PERSPECTIVES OF ADOLESCENTS ON THE QUALITY OF YOUTH FRIENDLY HEALTH SERVICES AT CHIKWAWA DISTRICT HOSPITAL

MSC. (REPRODUCTIVE HEALTH) THESIS

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MSc. (Reproductive Health) Thesis

BY

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DECLARATION

I, **SYLVIA PERENJE,** the undersigned, hereby declare that this thesis is my own original work which has not been submitted to any other institution for similar purposes. Where other people's work has been used, acknowledgements have been made.

SYLVIA PERENJE

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Full legal name

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Signature

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Date

Certificate of Approval

The undersigned hereby certify that this thesis is the student's own work and effort and has been submitted with our approval.

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Main Supervisor

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Gertrude Mwalabu, PhD
Second Supervisor

Dedication

I dedicate this work to my family; mum, Sarah, Hilda, and Michael for your support and encouragement. Janet thank you so much for taking care of Sean Kei while I was busy with my school work, you are an amazing sister. My husband Sam for your understanding, your caring heart, support, encouragement and for standing by my side on every step of my career; I love you. I dedicate this work to my children Sam Sylvan and Sean Kei, you are my inspiration and my joy, I love you lots.

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Abstract

This descriptive quantitative study aimed at assessing the quality of Youth Friendly Health Services offered to adolescents at Chikwawa district hospital. Sample size was 110 adolescents aged 15 to 19 years who came for reproductive health services at antenatal clinic, family planning clinic, HIV testing and counseling clinic and ART clinic. Data analysis was done using Statistical Package for Social Science (SPSS) version 20.0. SERVQUAL (Service Quality) model developed by Parasuraman, Berry, and Zeithaml (1985) was used to guide the study. SERVQUAL model uses 5 elements namely tangibles, reliability, responsiveness, assurance and empathy to assess quality from the perspective of the service user. SERVQUAL tool was used to measure the gap between quality expectations and quality perceptions using gap score analysis. Associations between expectations, perceptions and demographic characteristics were done using Independent- samples t- test.

Findings revealed that there was an average gap score of -5.31 meaning that reproductive health services that are provided to adolescents are not of good quality in relation to the expectations of adolescents in all the dimensions of quality. One of the limitations of the study was use of one method of data collection (SERVQUAL tool). There was need to use observation as another method of collecting data in order to validate some of the variables in tangibility, reliability, responsiveness, assurance, and empathy dimensions of quality.

In conclusion, the study revealed that adolescents have high service quality

expectations in all the five dimensions of quality. The study also revealed that service quality perception of adolescents towards YFHS was lower than their expectations mostly in tangibles and responsiveness dimensions. This calls for service providers to provide quality services in order to meet the expectations of adolescents.

Key words: SERVQUAL, quality, adolescents, youth friendly services, reproductive health

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Abbreviations and Acronyms

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Clinic
ASRH	Adolescent Sexual and Reproductive Health
ART	Anti-Retroviral Therapy
FP	Family Planning
HIV	Human Immunodeficiency Virus
MOH	Ministry of Health
SERVQUAL SCALE	Service Quality Scale
STI	Sexually Transmitted Infection
WHO	World Health Organization
YFHS	Youth Friendly Health Services

Operational Definitions

Adolescents - Young people between the ages of 10 and 19 years (In this study 15 - 19 year olds) (World Health Organization, 2014)

Infrastructure – Refers to how the buildings where service provision is rendered were designed (Reiling, Hughes, & Murphy, 2008)

Organization- Refers to the orderly arrangement of resources in the clinic and how services are conducted (Khalaf, Moghli, & Froelicher, 2010)

Physical facilities- Include resources such as tables, benches, chairs, shelves, lighting (Pena, Silva, Tronchin, & Melleiro, 2013)

Quality services - The result of clients' comparison between their expectation of a service and their perception of how well the service has been performed (Parasuraman, Zeithaml, & Berry, 1988)

Young people - Those persons between the ages of 10 and 24 years (WHO, 2010)

Youth Friendly Health Services – Services that attract young people, respond to their needs and retain young clients for continuing care (Evidence to Action Project, 2014)

CHAPTER 1

Introduction and Background of the Study

Introduction

Youth Friendly Health Services (YFHS) are essential in improving the quality of reproductive health care (World Health Organization, 2006a). Nationally and internationally, young people are exposed to a broad range of sexual and reproductive health problems that include unwanted pregnancies, early marriages, sexually transmitted infections (STIs), sexual abuse , HIV and AIDS (World Health Organization, 2014b).Young people need to have access to quality Youth Friendly Services provided by skilled health workers in order to prevent unwanted pregnancies, early marriages, STIs, HIV and AIDS. World Health Organization, (2006) defined quality services as services that are effective, efficient, accessible, acceptable, equitable and safe to the service user. Parasuraman, Zeithaml, & Berry (1988) who developed service quality (SERVQUAL) model for measuring quality, defined quality to service users as the result of clients' comparison between their expectation of a service and their perception of how well the service has been performed . Although Malawi established YFHS in 2007, an evaluation of YFHS done in 10 districts in Malawi revealed low access and utilisation of the service by young people. For instance, 31.7% of youth in the communities were aware of YFHS program and 13% had utilized the services (Evidence to Action Project, 2014).

Quality of SRH services is a prerequisite for the adolescents to access and utilize Youth Friendly Health Services, hence the services should be able to attract young people, respond to their needs and retain young clients for continuing care (Evidence to Action Project, 2014) . Studies conducted in Sub-Saharan Africa highlighted that some of the reasons why young people do not utilize SRH services are: fear of being embarrassed by health workers, lack of privacy by the health workers, inconvenient hours and reluctant to seek services (Biddlecom, Munthali, Singh, & Woog, 2007; Geary, Gómez-Olivé, Kahn, Tollman, & Norris, 2014; Schriver, Meagley, Norris, Geary, & Stein, 2014a; Wittenberg et al., 2007). Studies done in other developing countries indicated that adolescents expect to be treated with respect and privacy, have less waiting time before they are assisted and be satisfied with the care they receive at the clinic(Agampodi, Agampodi, & Ukd, 2008; Geary, Webb, Clarke, & Norris, 2015; Meuwissen, Gorter, & Knottnerus, 2006; Schriver et al., 2014a). However, service providers believe that for clients to receive quality care and services, providers need to have appropriate knowledge, skills, supplies, a clean environment and motivation to work with young people (Mosadeghrad, 2014; World Health Organization, 2012).

The few studies that have been conducted in Malawi on quality of YFHS have looked at knowledge of YFHS, accessibility, utilization and satisfaction of adolescents with the services (Biddlecom et al., 2007; Munthali, 2011; Wittenberg et al., 2007). There is scarcity of research findings in Malawi that have addressed the expectations of adolescents about YFHS and perceptions of the actual service they receive when they go to a health facility for SRH services. This study was conducted to assess the expectations of adolescents when they are going to access YFHS and the perception of the actual SRH service they receive. The study also endeavoured to

solicit data that could inform service providers to meet adolescents' expectations, thereby increasing adolescents' access and utilization of YFHS in the district.

Background Information

Young people aged 10- 24 years are facing sexual and reproductive health problems such as early marriages, unwanted pregnancies, sexually transmitted infections, HIV and AIDS, including sexual abuse (National Statistical Office, 2013). Skilled trained staff, respect for young people, privacy, confidentiality, convenient hours, adequate space, short waiting times, and affordable services are characteristics of a youth friendly health service (Dickson, Ashton, & Smith, 2007; Mehra, Sogarwal, & Chandra, 2013). If service providers in the facilities are not providing care according to acceptable standards, the quality of care is compromised and young people will be vulnerable to reproductive health problems and risk taking behaviours which will have undesirable outcomes and consequences (Kennedy et al., 2013; World Health Organization, 2012). Service providers need to provide quality YFHS for the youth to utilize the services and in turn improve their reproductive health status. The Population Reference Bureau (2013) states that 25 % of the world's population are young people aged 10 – 25 years with 32% of these in Sub- Saharan Africa. According to a UNICEF report, about 2.0 million adolescents aged 10 to 19 years were living with HIV globally in 2014 with 82% living in Sub Saharan Africa. In addition adolescents account for 5% of all people living with HIV and 4% of these adolescents are from Malawi (UNICEF, 2016) .

According to World Health Organization (2014a) 16 million girls aged 15 to 19 give birth every year mostly in low and middle- income countries. The rate of pregnancies per 1000 for adolescents aged between 15 to 19 years for Malawi in 2009 was 154 and 14% of these pregnancies ended in abortion (Sedgh, Finer, Bankole,

Eilers, & Singh, 2015). Evidence has shown that young people who give birth before the age of 20 are at risk of pregnancy and delivery related complications (Ringheim & Gribble, 2010; Sedgh et al., 2015). In addition, infant mortality is higher among children born to women under the age of 20 (Malawi National Statistical Office, 2011). Furthermore, more than 100 million sexually transmitted infections occur in young people aged 15-24 in developing countries each year (Augustine, 2010).

The Malawi youth data shows that two thirds of Malawi's population are young people below the age of 25 (Population Reference Bureau, 2014). Reports for national survey of adolescents conducted in Malawi showed that among 15–19-year-olds, 26% of females and 49% of males are unmarried and sexually active; 26% of females and 3% of males have ever been married (National Statistical Office of Malawi, 2011; Wittenberg et al., 2007). In addition, results from the 2010 Malawi Demographic Health Survey revealed high rates of unprotected sex with 46% of unmarried sexually active women using contraceptives; male condoms being commonly used. Furthermore, adolescents are engaging in high-risk behaviors such as having sex with multiple partners leading to high prevalence of sexually transmitted infections, and HIV and AIDS (National Statistical Office of Malawi, 2011).

