal and child clinic sought for antenatal services as compared to other services while fewer (50.8%) youth from the same clinic noticed a signpost mentioning operating hours. Most of those attending the outpatient clinic went for general treatment. Overall, most youths sought treatment (44.5%) followed by STI/HIV services (34.4%). A few of the youths (25.4%) knew other youth friendly health centres in Nairobi while below half

(41.1%) of the youths saw the display of their rights. Few youths attending all clinics saw a display of adolescents receiving services without discrimination and a display of the confidential policy at 18.6% and 15.7 % respectively.

Table 4. Knowledge of youths about Youth friendly Health Services by age groups

Variable	Age group of participants in years				p value
	10-14 (n=33)	15-19 (n=126)	20-24 (n=263)	Total (N=422)	
Knows where to go for services					
Yes	21 (63.6)	102 (81.0)	240 (91.3)	363 (86.0)	0.00
Knows rights					
Yes	23(69.7)	101 (80.2)	200 (76.0)	324(76.8)	NS
Rights mentioned					
0-2	33(100)	122(96.8)	252(95.8)	407(96.4)	0.05
≥1	0(0.0)	4(3.2)	11(4.2)	15(3.)	
contraceptives Methods named					
Yes (≥1)	0(0.0)	51(40.5)	147(55.9)	198(46.9)	0.00
Can get contraceptive (n=420)					
Yes	0(0.0)	109(86.5)	196(75.1)	305(72.6)	0.00
Heard of HIV					
Yes	32(97.0)	123(97.6)	263(100)	418(99.1)	0.00
Answered HIV questions (n=421)					
Yes	30(90.9)	118(93.7)	238(90.8)	386(91.7)	NS
Answers for HIV questions					
Yes (5 Correct)	1(3.4)	42(35.6)	114(47.5)	157(40.6)	0.00
Can be tested for HIV on (n=419)					
Yes	28(84.8)	118(93.7)	254(97.7)	400(95.5)	0.00
Heard of Sexually Transmitted Disease (n=414)					
Yes	10(35.7)	107(84.9)	251(96.5)	368(88.9)	0.00
Saw education materials					
Yes	6(18.2)	28(22.2)	75(28.5)	109(25.8)	NS

3.4. Knowledge of Youth Friendly Health Services.

Compared to the older youth, more of the younger youths aged 10-14 years (63.6%) did not know where else to go for services. Most youth respondents (76.8%) knew their rights. However, none of the younger youths and very few (3.6%) of all youth respondents could name three rights and above. Most youths of all ages could name one right. Overall slightly below half of all the respondents (46.7%) named more than three methods. Children aged below 15 years were not asked to answer questions on contraceptives. More of the oldest (20-24 years) youths named more than three methods of contraceptives than the younger youths (15-19years). More (86.5%) of youths respondents aged 15-19 years said they could get contraceptives if they needed it compared to the older youths (75.1%). Almost all youths (99.1%) had heard of HIV. Majority (91.7 %) of all youth respondents were willing to answer questions on HIV. Very few (3.4%) youths aged 10-14 years were got all five questions on HIV correct, with more than a third of the older youths getting these questions correct. Majority (95.5%) of youth respondents of all age groups said they could be tested for HIV if they requested for the test. Less than half (35.7%) of the younger youths had heard about sexually transmitted diseases. Generally, few (25.8%) of all youth respondents had seen education informational materials for adolescents.

The knowledge the youth and service providers had regarding Youth Friendly Health Services was based on the quality, the design and operation of the services.

Quality of Services: Majority of the youths described these services as medical services that would make the youth comfortable to come for services as in the following quotes.

> *"These are medical services that make the youth comfortable to come for help and treatment..."* (22 year old female2)

The Design of the Services: Youth Friendly Health Services were described as services that were designed to favour the youth and are meant for them. The following quotes describe this.

> *"... They are services that favour the youth so that they don't feel neglected..."* (23 year old Male) *"... YFHS is providing services that are favouring the youth..."* (Service provider at Mama Lucy Kibaki Hospital)

Service Operation: Both the youths and service providers described Youth friendly Health Services as operated through support groups, by understanding the youth, offering prompt services to the youths, the service providers showing fairness to the youths, as illustrated by this quotes.