The Malawi YFHS evaluation report showed that above 70% of hospital based service providers were trained in YFHS to ensure that there is provision of high quality services to young people in accordance with the Ministry of Health guidelines and standards(Evidence to Action Project, 2014). Youth friendly health services were established in Malawi in 2007 to improve quality SRH service and address sexual and reproductive health problems among young people (National Youth Council of Malawi, 2013). Despite that young people are aware of the modern contraceptive

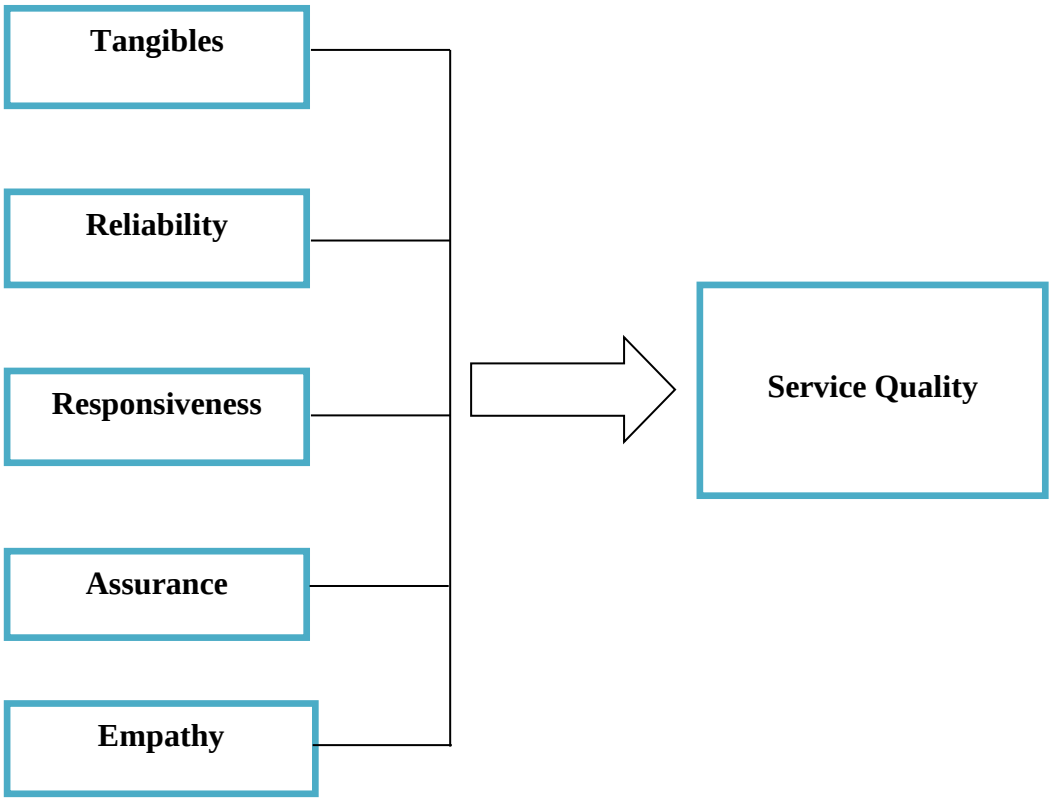
methods and other reproductive health services being provided, youths are having sexual and reproductive health problems and complications (Kennedy et al., 2013). United Nations Children's Fund (UNICEF) needs assessment in 2002 revealed that service providers had negative attitude towards young people, and timing for services was not convenient to the young people hence they were not utilizing SRH services (Malawi Human Rights Commission, 2006). This prompted the Malawi government to start implementing Youth Friendly Health Services program in 2007 as a strategy to make services more acceptable, accessible, and affordable to young people. Malawi also developed YFHS standards using the World Health Organization international standards that define the minimum package of services to be offered to young people by level of care (Ministry of Health, 2007). The minimum package is according to the essential health package (EHP) where service delivery is defined according to level of health service delivery and includes: health promotion, delivery of health services, referral and follow up (World Health Organization, 2006b).

Although SRH services are provided to young people, a national monitoring of YFHS in Malawi in 2010 showed that 85 % of the facilities visited were providing the minimum package of YFHS but about 25% only were implementing the national standards of YFHS (National Youth Council of Malawi, 2010). This means that most facilities have the minimum package of YFHS but are not providing care according to the set standards. Assessing quality of YFHS was important in order to explore the views of adolescents on the quality of YFHS that is provided at Chikwawa district hospital. Provision of high quality YFHS can potentially improve the health status and life styles of young people.

Conceptual Framework

SERVQUAL (Service Quality) Model

Parasuraman model of quality uses five elements namely tangibles, reliability, responsiveness, assurance, and empathy to assess service quality from the perspective of the user. Parasuraman, Berry, and Zeithaml (1985) service quality (SERVQUAL) tool measures the gap between customer's expectations for excellence and their perceptions of actual service delivered (Figure 1).



Parasuraman, Zeithaml, and Berry (1991)

Figure 1: Measuring Service Quality: SERVQUAL Model

Tangibles refer to all things that are physically visible and touchable such as physical facilities, equipment and appearance of service providers (neatness of service providers and whether the service providers are putting on uniform or not). Reliability refers to ability of service providers to perform the promised service dependably and accurately. Service providers are supposed to do what they said they were going to do when they said they were going to do it. Responsiveness refers to willingness of service providers to help adolescents and provide prompt service. Assurance refers to competence of service providers in having requisite knowledge and skills to manage adolescents. The service providers also need to show courtesy by being polite to adolescents, showing respect, being considerate and friendly. In addition service

providers should be trustworthy, honest and able to inspire confidence in adolescents. Adolescents need to feel safe from danger, risk or doubt when they access RH services. Empathy refers to the capacity to recognise feelings that are being experienced by another person. Service providers need to communicate to adolescents in a language that they understand. Service providers should also make an effort to get to know adolescents and their specific needs.

Application of the Conceptual Framework in the Study

The researcher used the 5 elements of SERVQUAL model to assess the quality of YFHS offered to adolescents at Chikwawa district hospital. In this study tangibles include availability of modern equipment which is visually appealing, neatness of service providers and the cleanliness of the physical environment. Reliability comprises interest of service providers when solving adolescents' problems, ability of service providers in provision of right service at the right time, and accurate record keeping by service providers. Responsiveness includes easy access to RH information by adolescents and provision of prompt service to adolescents. Assurance includes knowledge of service providers in YFHS, politeness of service providers to adolescents, confidence, trust and safety of adolescents when transacting with service providers. Empathy includes convenient clinic operating hours, and service providers giving individual attention to adolescents.

Problem Statement

Although there are YFHS trained providers in health facilities, Malawi has high numbers of young people with sexual and reproductive health problems and Chikwawa district is not excluded (Malawi National Statistical Office, 2011). According to Health Management Information System data for Chikwawa district health facility, between October 2014 to March 2015, three hundred and ninety six

adolescents aged 10- 19 were screened and treated for sexually transmitted infections, 712 adolescents were tested for HIV, out of which 38 were HIV positive. Adolescents among the age group of 10-19 years who came to the facility for modern family planning methods were 326; and 348 adolescents of the same age group came for antenatal care. Sexual and reproductive health issues are a challenge among adolescents since they are sexually active from an early age and some even marry before the age of 15 (Human Rights Watch, 2014). Adolescents in Chikwawa district are engaging in unprotected sex resulting in unwanted pregnancies, early marriages, sexually transmitted infections including HIV and AIDS due to different reasons including cultural practices such as wedding dances, *kusasa fumbi*, and *fisi* (Malawi Human Rights Commission, 2006). This indicates that adolescents are exposed to sexual and reproductive health problems though YFHS are being provided. There are no studies that have addressed the quality of YFHS in Chikwawa district from expectations and perceptions of adolescents; hence this study was conducted in order to identify gaps in service quality.

Significance of the Study

Assessing quality of Youth Friendly Health Services from adolescents' expectations and perceptions will provide data that might inform YFHS interventions aimed at improving the quality of the services consequently, reducing adverse SRH conditions among the adolescents. The results of the study can be used as a yard stick to measure quality from adolescents' perspective. The gaps identified during the study might form a basis for further studies in adolescent sexual and reproductive health.

Broad Objective

The broad objective of the study was to assess quality of Youth Friendly Health Services offered to adolescents at Chikwawa district hospital using SERVQUAL model

Specific Objectives

The specific objectives of this study were to:

1. Identify expectations of adolescents regarding Youth Friendly Health Services at Chikwawa district hospital.
2. Determine adolescents' perceptions of YFHS at Chikwawa district hospital.
3. Examine the relationship between adolescents' expectations and perceptions of YFHS at Chikwawa district hospital.
4. Identify important quality YFHS parameters to adolescents at Chikwawa district hospital.

CHAPTER 2

Literature Review

Introduction

Literature review is a method used to summarize the existing state of knowledge about a particular subject (Knopf, 2006). This chapter discusses published information on adolescent youth friendly reproductive health services, expectations and perceptions in relation to quality of YFHS

Literature Search Strategy

National and international literature on quality of sexual and reproductive health services for young people was reviewed. Google scholar was used as the search engine. The following electronic data bases were used to identify the articles: HINARI Pubmed/Medline, and CINAHL. Search terms consisted of the following key words: young people, youth, adolescents, quality, tangibles AND youth friendly health services, reliability AND youth friendly health services, responsiveness AND youth friendly health services, assurance, empathy AND youth friendly health services were used. Publications, reports, papers containing materials on this subject matter were reviewed. Documents were considered for review if they had information that was published from 2005 onwards and addressing young people from 10 to 24 years old. This was so because articles were interchangeably using the words adolescents, youth and young people. The literature review explored the expectations of adolescents regarding YFHS, perceptions of adolescents towards YFHS, and important quality YFHS parameters to adolescents using the components of SERVQUAL model. These components include tangible elements of YFHS,

responsiveness of YFHS, assurance or commitment of service providers towards YFHS, and empathy of service providers in providing YFHS. However, studies that examined relationship between adolescents' expectations and perceptions of YFHS were scarce.

Expectations of Adolescents regarding Youth Friendly Health Service

Adolescents who come to a youth friendly clinic have different expectations about the services they are seeking. Almost every adolescent expect a youth friendly clinic to provide reproductive health services which are of good quality (Haller, Sanci, Patton, & Sawyer, 2007) . A quasi-experimental case- control study in South Africa by Dickson, Ashton, and Smith (2007) found that setting and implementing standards and criteria improves the quality of adolescent services in clinics. This means that if service providers in youth friendly clinics are providing care according to the guidelines, then the service quality expectations of adolescents would be met.

Upon reaching a health facility, adolescents expect to be received and greeted in a polite manner as well as be assisted by trained staff who are friendly (Lesedi, Hoque, & Ntuli- Ngcobo, 2011; Renju et al., 2010). Most adolescents expect that the service providers will be welcoming, will communicate with them in a polite manner, will make the right diagnosis and provide the right treatment including the necessary information (Haller et al., 2007). In addition adolescents regard a youth friendly clinic as reliable when it has necessary drugs and supplies to provide essential adolescent friendly care package (Dickson et al., 2007). Furthermore adolescents expect to be assured by the health workers that confidentiality and privacy will be maintained during their interaction and transactions with the service provider (Biddlecom et al., 2007; Kipp, Chacko, Laing, & Kabagambe, 2007). Service providers therefore need to

note that adolescents expect them to provide reliable services through provision of prompt service, and showing sincere interest when solving problems of adolescents (Tylee, Haller, Graham, Churchill, & Sanci, 2007).

Adolescents access sexual and reproductive health services for so many reasons including information and advice (Kennedy et al., 2013). Although it is expected for service providers to provide necessary information to adolescents, results of a qualitative study done in a semi urban setting in Sri Lanka by Agampodi et al., (2008) with adolescents aged 17 to 19 years proved otherwise. The focus group discussion results revealed that the expectations of young people for adequate information on SRH were not met. This implies that service providers need to provide adolescents with necessary and adequate information on sexual and reproductive health issues (Agampodi et al., 2008).

In addition to information and advice, adolescents expect to be assisted by health workers who have knowledge of YFHS and skills in managing the youth so that they should be able to answer adolescents' questions (Kipp et al., 2007). According to exit interviews conducted with 200 young people in Kwa Zulu- Natal, South Africa on interpersonal relations between health care workers and young clients by Alli, Maharaj, and Vawda(2013), a significant proportion of young people expressed that service providers answered their questions according to their expectations. The results showed that 65% of the young people were given an opportunity to ask questions and 63% felt that there was sufficient time for asking questions. Similar results were found in Switzerland in a cross sectional survey by Mauerhofer, Bertchold, Akré, Michaud and Suris (2010) who found that time for asking questions was sufficient among 94.5% of female adolescents' views on a youth friendly clinic.

Perceptions of Adolescents towards Youth Friendly Health Services

Studies that have been conducted on youth's perception on YFHS, suggest that there is need for a special room or a one stop centre where all sexual reproductive health services for the youth are offered (Biddlecom, Munthali, Singh, & Woog, 2007; Kipp, Chacko, Laing, & Kabagambe, 2007; Tangmunkongvorakul et al., 2012).Young people prefer a youth only clinic because they want to feel relaxed and well cared for. The results of a quantitative study conducted in Addis Ababa in Ethiopia by Berhane et al. (2005) showed that 21.6% preferred YFHS offered in the existing services with special approach to adolescents, 15.2% in special rooms within the existing health services, 22.3% in separate adolescent health institutions , 7.7% in school health services while 19.6 % preferred the services to be offered in youth centres. Similarly in Malawi, 53.1 % of YFHS are integrated with other services, 28.4% of the services are offered on specific days of the week, and 10.2 % of the services are offered in a separate space within the health facility (Evidence to Action Project, 2014). Although adolescents prefer a youth only clinic, it is important to note that due to shortage of rooms and human resources, YFHS in most facilities are incorporated with other reproductive health services and this most of the time, prevents the young people from accessing the services (Renju et al., 2010). In addition, adolescents are also concerned about the physical appearance of the staff. A quantitative study done in Stinkwater, in South Africa found that adolescents perceive a friendly health service as one with service providers dressed according to professional dressing codes (Richter & Mfolo, 2006). Furthermore adolescents said that uniforms instill a sense of safety (Richter & Mfolo, 2006)

Tangible / Physical factors that influence YFHS

A number of factors influence the provision of quality YFHS such as infrastructure, physical facilities and organization of a youth friendly clinic (Geary et al., 2014; Tanner et al., 2014). An ideal youth friendly clinic needs to have a well organized structure with a clean environment, enough resources in order for adolescents to be attracted and utilize reproductive health services (Khalaf et al., 2010; Sovd, Mmari, Lipovsek, & Manaseki-Holland, 2006a). A youth friendly clinic needs to have material resources such as checklists, guidelines, equipment, furniture and human resources (Kesterton & Mello, 2010; Renju et al., 2010; World Health Organization, 2012) . An evaluation of YFHS which was done in 10 out of 30 districts in Malawi showed that 18.2% of facilities in Malawi have service providers with adequate job aids and guidelines (Evidence to Action Project, 2014). This means that in most facilities, service providers give verbal information to adolescents without using job aids and guidelines.

A clean environment inside and outside a youth friendly clinic provides a welcoming scene to adolescents. According to a qualitative study on youth friendly reproductive services in Jordan, United States of America by Khalaf et al.(2010), adolescents who visit a clinic and are satisfied with the environment of the clinic, and the physical facilities are very likely to advise their friends and relatives to visit the clinic than those who are not satisfied with its outlook . Similarly a qualitative study on adolescent health seeking behaviour during pregnancy and early motherhood by Atuyambe, Mirembe, Annika, Kirumira, and Faxelid (2009) among adolescent girls aged 16 to 19 years in Uganda, found that health seeking behaviour by young women was influenced by hygiene in public health facilities. The results further showed that

adolescents detested services if facilities were dirty and had a bad smell. On the contrary, Schriver, Meagley, Norris, Geary, and Stein (2014) conducted in-depth interviews to 25 young people in Soweto, South Africa. The results showed that young people were dissatisfied with services due to lack of resources and long waiting times. This implies that there are a lot of factors that are involved for a service to be of good quality.

Reliable Youth Friendly Health Service

A service is referred to as reliable to adolescents when service providers perform the promised service dependably and accurately. Kennedy et al. (2013) conducted a study on adolescents' and service providers' perceptions of youth friendly sexual and reproductive health services in Vanuatu. Sixty six focus group discussions were conducted with 341 male and female adolescents aged 15 to 19 years. The results revealed that one of the reasons why adolescents do not utilize RH services is due to unreliable commodity supplies. It is therefore important to note that adolescents do not access RH services when the youth clinic does not have drugs and supplies.

Another important key element for a reliable youth friendly clinic is history taking and physical assessment. When adolescents visit a youth clinic, service providers need to take appropriate history, conduct a comprehensive physical and psychosocial assessment, make a right diagnosis and be able to properly manage the problem or perform the service right at the first time. Although a comprehensive physical assessment is recommended, Braeken & Rondinelli (2012a) in their report on improving sexual and reproductive health needs of young people found that young people may be reluctant to seek services where extensive physical examination is

performed, if confidentiality and privacy are not assured. This implies that service providers need to understand and practice confidentiality when dealing with adolescents in any situation.

Responsive Youth Friendly Health Services

Utilization of YFHS by adolescents depend on promptness of service providers and friendliness of service providers in provision of reproductive health services (Renju et al., 2010). Ambresin, Bennett, Patton, Sanci, and Sawyer (2013), conducted a systematic review of indicators drawn from young people's perspectives with a view to define domains and indicators of youth friendly care. The systematic review of 22 studies showed that adolescents regard a friendly provider as someone who is nonjudgmental, kind, understands young people and their rights, keeps confidentiality, and allows adequate time for consultation. In addition to that, adolescents perceive a service as of good quality when health personnel is able to communicate with the young people appropriately, take a full history, do a thorough physical examination and be able to assist or treat the young person accordingly(Ambresin et al., 2013; Braeken & Rondinelli, 2012a; Kennedy et al., 2013). The health service provider should be able to provide the necessary information and counseling to the young people so that informed decisions should be made (Braeken & Rondinelli, 2012).

In addition, there should be availability of educational materials at a youth friendly clinic so that the young people should read and get information on all sexual and reproductive health issues. If service providers are not giving sexual and reproductive health information to adolescents, they will obtain it from other sources including family members, friends, the mass media, and teachers (Birungi et al., 2008; Seloilwe, Magowe, Dithole, & St. Lawrence, 2015). On the contrary, a community

based cross-sectional study conducted in Jimma town in Ethiopia by Tegegn, Yazachew and Gelaw (2008) found that the major source of RH information to adolescents was the mass media where information is disseminated predominantly through radio (80.4%). Furthermore the results of the study also showed that 40.3% of adolescents get RH information from parents and close relatives.