> *"... the youth friendly services I know are the support group that is conducted every Saturday of the month"* (14 year old Male).
>
> *"This I assume is providing services that are able to meet the needs of the youths in*

addressing their different needs..." (Service provider at Mbagathi District Hospital) *"...it is, understands the youth at their level..."* (Service provider at Mama Lucy Kibaki Hospital), *"... hurrying their services because they don't want to wait ..."* (Service provider at Mama Lucy Kibaki Hospital) *and "... being fair to them and bringing yourself to their level."* (Service provider at Mama Lucy Kibaki Hospital)

Some few of youth participants were unaware of what youth friendly health services are.

Table 5. Attitude of youths about Youth Friendly Health Services at Mbagathi and Mama Lucy Kibaki Hospitals by facility departments

	Department code			Total
	Maternal Child health n (%)	Comprehensive Care n (%)	Out Patient Clinic n (%)	n (%)
Friendly staffs (n=418)				
Yes	122 (92.4)	115(94.3)	147(89.6)	384(91.9)
Staff are respectful(n=418)				
Yes	118 (89.4)	117(95.1)	135 (82.8)	370(88.5)
Information confidentiality (n= 419)				
Yes	106 (80.3)	96(78.0)	122(74.4)	324(77.3)
Agreed with treatment				
Yes	98 (74.8)	96(78.0)	103(62.8)	297(71.1)
Felt involved in care (n=418)				
Yes	97 (74.0)	89(72.3)	109(66.4)	295(70.5)
Guardian (n=415)				
Yes	108 (83.1)	101(82.1)	134(82.7)	343(82.7)

3.5. Attitude among youths and services providers towards youth friendly health services.

Most variables assessed on attitude were not significant to the facility departments. Majority (91.9%) of youths especially from the comprehensive care clinic felt that the service provider was friendly. Most (88.5%) youths said that the service provider was respectful of the youth needs, the service providers at the comprehensive care clinics were the most respectful (95.1%).this findings are encouraging because the services providers thus possess good attitudes that were raised by the youths in qualitative findings as desired for the personnel including being available, friendly, confidential, kind and say a polite word as indicated in the following quotes.

> *"...The service provider should be available, friendly, confidential and their attitude good..."* (22 year old Female2)

Most (77.3%) youths from all departments were confident that their information will not be shared without consent with confidentiality observed more at the maternal child health clinic (80.3%). Youths also developed confidence in the facility through frequent visits to the facility since they were young as expressed by youths in qualitative findings as indicated in the following quote.

> *"Like most of us started here when we were kids around 10-12 years, most of us ...who have talked today, started here. Thus is why we have that confidence to go and talk to other people"* (22 year old Female1).

Most (78.0%) respondents in the comprehensive care clinic were asked if they agreed with the treatment or procedure. Overall, 70.5% of youths felt that they were involved in their care. This is enhanced by the fact that in qualitative findings, the youths voiced appreciation if they were received enough time with the service provider during provision.

> *"...I appreciate that I come and have enough time to pour all I have to the service provider so that he treats me well."*(24 year old Male)

Overall most (82.7%) youth respondents received support from their guardians and parents on the use of the facility. Attitude was not significant by gender and age group of participants.

Youths displayed more mixed attitudes towards the service providers including fear that made them not freely seek the service providers' help. In qualitative findings, we further discover from both the service providers and the youths that there's need for the service providers to get training on youth services as expressed by the quotes below.

> *"...Most youths still have negative attitude towards the service providers and therefore they don't readily approach service providers for help. Most of them prefer asking the other youth questions..."* (Service provider at Mama Lucy Kibaki Hospital)

"The (the facilitator) has ... been trained...Training is important because you know how to relate with people, especially the youth, you will know what they need the most if you are trained. (22 year old Female1)

"I have also come to understand the youths more through youth training ..." (Service provider at Mbagathi) *"... I feel that researching is good for us so that we can start more services)"* (Service provider at Mama Lucy Kibaki Hospital)

Table 6. Practices among the youth and service providers about youth friendly health services at Mbagathi and Mama Lucy Kibaki Hospitals by facility department