An evaluation report of YFHS for Malawi showed that 23.2 % of facilities in Malawi have youth specific and appropriate information, education and communication (IEC) materials on display for young people to take away, and 46.5% of facilities have IEC materials that target young people (Evidence to Action Project, 2014). It is important to note that most of the times adolescents trust their friends more and feel comfortable when it comes to discussing reproductive health issues that are bothering them than talking to their parents or teachers (Wittenberg et al., 2007). However, peers transmit a lot of information to their friends but most of the times this information is incomplete and false (Agampodi et al., 2008). Although parents are a key source of information, most of them do not transmit this information to their children since they may feel embarrassed to discuss these issues with their children or they may disapprove of adolescents expressing interest in RH (Tegegn et al., 2008). This is why service providers need to give accurate and relevant information to adolescents without being judgmental (Birungi et al., 2008). Service providers need to be responsive to individual needs of adolescents in order to improve the quality of YFHS and remove barriers to access the services.

Assurance and Commitment of Service Providers in Providing YFHS

Utilization of youth friendly health services by adolescents depends on how they are handled by service providers once they reach the health facility (Biddlecom et al., 2007). Studies have revealed that adolescents are reluctant to seek reproductive

health services when confidentiality and privacy are not assured by service providers at a particular clinic (Bankole & Malarcher, 2010; Braeken & Rondinelli, 2012a). Therefore, service providers need to maintain confidentiality when providing care to adolescents because lack of confidentiality may compromise quality (Tangmunkongvorakul et al., 2012).

In order to provide quality services to adolescents, service providers need to have comprehensive knowledge regarding YFHS. Renju et al., (2010) reports that health workers who are trained in youth friendly services show increased knowledge and understanding of young people's needs for information and advice than the health workers who are not trained. In Malawi an evaluation report of YFHS showed that 81.3 % of the facilities have service providers who were trained in YFHS (Evidence to Action Project, 2014). If health workers are trained in youth friendly health services, it is assumed that quality services will be provided to the young people since the health workers will have increased knowledge about the issues that concern young people. In addition, attitude of health workers towards confidentiality and young people's right to treatment is improved. However, this is inconsistent with the findings of Lesedi et al., (2011) who rated providers' judgmental attitude as being lowest.

Health workers who are not trained in YFHS have a negative attitude in providing reproductive health services to young people and may set rules to punish young people who are engaging in premarital sex (Tilahun, Mengistie, Egata, & Reda, 2012). A qualitative systematic review of literature on attitude of health care providers towards adolescent SRH revealed that health workers who have a negative attitude towards the youth are not supportive, do not give chance to young people to discuss their reproductive health issues and do not regard problems faced by young

people seriously (Chilinda, Hourahane, Pindani, Chitsulo, & Maluwa, 2014). Similar results were reported in a qualitative study by Atuyambe et al. (2009) who conducted focus group discussions with 92 adolescents. The results revealed that some health workers had a negative attitude and a high degree of laxity. This can be a barrier for young people to utilize YFHS and can affect provision of quality services.

Empathy of Service Providers in Providing YFHS

One of the key elements for quality Youth Friendly Health Services is empathy from service providers (Atuyambe et al., 2009). Firstly, the clinic's operating hours should be convenient to all adolescents so that they should be able to access reproductive health services (Tylee et al., 2007). According to a quantitative study on adolescents' preferences for RH conducted in Kenya and Zimbabwe by Erulkar, Onoka, and Phiri (2005), adolescents were asked to rate the YFHS characteristics which would help them to decide which clinic they could prefer to visit. The results showed that 55% of adolescents in Kenya and 66.2% of adolescents in Zimbabwe rated convenient opening hours as an important characteristic of YFHS. Similar to this finding, a quantitative study by Kavanaugh, Jerman, Ethier, and Moskosky (2013) on meeting the contraceptive needs of teens and young adults in United States showed that 51% of the young people mentioned inconvenient clinic hours as a common challenge to providing contraceptive services to younger clients.

Adolescents need safety and empathy when they come to a facility for a reproductive health service because they feel exposed, powerless and afraid to visit a health facility (Atuyambe et al., 2009). Results of a qualitative study conducted by Muir, Powell, and McDermott(2012) showed that young people found staff to be friendly, good listeners who were relating with them in a non judgmental manner. Furthermore, staff was sensitive to the needs of young people and that made them to

feel safe (Muir et al., 2012). Therefore, adolescents expect to be appreciated for coming to a health facility for reproductive health services and not to be judged by service providers. Service providers need to be sensitive to the needs of the young people and be able to provide individual attention to the needs of adolescents. Lack of compassion by service providers will result in adolescents not accessing RH services (Atuyambe et al., 2009).

Important Quality YFHS Parameters to Adolescents

For provision of quality YFHS, a youth friendly clinic need to have fundamental provider characteristics, facility characteristics and program design characteristics such as specially trained staff, convenient hours and short waiting times(World Health Organization, 2012). According to adolescents, characteristics of a friendly clinic are categorized depending on the availability and accessibility of services and resources, physical environment, service providers' attitude, knowledge and skills (Khalaf et al., 2010). This means that adolescents rate service quality parameters as more important or less important depending on their existence or not and how service providers are using these service quality parameters.

A quantitative study conducted by Erulkar et al.(2005) in Zimbabwe and Kenya with 1344 adolescents aged 10 – 19 years found that adolescents rated confidential services, short waiting time, friendly staff and convenient opening hours as being important characteristics of youth friendly services to them. The results are similar to a systematic review of quantitative and qualitative study by Ambresin et al.(2013) who found that confidentiality was an important characteristic for utilization of services by adolescents. Similarly Shaw (2009) reported that staff honesty and competency were more important characteristics of service quality to adolescents than the physical environment of the facility. Conversely a study conducted by Khalaf

et al. (2010) found that some adolescents could not utilize the health services because the facilities were not clean and there was no adequate space. Although adolescents rate other characteristics as being more important than others, it is important to note that all elements of service quality need to be taken in consideration since all the service quality elements are paramount in provision of quality YFHS .

Conclusion

Youth friendly health services are an important package in improving reproductive health services because they have a tremendous impact on the future health of mothers, fathers and children. It is evident through literature that youth friendly health services are provided in Malawi and globally, though there is little information on the expectations of adolescents regarding YFHS. Most of the youth are accessing these services but there is still need for awareness and involvement of the youth in order to improve the quality of the services. There are service quality factors that influence adolescents to access and utilize YFHS while other service quality factors will bar and the adolescents and young people from utilizing the health services. Factors such as clean youth friendly clinic, convenient operating clinic hours, positive attitude by service providers, provision of prompt service and confidentiality are some of the determinants of client satisfaction which will indicate a good service quality. Quality services will lead to acceptability and utilization of RH services by the young people. On the other hand negative attitudes of health workers to adolescents, long waiting hours, dirty clinic environment, or any feeling of discomfort by the adolescents with the services will lead to dissatisfaction and bar the adolescents and young people from utilizing the services. This will result in undesirable outcomes in terms of health. Health workers need to be aware of the factors that influence access and utilisation of services by young people so that they

should make the services attractive and be able to motivate the young people to utilize them. Service providers also need to identify the quality dimensions which are ranked less important by adolescents. This will assist the health workers to address the identified problems and improve the quality of youth friendly reproductive health services in all service delivery points, thereby promoting RH among young people.

CHAPTER 3

Methodology

Introduction

Research methodology is a total strategy to achieve the research objectives, from identification of the problem to the final plans for data collection and data analysis (Redman & Mory, 2009). This section describes the steps that were taken to conduct the study and includes the study design, study setting, sample and sampling methods, recruitment process, data collection method and instrument, data analysis as well as ethical considerations

Research Design

This was a cross sectional study that used descriptive quantitative design to address the objectives. Creswell (2008) recommends the use of descriptive methods to describe expectations, perceptions of adolescents and statistically analyse the data to describe trends about responses to questions. The study identified important expectation and perception elements of SERVQUAL model that affect quality YFHS. The study also determined the degree at which demographic characteristics of adolescents are related to their expectations, and perception of YFHS. It also critiqued each element of service quality provided to adolescents. Quantitative approach was used because it clearly explains the variables by collecting numerical data that are analysed using mathematically based methods and then examined to detect patterns of association (Muijs, 2010).

Study setting

The study was conducted at Chikwawa district hospital, which is the main referral health facility in the district. Chikwawa district is in the southern region of Malawi, in the Shire Valley Highlands approximately 54 km away from Blantyre city. Chikwawa district has a population of 533, 714 with the district hospital serving a population of 38, 072. The population of adolescents aged 10 – 19 years for Chikwawa district hospital is 9,219. The hospital setting provides both inpatient and outpatient services such as HTC, ART, all maternal, child, and neonatal services. Nurse midwife technicians, registered nurses, medical assistants, clinical officers and medical doctors are the providers of all the services depending on their training skills. The facility was chosen because it provides YFHS and had nurses and clinicians trained in Youth Friendly Health Services, hence it was assumed that there was provision of quality YFHS.

Study population

The study population was adolescents aged 15 to 19 years who came to Chikwawa district hospital for services that are in the package of YFHS such as ART, HTC, ANC, FP, screening and treatment of STI. The age group 15 to 19 years was chosen because adolescents are sexually active, unmarried and engaging in risky sexual behaviours during this period, resulting in sexual and reproductive health problems (Malawi National Statistical Office, 2011).