Variable	Department			Total n (%)	P value
	Maternal Child n (%)	Comprehensive Care n (%)	Out Patient Clinic n (%)		
Number of visit (n=421)					
First	55(41.7)	21(37.1)	85(51.2)	161(38.2)	.00
Repeat	77(58.3)	102(82.9)	81(48.8)	260 (61.8)	
Informed of services (n=419)					
Yes	53(40.2)	78 (63.9)	69(41.8)	200(47.7)	.00
Accompanied to hospital by (n=414)					
None	71(54.6)	80(65.0)	67(41.6)	218(52.7)	.00
Parent	8(6.2)	25(20.3)	42(26.1)	75(18.1)	
Sibling	10(7.7)	2(1.6)	9(5.6)	21 (5.1)	
Spouse	27(20.8)	3(2.4)	18(11.2)	48 (11.6)	
Friend	14(10.8)	13(10.6)	25(15.5)	52(12.5)	
Time alone with the staff (n=412)					
Yes	110(85.3)	104(84.6)	115(71.9)	329(79.9)	.00
Helped to improve services (n=413)					
Yes	33(25.4)	45(37.2)	36(22.2)	114(27.6)	.02
Assured of confidentiality (n=417)					
Yes	48(36.6)	82(66.7)	81(49.7)	211(50.6)	.00
Convenient hours (n=418)					
Yes	122 (93.8)	100(82.6)	157(94.0)	379(90.7)	.00
Short waiting time (n=418)					
Yes	67(51.5)	77(63.6)	57(34.1)	201(48.1)	.00
Curtains present (n=418)					
Yes	124 (95.4)	104(86.0)	158(94.6)	386(92.3)	.00
Comfortable seating(n=418)					
Yes	111(85.4)	98(81.0)	144(86.2)	353(84.4)	.45

3.6. Practices of youth friendly health services.

At the comprehensive care clinic majority of youths came for services alone (65.0%) were seeking for a repeat visit at 82.9 % . This concurs with the qualitative findings where during service provision (execution of services) the service providers made appointments for the youths during holidays. They grouped the youths according to age groups and booked them in specific days.

"...We want to open a Youth Friendly Health Services Centre as a drug rehabilitation Centre. We hope to have different (varied) services included in there centre." (Service provider at Mbagathi District Hospital) *"To make YFH services effective, we have booked youths on holidays for services ...*

Youths at the comprehensive clinic had time alone with the services providers (84.6%), they were informed by the service provider about available services (63.9%), youths were assured of information confidentiality (66.7%), they had a reasonably short waiting time (63.6%), (77.2%) received educational information or health services in the community . Despite the fact that less than a third of the youths at the comprehensive care clinic were approached by the service provider to help improve quality of services (37.2%), these youths appreciated being mentored and in return mentoring others as regards to health care provision as explained by the quotes below.

"... for the kids that are coming now, we mentor them" (22 year old Female1). *"... We started a long time ago by being prepared to talk to other people (the youth) about importance of services..."* (23 year old Male)

Youths coming for maternal child health clinic were coming for repeat visit (58.3%), they had time alone with the service provider (85.3%). Youths attending the outpatient clinic were coming for the first visit (51.2%) majority (94.0%) said that the working hours were convenient for them. Generally, majority of youths received the information and services in the community (83.1%) this contradicts the behaviour the services providers

saw the youths, in that the information they received on health did not make them have good health practices but instead they went ahead and engaged in unhealthy practices like taking harmful drugs, as in the following quote.

> *"The youth are engaging in some bad activities and do things that harm them like taking drugs..."* (Service provider at Mbagathi District Hospital)

Majority of youth saw curtains in windows and doors (92.3%), had a comfortable seating place in the clinics (84.4 %) and the youths had time alone with the service provider (79.9%). More than half of the youths came alone for health services (52.7%), less than half had a reasonably short waiting time (48.1%) and were approached to help improve services (27.6%)

4. Discussion

4.1. Socio-demographic characteristics of the youths

The participant from both the hospitals constituted about half of the total population. Slightly more participants were from the outpatient department, this might be explained by the fact the outpatient offers a variety of services to people of all genders and ages as compared to that comprehensive care clinic and the Maternal and child clinics. Most of the participants were of aged 20-24 years (130) (23), (24), (9) and they were single (25)as most of these ages are school and college going youths. More females than males (9) were realized in this study, this resulted in female clients' presence dominating all clinics. The many numbers of females may also be explained by the fact that the maternal and child health clinic offers services that are mostly relevant to females than males. Most guardians of these youths had attained some level of studies, with most of them having secondary education and above, this resulted in most of the guardians to be being either in self or paid employment. This shows that most of these youths are likely to get financial assistance needed in seeking health services.