Sample Size

The estimated proportion of adolescents utilizing YFHS was based on an evaluation report of YFHS which was done in Malawi in 2010 (Evidence to Action Project, 2014). The results showed that 13% of young people aged 10 to 24 years

were utilizing YFHS. According to Lemeshow et al., (1990) the recommended sample size to be used in the study was calculated from the formula:

Estimated sample size $n = Z^2 p (1-p) / e^2$

Where Z = the standard normal variate associated with a level of confidence on the findings of this study, set at 95% confidence level, given as (1.96 from tables)

p = the anticipated proportion of young people utilizing YFHS expressed as decimal. In this case the prevalence is 13%, hence p= 0.13

e = the margin of error for the study expressed as decimal, set at 5% expressed as decimal i.e. 0.05. The sample size is then calculated as:

$n= 1.96^2 \times 0.13 (1- 0.13) \div (0.05)^2$

n= 3.8416 x 0.13 (0.87) ÷ .0025

n= 0.434÷ .0025

n= 174 adolescents.

However, to come up with the sample size for this study, the finite population correction factor was used because the target population was small. Adolescents who attended YFHS clinics at Chikwawa district hospital in the month of October 2014 were 300 (HTC=134, ANC=53, STI=66, FP =47). It was noted that most of the adolescents who went to ANC, STI, and FP were also tested for HIV as such most of them were double counted. Secondly the data collected for October 2014 had some adolescents who were less than 15 years old and these could not be included in the study as there were not in the target population.

Finite sample

$$na = \frac{ur}{1 + \frac{(ur-1)}{N}}$$

Where ur =the calculated sample size in this case 174

N= the population of adolescents attending YFHS clinics at Chikwawa district hospital in the month of October 2014, in this case 300 (HTC=134, ANC=53, STI=66, FP =47)

na=174÷1+174-1/300

na= 174/1.576

na=110

Sampling

Non probability consecutive sampling was used to select participants for the study. Every adolescent that met the inclusion criteria, and willing to be interviewed was selected and recruited in the study over a period of four weeks (Polit & Beck, 2014). This sampling method was chosen because it allows the complete accessible population to be studied in a reasonable period of time hence making a good representation of the overall adolescent population in Chikwawa (Creswell, 2008).

Inclusion criteria.

- Adolescents aged 15 to 19 years
- Able to communicate fluently in Chichewa language
- Willing to participate in the study
- Those attending ANC, FP, STI, HTC, and ART clinics

Exclusion criteria.

- Adolescents below 15 years old were excluded from the study

- Adolescents who do not speak Chichewa fluently
- Adolescents who were not willing to participate in the study

Recruitment of participants.

The study was conducted at STI, ART, HTC, ANC, and FP clinics at the district hospital. Those in charge of the clinics were inviting adolescents who were accessing reproductive health services to participate in the study. Depending on literacy level, the participants were given oral or written information about the study so that they could understand the objectives of the study, the benefits and risks involved in the study, and the data collection procedures. They were also given an invitation to join the study and the researcher got written consent from adolescents who were aged 18 to 19 years to show their willingness to participate in the study.

The researcher got an assent for emancipated adolescents aged between 15 to 17 years who were married, which was regarded as an informed consent. This is because married adolescents are regarded as mature minors capable of making independent and informed decisions or choices by society and law (National Commission for Science and Technology, 2011). The researcher requested for a waiver from College of Medicine Research and Ethics Committee not to get parental/ guardian consent for adolescents aged between 15 to 17 years who were still living with their parents, and the waiver was approved. This was done because legally, parents or guardians are supposed to give permission for all children less than 18 years old to participate in a research study(National Commission for Science and Technology, 2011). During an evaluation study of YFHS in Malawi, some parents said that YFHS are eroding traditional values by encouraging sex rather than promoting abstinence among adolescents; as such some parents disapprove of YFHS (Evidence to Action Project, 2014). This results in adolescents accessing YFHS

without the knowledge and consent of their parents. If the researcher could get parental / guardian consent, then adolescents would be exposed to emotional harm such as anger, stress, hostility and low self esteem since some parents do not support their children (Sanci, Sawyer, Haller, Patton, & Kang, 2005).

Study Period

The study was conducted from October 2015 to October 2016.

Ethical Considerations

In order to ensure that ethical issues were considered, approval for the research was obtained from College of Medicine Research and Ethics Committee (COMREC). Permission to conduct the study at Chikwawa district hospital was obtained from the District Health Officer who oversees all the health facilities, and the participants were selected with the help of the Youth Friendly Health Services coordinator.

The study respected human rights for adolescents as study participants with much emphasis on privacy, anonymity, confidentiality, and protection from emotional harm. This was done by provision of detailed information on the aim of the study, duration of the interviews, data collection methods and procedures, benefits and risks of the study to the participants as well as relevance of the research study to health care providers and service users in Malawi and worldwide. In order to protect adolescents from emotional harm, the researcher requested for a waiver from College of Medicine Research Ethics Committee not to get parental/ guardian consent for adolescents aged between 15 to 17 years who were still living with their parents. This was done because most adolescents access YFHS without the consent of parents/guardian; as such obtaining parental consent might have subjected adolescents to emotional harm.

Participants were also assured that the data would be treated with strict confidentiality as its collection tools were identified by numbers and no names were written on all the documents produced as a result of the interviews except for consent forms. The details of the interviewees were stored securely in a locked cupboard and only accessible to the researchers. Participants were informed that they will not be identified in any publications or reports. They were also informed that they were free to withdraw at any stage of the study, stop an interview or not to answer some questions without any consequences. The participants were given both oral and written information about the study so that they could understand the objectives of the study. They were given an invitation to join the study and consent forms was read to them and were asked to sign a written consent so that they should show their willingness to participate in the study. For adolescents who were unable to write, a thumb print was used to indicate consent to participate in the study. A nurse on duty was signing as a witness that the researcher had provided the participant with all the necessary information about the study and that the participant had freely given consent to take part in the study. Nurses were signing as a witness to certify that the participant was not coerced to take part in the study. Nurses did not violate issues of confidentiality since they were not present during the interviews.

Data Collection

After obtaining approval letters from the District Health Officer, the researcher briefed the YFHS coordinator and the in charges of all departments where the study was conducted on the procedures that would be followed. The researcher gained access to the participants at the maternal and child health department where adolescents were receiving the services. The researcher was checking in health passport books of all people on the queue to identify adolescents aged 15 to 19 years.

After confirming their age, the researcher invited adolescents one by one to a private room where they were given oral information about the study so that they could understand the objectives, the benefits and risks involved in it, and the data collection procedures (see appendix 7A). They were also given an invitation to join the study and the researcher got written consent from adolescents to show their willingness to participate in the study. The researcher interviewed those that consented to take part in the study before receiving a service using a questionnaire on expectations. After receiving care from the clinic, the researcher also interviewed the participants using a questionnaire on perception. The participants were also asked to rank the five dimensions of quality in order of their importance using the SERVQUAL importance weights. The interviews were conducted at the hospital in a closed room in order to enhance privacy, confidentiality and anonymity. The interviews were conducted in Chichewa. After data collection, the researcher was checking for completeness and accuracy of the data and kept the questionnaires in a locked drawer in readiness for entry**.** Data were collected from 19th April 2016 to 17th May 2016.

Pretesting Data Collection Tools

Pretesting of study tools was done to assess the feasibility of the data collection tool that was intended to be used in research study (Leon, Davis, & Kraemer, 2011). The data collection tool was pretested using 5 adolescents at Chiradzulu district hospital to assess if it was measuring and achieving the desired outcomes. Chiradzulu district hospital was chosen because it provides similar SRH services to adolescents and it is located in the same zone with Chikwawa district in provision of health care services in the Ministry of Health. The tool was pretested because it has never been used in a Malawian setting as such the researcher needed to test it in the language it was intended to be used since it was translated in the local language. Secondly the

researcher anticipated to have problems with participants allocating points to SERVQUAL Importance Weight(Appendix4A)considering educational background of most young people in Malawi (National Statistical Office of Malawi, 2011; Population Reference Bureau, 2014). This helped the researcher to identify questions which did not make sense to participants or problems which might have lead to biased answers.

Two questions were deleted on the original SERVQUAL expectations tool and two questions were also deleted from the perception tool. The questions were removed from the tool because the meaning of the variables when translated in the local language was similar to some variables on the same tool. The researcher added a column on Importance Weight tool (Appendix 4A) so that participants should rank the dimensions instead of allocating points. Pretesting study tools assisted in determining reliability and validity of the instruments to prevent mistakes.

Data Collection Instrument

Data was collected using a questionnaire (see appendix 1-3). The questionnaire was divided in four sections. Section 1 included demographic characteristics of the adolescents such as age, gender and educational level. Sections 2 and 3 of the questionnaire consisted of questions adapted from SERVQUAL model developed by Parasuraman Berry, & Zeihaml, (1985) to measure service quality. SERVQUAL model has five dimensions of service quality (reliability, responsiveness, assurance, empathy, and tangibles) that link specific service characteristics to consumer's expectations. The model has 44 items; 22 items on expectations and 22 items on perceptions that represent the five dimensions of service quality. In this study two items on expectation and two items on perception were removed because the meaning of the statements was similar when translated in the

local language. Service quality is determined by the differences between client's expectations of service provider's performance and their evaluation of the services they received (Parasuraman et al., 1988). Adolescents' perceptions of service quality resulted from a comparison of their expectations before receiving a service with their actual service experience. The service was considered excellent, if adolescents' perceptions exceeded expectations; it was regarded as good or adequate, if it only equaled the expectations. YFHS was grouped as bad, poor or deficient, if it did not meet adolescents' expectations.

Table 1

Relationship between the Questionnaire and Objectives

SERVQUAL TOOL	QUESTIONNAIRE ITEM	OBJECTIVE
Expectations (Tangibles, reliability, responsiveness, assurance, empathy)	1 to 20	1
Perceptions (Tangibles, reliability, responsiveness, assurance, empathy)	21 to 40	2
Expectations and perceptions	1 to 40	3
Expectations, perceptions, importance weights	1 to 40 Importance Weights	4

Section 2 of the questionnaire assessed expectations of adolescents who were accessing FP, HTC, ANC, ART, STI services. Adolescents were asked about their expectations of the service they were about to receive in terms of quality based on the 20 items. The questionnaire was a five point likert scale adapted from a 7 point likert scale by Parasuraman et al. (1985) in which adolescents were asked questions and the researcher was ticking on the listed items corresponding to the degrees to which the adolescent agreed or disagreed with the statement. The statement questions ranged

from 1 to 5; 1 if the adolescent strongly disagreed with the statement, 2 if the adolescent somewhat disagreed with the statement, 3 if the adolescent agreed with the statement, 4 if the adolescent somewhat agreed with the statement, and 5 if the adolescent strongly agreed with the statement.

Section 3 of the questionnaire covered the perception of the adolescents on the actual quality of reproductive health care they received in FP, HTC, ANC, ART, STI services based on the 20 items. The questionnaire was a five point likert scale adapted from Parasuraman in which adolescents were asked questions and the researcher was ticking on the listed items corresponding to the degrees to which the adolescent agreed or disagreed with the statement. The statement questions ranged from 1 to 5; 1 if the adolescent strongly disagreed with the statement, 2 if the adolescent somewhat disagreed with the statement, 3 if the adolescent agreed with the statement, 4 if adolescent somewhat agreed with the statement, and 5 if the adolescent strongly agreed with the statement.

In section 4 of the questionnaire, adolescents were required to rate the importance of each of the five dimensions of service quality to them by allocating a total of 100 points to these dimensions (Appendix 4A). Adolescents were asked to assign the most points to the most important dimension and fewer points to the least important dimensions. This information allowed for a measure that can be used to determine which of the service quality dimensions are the most important to adolescents. The points were used to weight the results of the SERVQUAL scores for each service quality dimension. The weighted scores can provide greater insights as to the overall importance of the service quality which could assist service providers to implement more targeted improvement initiatives.

Reliability of the research instrument.

The SERVQUAL tool has been proven to be a valid and reliable instrument. Internal consistency reliability using Cronbach's Alpha was used to check the stability of the original instrument by Parasuraman et al., (1988). Reliability coefficients for the SERVQUAL dimensions range from .80 to .93 indicating a high internal consistency among items within each dimension (Parasuraman et al., 1991). Its reliability is also supported by its use in several service quality research studies measuring perceptions of service users (Ahuja, 2011; Bahadori, Mousavi, Sadeghifar, & Haghi, 2013; Tyran & Ross, 2006).

Validity of the research instrument.

The SERVQUAL model used in assessing quality of service from the perspective of the client has been tested and was valid (Parasuraman et al., 1991). A valid scale is the one which actually measures what you think it is measuring (Creswell, 2008). Face validity shows if the scale appears to measure what it is supposed to measure while content validity is achieved when experts in the area agree that a questionnaire comprehensively covers all the important aspects of the particular issues (Polit & Beck, 2010). The questionnaire was translated into the local language (Chichewa) and a back translation in English was done by a service provider with translation experience to make sure that the instrument accurately measured what it was supposed to measure and if it was truly reflecting the concepts it was supposed to measure. The SERVQUAL instrument was critically reviewed by research supervisors to establish whether the instrument was comprehensive to generate the proper range of responses and flow of questions. The questionnaire was pre tested at Chiradzulu district hospital to test for the clarity of the questions, instructions, completeness of the responses and the time to be taken to complete the questionnaire.

Data Analysis

Data were entered and analysed using statistical package for social sciences (SPSS) version 20.0. Descriptive statistics was computed for demographic characteristics (age, gender and educational level) and was presented as mean, frequencies, percentages, and standard deviation. Test of association between service quality expectations, service quality perceptions and demographic characteristics was done using independent t-test.

Descriptive statistics was used to compute means and standard deviations of perceptions and expectations of adolescents of YFHS. A gap score was calculated for each statement by subtracting expectations from perceptions, implying a score for each statement ranging between -4 and +4. A zero to positive score indicated a level of YFHS quality which is equal to or exceeds adolescents' expectations. Conversely, a negative score indicated a level of YFHS quality which is below that which is expected by the adolescents.

A gap score analysis was done to measure quality by obtaining an average gap score of the SERVQUAL dimension. Scores for each of the 20 expectation and 20 perception questions were obtained. A gap score of each of the statement and dimension was determined by calculating the perception minus expectation scores (Gap Score = Perception – Expectation). An average Gap Score for each dimension was obtained by assessing the Gap Scores for each of the statements that constitute the dimension and divide the sum by the number of statements making up the dimension.

CHAPTER 4

Presentation of Results

Introduction

This chapter presents the results of a descriptive quantitative study which was conducted to assess the quality of Youth Friendly Health Services (YFHS) at Chikwawa District Hospital. The chapter starts by presenting the demographic characteristics of the participants, service quality expectations of the participants towards YFHS and service quality perceptions of the participants using gap analysis. Relationships between service quality expectation, service quality perceptions and demographic characteristics are also discussed. Lastly findings of important YFHS quality parameters to adolescents are presented. SERVQUAL (Service Quality) framework was used to assess quality of YFHS from adolescents' perspective.

Demographic Data of the Participants

A total of 110 adolescents participated in the study, representing 100% response rate. The demographic characteristics of the participating adolescents were computed using descriptive statistics and the results are presented in Table 2. The majority of the participants were above18 years and the mean age was 17.8 years old with a standard deviation (SD) of 0 .121. The results also showed that the majority of participants were females (96.4%, *n*=106). Regarding education, most adolescents had primary education (79.1%, *n*=87)

Table 2

Social Demographic Characteristics of Adolescents

Variable	n (%)
Sex	
Male	4(3.6)
Female	106(96.4)
Age (Years)	
15	7(6.4)
16	15(13.6)
17	13(11.8)
18	32(29.1)
19	43(39.1)
Marital Status	
Married	82(74.5)
Single	28(25.5)
Highest level of education	
Primary	87(79.1)
Secondary	23(20.9)
Tertiary	0(0)

Table 3 shows the percentage of married adolescents by age. The results showed that more than 25% of the participants were married by the age of 18 years. The results also showed that 2.42% of adolescents were married by 15 years old.

Table 3

Percentage of Married Adolescents by Age

Age (Years)	n(%)
15	2(2.42)
16	9(10.98)
17	11(13.41)
18	22(26.83)
19	38(46.34)

Expectations of Adolescents regarding Youth Friendly Health Services

Adolescents were asked to show the extent to which they thought (expectation) YFHS should possess the quality dimension variables before receiving a service at any of the clinics (ANC, FP, ART, STI and HTC). Table 4 shows the mean likert scale for different SERVQUAL dimensions of adolescents' expectations from YFHS. A score of 1= strongly disagree, 2 = somewhat disagrees, 3 = Agrees, 4 = somewhat disagrees, 5 = strongly agree. A standard deviation of 0 indicated that everyone strongly agreed with the statement and a standard deviation of more than 0 means that a few number of participants did not strongly agree with the statement. The results showed that most adolescents strongly agreed with the expectations of quality services in all dimensions; reliability, assurance and empathy (M = 5.00, SD = 0.00), responsiveness (M = 4.998, SD = 0.238) and tangibles (M = 4.996, SD = 0.336)

Table 4

Expectations of Adolescents from YFHS

Item	n	Mean	Std. Deviation
Tangibility			
Clinic should have modern equipment	110	4.99	.095
Equipment should be visually appealing	110	4.99	.095
Service providers should be well dressed	110	5.00	0.000
Physical environment should be clean	110	5.00	0.000
Reliability			
Providers should keep promise	110	5.00	0.000
Should show sincere interest when solving problems	110	5.00	0.000
Providers should perform the service right	110	5.00	0.000
Providers should keep records accurately	110	5.00	0.000
Responsiveness			
Information should be easily obtainable	110	4.99	.095
Providers should give prompt service	110	5.00	0.000
Providers should be willing to help	110	5.00	0.000
Should never too busy to respond to adolescents' needs	110	5.00	0.000
Assurance			
Providers should instil confidence in adolescents	110	5.00	0.000
Adolescents should feel safe	110	5.00	0.000
Providers should be polite	110	5.00	0.000
Providers should answer all questions	110	5.00	0.000
Providers should give individual attention	110	5.00	0.000
Empathy			
Operating hours should be convenient	110	5.00	0.000
Providers should have adolescents' best interest at heart	110	5.00	0.000
Should understand specific needs of adolescents	110	5.00	0.000

Perceptions of Adolescents towards Youth Friendly Health Services

Adolescents were asked to show the extent to which they thought (perceptions) YFHS possessed the quality dimension variables after receiving a service at any of the clinics (ANC, FP, ART, STI and HTC). Table 5 shows the mean likert scale for different SERVQUAL dimensions of adolescents' perceptions towards YFHS. A score of 1= strongly disagree, 2 = somewhat disagrees, 3 = Agrees, 4 = somewhat

disagrees, 5 = strongly agree. A standard deviation of 0 indicates that everyone strongly agreed with the statement and a standard deviation of more than 0 means that a few number of participants did not strongly agree with the statement. The results showed that service quality perceptions of adolescents were lower than their service quality expectations in all the five dimensions (assurance M = 4.882, SD = 0.377, empathy M = 4.796, SD = 0.341, reliability M= 4.682, SD = 0.436, responsiveness M = 4.221; SD = 0.765 and tangibles M = 3.759; SD = 0.869).