4.2. Availability of health services

The services at the comprehensive care clinic in both hospitals were considered to be youth friendly, the outpatient and the maternal child health clinic did not offer youth services. The attendance of the youths to this clinic is however limited because the clinic only attends to a specific group of people that is, people who are Human Immunodeficiency Virus positive including youths who are infected. Youths who do not attend this clinic are therefore disadvantaged because they cannot access these youth friendly health services. Most youth are attended at the outpatient and the maternal child health clinics that do not offer services that are tailored to meet their needs (the services are no youth friendly). The services at these clinics are offered to both the adult and youths at the same time, same place and at the same cost. The commonly sought services were treatment from the outpatient department (9). In absence of youth friendly health services at Mbagathi and Mama Lucy Kibaki Hospitals, some of the younger youths did not know where else to seek for these services including reproductive services (26).

4.3. Knowledge regarding youth friendly health services

Below half of the youths had heard about youth friendly health services, the remaining youths were not aware of the existence of these services (25) (11)Youths and service providers described youth friendly health services based to the design and operation of the services. Some of these descriptions include; they are services that guaranteed comfort, services that are meant for them and designed to favour them and meet their needs (8). The service providers further described these services as services that should be delivered promptly through support groups and make the youths feel understood and not feel neglected. These elements that have been described above are essential in any setting to be able to serve the youths effectively in line with WHO domains (13), this is because most youths want a comfortable place and they are in a 'hurry' and cannot wait to be served.

Generally most youths knew their rights, they could name methods of contraception, they could get contraceptives if they needed some contraceptives and also the youths knew about sexually transmitted diseases (9). In contrast most of the same youth that agreed to name their rights could barely name more than 3 of their health rights. Knowledge of youth friendly services is therefore still a problem. This problem is not being made any better because we noticed a limited access to educational materials for adolescents (27) (28) at the facilities. There are also no training schedules for the service providers to have updates or full training on youth services.

4.4. Attitude regarding youth friendly health services

Many of the youths felt they received good services and care. Youths displayed attitudes of confidence

in the services and the facility because they were supported by their guardians/ parents in using these facilities, they had been coming to this facility since they were young and they had prepared for youth services through mentorship. The youths were assured at the beginning of the consultation of information confidentiality (16), this was observed, and it is in line of who domains to achieve acceptability of the services. Youths appreciated being understood by the service provider, accorded enough time with the service provider to get the best care, being asked if they agreed to treatment and procedures and feeling that they were involve in their care. (13) . There was fear and a negative attitude by the youths towards the service providers because the service providers are not friendly, they quarrelled and treated them badly (16). We hence discovered from both the youths and service providers (participants) that there is need to train the personnel (29) to know how to deal with these youths and develop a good attitude towards them. Lack of training by the service providers is associated with negative attitude. (30)

4.5. Practice regarding youth friendly health services

We discovered that practices of youth friendly health services involved the preparation of youths through mentoring young youths (10-14 years) by the peers who are older (20-24years) and have been trained; this is a good approach in improving health services by involving the youth, (7) (8), (31) in line with the WHO domains (13). However this practice is low because about a third of the youths were approached by the service provider to help improve services while the majority were not approached with none from the younger youths being approached.

Unhealthy practices by the youths emerged in form of taking harmful drugs and preferring home deliveries by the Traditional birth attendants instead of seeking care from the hospital (27). During service utilization it was knotted that youths coming for the first visit are attended to without an appointment after which they are informed about available youth services during the holidays, they are then grouped by age and booked for services during holidays. Booking them during holidays enables the youths to continue coming for services and results in those coming for repeat visits to be more than those youths who come for the first time. We further associate coming for a repeat visit to the fact that the youth having come for the first time, almost half of them were informed available services; they liked the experiences of the first visit and got parental support that gave them the confidence to come again to the facility for the services. However, less than half of the youths observed that there was a short waiting time during the visit, long waiting times affects service utilization negatively (26).

During their service provision, service providers saw a need to start youth friendly health centres due to the challenges of spaces in the hospitals; these centres are to provide diverse services like providing counselling for youths who displayed some unhealthy practices like taking drugs that are harmful.

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