Table 5

Perceptions of Adolescents towards YFHS

ITEM	n	Mean	Std. Deviation
T**angibility**			
Equipment is up to date	110	3.92	1.472
Equipment is visually appealing	110	3.27	1.439
Service providers are neat	110	4.93	.324
Physical environment is clean	110	2.92	1.604
Reliability			
Service providers keep promises	110	4.82	.623
Service providers show sincere interest	110	4.79	.755
Service providers provide the right service	110	4.19	.904
Service providers keep records accurately	110	4.93	.422
Responsiveness			
Information is easily obtainable	110	3.44	1.774
Service providers give prompt service	110	3.85	1.501
Service providers are willing to help	110	4.82	.680
Service providers are never too busy	110	4.77	.686
Assurance			
Service providers instil confidence	110	4.86	.550
Adolescents feel safe	110	4.91	.499
Service providers are polite	110	4.85	.652
Service providers answer all questions	110	4.91	.460
Empathy			
Service providers give individual attention	110	4.60	.780
Clinic's operating hours are convenient	110	4.70	.808
Service providers have adolescents' best interest at heart	110	4.95	.354
Service providers understand needs of adolescents	110	4.94	.413

Service Quality Gap

A gap score analysis was done to measure quality by obtaining an average gap score for each of the SERVQUAL dimensions. A gap score of each of the dimensions was determined by calculating the perception minus expectation scores (Gap Score = Perception – Expectation). An average Gap Score for each dimension was obtained by assessing the Gap Scores for each of the statements that constitute the dimension and divide the sum by the number of statements making up the dimension (Appendix 5). Table 6 shows the average mean gap scores of the 5 dimensions of service quality. A zero to positive mean gap score indicates a level of YFHS quality which is equal to or exceeds adolescents' expectations. Conversely, a negative mean gap score indicates a level of YFHS quality which is below that which is expected by the adolescents. The results showed that all the five dimensions of service quality had negative mean gap scores with the largest gap on tangibles M = -1.236, SD = 0. 867. Responsiveness M = -0.777, SD = 0.764, reliability M = -0.318, SD = 0.436, empathy M = -0.205, SD = 0.341, and assurance M = -0.118, SD = 0.377.

Table 6

Gap Score Analysis

Dimension	**Expectation (M,SD)**	**Perception (M,SD)**	**Gap(M,SD)**
Tangibles	4.996 (0.336)	3.759 (0.869)	-1.236 (0.867)
Reliability	5.000 (0.000)	4.682 (0.436)	-0.318 (0.436)
Responsiveness	4.998(0.238)	4.221 (0.765)	-0.777 (0.764)
Assurance	5.000 (0.000)	4.882 (0.377)	-0.118 (0.377)
Empathy	5.000 (0.000)	4.796 (0.341)	-0.205 (0.341)
Overall	**4.999 (0.008)**	**4.468 (0.370)**	**-0.531 (0.369)**

Relationship between Service Quality Expectation and Demographic Characteristics

The relationship between service quality expectations of adolescents from YFHS and demographic characteristics was measured using Independent Samples t- test. Table 7 shows that all the demographic characteristics did not show any statistical significantly difference in the category of these variables Gender t = 108, df = 0.338, p = 0.736, Age t = 108, df = 1.197, p = 0.234, Marital status t =108, df = -0.315, p = 0.753, Education t = 108, df = 0.532, p = 0.596 and service quality expectations.

Table 7

Relationship between Expectations and Demographic Characteristics

Variable	**Attribute**	**Mean**	**SD**	**Statistical Test**
Gender	Male	5.000	0.000	t = 108, df = 0.338, p = 0.736
	Female	4.999	0.008	
Age	≤17	5.000	0.000	t = 108, df = 1. 197, p = 0.234
	≥18	4.998	0.010	
Marital Status	Single	4.998	0.009	t = 108, df = -0.315, p = 0.753
	Married	4.999	0.008	
Education	Primary	4.999	0.008	t = 108, df = 0.532, p = 0.596
	Secondary	4.998	0.010	

Relationship between Service Quality Perception and Demographic Characteristics

Independent t- test results in Table 8 showed that male adolescents had statistically significantly lower service quality perception (M = 4.038, SD = 0.554) of YFHS than females (M = 4.038, SD = 0.355), t = 108, df = -2.422, p = 0.017. All other demographic characteristics had no statistically significantly differences with service quality perception (age t = 108, df = 1.209, p = 0.229, marital status t = 108, df = -0.558, p = 0.578 and education t = 108, df = 1.276, p = 0.205).

Table 8

Relationship between Perceptions and Demographic Characteristics

Variable	Attribute	Mean	SD	Statistical Test
Gender	Male	4.038	0.554	t = 108, df = -2.422, p = 0.017
	Female	4.484	0.355	
Age	≤17	4.530	0.342	t = 108, df = 1.209, p = 0.229
	≥18	4.439	0.381	
Marital Status	Single	4.434	0.354	t = 108, df = -0.558, p = 0.578
	Married	4.479	0.377	
Education	Primary	4.491	0.348	t = 108, df = 1.276, p = 0.205
	Secondary	4.380	0.441	

Important Quality YFHS Parameters to Adolescents

Adolescents were asked to allocate a total of 100 points among the five dimensions of service quality according to how important the dimensions were to them. Identification of important YFHS quality parameters was done in order to assess the quality dimensions which were accorded more weights and therefore more important to adolescents. Table 9 shows the Importance Weights. The results showed that assurance (23 points), empathy (22 points), reliability (21 points) and responsiveness (20 points) were allotted marks within the same range while tangibles were allotted 14 points.

Table 9

SERVQUAL Importance Weight

SERVQUAL Dimension	Importance Weight
Average Tangible	**14.0**
Equipment is up to date	
Physical facilities are appealing	
Service providers are neat	
Physical environment is clean	
Average Reliability	**21.0**
Service providers keep promise	
Show interest in solving problems	
Perform the right service	
Provide service at the promised time	
Average Responsiveness	**20.0**
Information is easily obtainable	
Prompt service	
Providers are willing to help	
Providers are never too busy	
Average Assurance	**23.0**
Instil confidence	
Adolescents feel safe	
Providers are polite	
Providers have knowledge	
Average Empathy	**22.0**
Give individual attention	
Convenient operating hours	
Adolescents' best interest at heart	
Understand specific needs	
TOTAL	**100 POINTS**

CHAPTER 5

Discussion

Introduction

This chapter discusses the results of a study that assessed perspectives of adolescents on quality of Youth Friendly Health Services at Chikwawa district hospital. The relationship between service quality expectations, service quality perceptions and demographic characteristics of adolescents will be discussed first. This will be followed by service quality expectations of adolescents from YFHS and service quality perceptions of adolescents towards YHFS. Important YFHS quality parameters to adolescents will also be discussed. Lastly, study limitations, recommendations that were drawn from the research findings and the conclusion will be presented.

Demographic Characteristics of Adolescents

The demographic characteristics of adolescents in this study were age, sex, marital status and highest level of education.

Results of the study showed that the majority of adolescents were 18 years old or more, while 31.8% were less than 18 years old. There were no statistically significant differences between the age of adolescents and their expectation and perception towards the quality of Youth Friendly Health services. This finding suggests that expectation and perception of adolescents towards YFHS does not depend on age. Similarly, a quantitative study conducted with adolescents aged 10 to 19years old by Sovd, Mmari, Lipovsek, and Manaseki-Holland (2006) in Mongolia

found that there were no differences in how adolescents below 15 years old and adolescents above 15 years old perceived the quality of adolescent friendly services. Furthermore the Mongolian study found that adolescents between 10 to 19 years old were satisfied with the services provided in adolescent friendly clinics than adolescents of the same age receiving services in other clinics not providing adolescent friendly services (Sovd et al., 2006b). This means that expectation and perception of adolescents depend on the quality of services being provided and not on individual age.

The study results also revealed that 26.81% of adolescents married before the age 18 years while 73.17% of adolescents got married at 18 or more than 18 years old. This finding is consistent with the findings of Population Reference Bureau (2014) and United Nations Population Fund (2012) who reported that in Malawi 50 % of young women are married by the age of 18 and that adolescent girls ages 15 to 19 are 10 times more likely to be married than boys. However the results showed no statistical significant differences between marital status, expectation of adolescents from YFHS and perception of adolescents towards YFHS. Teenage marriages might suggest poor quality of YFHS in terms of information dissemination to adolescents which can result in poor decision making. This could explain why there are so many reproductive health problems since adolescents are married before they are mature to make right decisions and are exposed to risks such as sexual abuse, unwanted pregnancies which can result in termination, STI's and HIV and AIDS.

The results of the study showed that there is no difference in expectation of YFHS in males and females, but the results showed that female adolescents had a higher service quality perception of YFHS than male adolescents. The difference in perceptions of males and females towards YFHS might be attributed to number of

male participants in this study. Only four males participated against 106 female participants. The difference could be also attributed to culture. Culturally male adolescents with more traditional masculine beliefs are said to be less likely to get reproductive health care than girls (Marcell, Ford, Pleck, & Sonenstein, 2007). This implies that boys are taken to be stronger than girls who are said to be weaker. In addition female adolescents have the urgency to access RH care than male adolescents who have lack of urgency (Bearinger, Sieving, Ferguson, & Sharma, 2007). This forces female adolescents to access RH services probably at the same facility for a number of visits and may perceive that the services they are receiving are of good quality due to lack of experience of other settings. Contrary to this finding, Tegegn, Yazachew, and Gelaw (2008) in their study in Ethiopia asked adolescents whether only girls should use RH services. The results revealed that only 4% agreed with this statement while 96% were of the opinion that RH services should be utilized by both male and female adolescents. This means that both male and female adolescents need to access youth friendly reproductive health services so that they should receive quality care and obtain RH information which will help them to reduce risky behaviours.

Results further showed that the majority of adolescents had primary education. There were no significant differences between service quality expectations, perception of adolescents towards YFHS and level of education. This finding suggests that the level of education in this study did not affect expectation and perception of adolescents towards YFHS. This finding is similar to a study on perceived quality of reproductive care for girls by Meuwissen et al. (2006) in Nicaragua (Central America) who found that differences in education of adolescent girls did not influence their assessment of quality of reproductive health services. This means that regardless

of educational status, service providers should provide quality youth friendly RH to all adolescents.

On the contrary, a study conducted by Tegegn et al.(2008) in Ethiopia found that adolescents who completed elementary education or were still in school were more aware of where to obtain RH information easily from service providers than those who were not educated. The seeming contrast in the findings might be attributed to the differences in sample size and the setting where the studies were conducted. In this study there were 110 participants and it was facility - based with the majority having undergone primary education only, while the Ethiopian study recruited 1130 participants at community level with the majority(94.8%) having undergone post primary education. It is also important to note that adolescents who stay in school longer tend to marry older than adolescents who are out of school (Population Reference Bureau, 2014). This implies that adolescents who are educated are better informed about health related behaviours and therefore their expectation and perception towards quality YFHS will be different than those who are not educated

Expectations of Adolescents regarding Youth Friendly Health Services

The results showed that adolescents in Chikwawa district had high service quality expectations in all the five dimensions. The results on expectation of adolescents from YFHS are consistent with the findings of Biddlecom et al. (2007) who found that in Burkina Faso, Ghana, Malawi, and Uganda adolescents have positive expectations of government health facilities. The results suggest that expectations of adolescents might assist in setting standards of care whereby service providers should strive to improve the services in order to meet the expectations of adolescents.

Perceptions of Adolescents towards Youth Friendly Health Services

Tangible Factors that Influence YFHS (Tangibility)

The study results showed that tangible or physical factors had the largest gap score among all the dimensions with the largest gap on cleanliness of the physical environment. Tangibles received the lowest rank among all the dimensions in terms of service quality expectations of adolescents from YFHS but it had the largest gap score among all the dimensions. Cleanliness of the physical environment was rated the lowest (M = 2.92; SD = 1.604) meaning that most of the adolescents rated the cleanliness of the physical environment as not of good quality. This implies that adolescents were not satisfied with the outlook of physical environment both inside and outside the clinic. A study conducted by Atuyambe, Mirembe, Annika, Kirumira, and Faxelid (2009) in Uganda found that young women were detesting services if facilities were dirty and had a bad smell. Although adolescents who participated in this current study disagreed that the environment of the clinic was clean, they did not detest services. This might be due to the fact that adolescents are not aware that a clean environment is one of the characteristics of a youth friendly clinic providing quality services so they could not complain or they did not have another option of a facility where they could go and access similar RH services. This implies that physical environment of a youth friendly clinic can influence adolescents' overall perception towards quality of services. If the state of the physical environment is different to the expectations of adolescents, all the care that adolescents receive might be perceived as of poor quality since first impression of the clinic matters (Khalaf et al., 2010).

The results also showed that the appearance of physical facilities such as shelves, rooms, equipment and furniture were not good to adolescents. The result

suggests that adolescents expect a youth friendly clinic to be attractive with modern physical facilities, equipment and furniture. Similarly Khalaf, Moghli, and Froelicher (2010) in their study in United States of America on adolescents' perception of characteristics of YFHS, found that adolescents were of the view that clinics should have new equipment which is of good quality and the rooms should be nicely decorated. This finding implies that though the equipment used in a youth friendly clinic might not always be new, service providers should make sure that the equipment is well cared for and the clinic should be arranged in a way such that it should be attractive to adolescents.

The results showed that there was a very small gap between adolescents' expectations and perceptions on the physical appearance of the service providers. This finding suggests that service providers were well dressed and mostly appeared neat but not to the expectations of adolescents. This result is similar to the findings by Richter and Mfolo (2006) in South Africa who found that service providers who put on uniform instill a sense of safety in adolescents that they will receive the expected care. The results suggest that adolescents perceive a service provider who is in uniform as someone knowledgeable, skilled and professional who can provide quality youth friendly reproductive health care and is able to solve their RH issues accurately and promptly, than a service provider who is not dressed according to the professional code.

Reliable Youth Friendly Health Services

The results showed that there were small negative gaps between all the four variables within the reliability dimension of service quality. This means that perception of adolescents on reliability of YFHS was lower than their expectations. The results showed that service providers were not doing some things at the time they

promised to do them. In addition adolescents did not find some necessary drugs and supplies when they came to the clinic for RH services. This finding is in agreement with Dickson et al.(2007) in South Africa who reported that when a clinic has essential drugs and supplies according to the standards, quality of care is improved. This finding suggests that necessary drugs and supplies are essential in the provision of effective and quality YFHS at any service delivery point. Lack of essential drugs and other commodities at a youth friendly clinic will cause referral of adolescents to other health facilities and that might influence adolescents' perception towards quality of YFHS.

The results also showed that service providers did not show sincere interest when solving problems of adolescents and could not perform the service right at the first time. The result suggests that adolescents want to be assessed thoroughly by a service provider when they come for RH services. It also implies that service providers need to make accurate diagnosis of the problem and be able to manage the problem appropriately during the first contact. Contrary to this finding, Braeken and Rondinelli (2012) reported that adolescents do not need extensive physical examination to be performed when confidentiality and privacy are not assured. The difference in the findings can be attributed to the fact that adolescents want to be examined properly where there is privacy and service providers should not take a long time in conducting the physical examination. Adolescents perceive services to be of good quality when they receive the expected care in the shortest period possible without being referred to other departments for other services (Dickson et al., 2007).

In addition, the result also suggests that adolescents do not want to wait for a long time before they receive a service. This statement is similar to Biddlecom et al.(2007) and Tylee et al.(2007) who found that adolescents did not wait for a long

time to receive a service. However adolescents in other studies complained that the waiting time was too long (Alli et al., 2013; Mauerhofer et al., 2010; Renju et al., 2010). Long waiting time can be attributed to high case load and sometimes shortage of human resource. When there is shortage of staff, service providers do not provide quality YFHS because they have short consultation times with adolescents in order to finish the queue. It is however important to note that adolescents' perception of quality is short waiting time with comprehensive assessment and this requires a service provider to be skilled, competent and have necessary resources.

The results revealed that perception of adolescents on accurate record keeping by service providers was below their expectation. This finding is similar to the results of a qualitative study conducted in Tanzania by Mbeba et al. (2012) who found that record keeping was one of the challenges faced in provision of RH services to young people. This finding suggests that when adolescents' records are clearly documented and kept safely, it will be easier for service providers to analyse the data and identify challenges in provision of RH services to adolescents. This might assist in developing interventions that can improve the quality and influence perception of adolescents towards YFHS.

Responsiveness of Youth Friendly Health Services

The results showed that the expectations of adolescents are high in terms of responsiveness but their perception of the service is low. The results showed that responsiveness dimension had a gap score of (M = -0.777; SD = 0.764) with the largest gap on the variable regarding service providers making information easily obtainable by adolescents (M = 3.44; SD = 1.774). This finding suggests that adolescents do not obtain adequate and necessary information on RH issues when

they reach a youth friendly clinic. In a study conducted by Agampodi et al (2008) in Kalutara district, Sri Lanka, adolescents emphasized that they expect to get RH information from trained health personnel and not from trained volunteers or teachers because information obtained from a service provider is taken to be accurate. Although adolescents' expectations to get information easily when they reach a health facility are high, their experience explains otherwise.

In agreement with this result, other authors found that adolescents seek advice from friends first when they have any reproductive health issues such as un- intended pregnancy, STI, when they need HIV services and family planning services (Agampodi et al., 2008; Bearinger et al., 2007; Berhane et al., 2005). This suggests that the information which adolescents obtain from friends is most of the times inaccurate and incomplete. This is reflected in 0.4% of girls and 0.6% of boys aged 15 to 19 years having sexually transmitted infections, HIV prevalence rate of 8.4% in females and 2.4% in males among 15 to 24 year olds, and unwanted / unplanned pregnancies in adolescent girls in Malawi,(Joint United Nations Programme on HIV/AIDS, 2008; Malawi National Statistical Office, 2011; Population Reference Bureau, 2014).

Quality YFHS requires service providers to have information, education and communication (IEC) materials on display for adolescents to take home and provide adolescents with adequate and relevant RH information which will help them to make informed choices and decisions. Bearinger et al. (2007) reported that the most basic needs of adolescents regardless of culture, age, and marital status are accurate and complete information about their body functions, sex, safer sex, reproduction, and sexual negotiations. When adolescents do not have adequate information or when they

obtain advice from peers, they most of the times make poorly informed decisions that may have negative effects on their lives.

Assurance and Commitment of Service Providers in Providing YFHS

The results showed that assurance dimension had a gap score of (M = -0.118; SD = 0.377) and it was a dimension with a lowest gap among all the dimensions. This means that there was a small difference between what the adolescents expected and their perception of service quality. Although the results showed that there were small gaps between the statements in this dimension, it was noted that perception of adolescents on assurance dimension of quality was lower than their expectations.

The results showed that adolescents were not assured to some extent that the service providers had knowledge to answer their questions. Similarly Alli et al. (2013) in their study in South Africa, reported that 65 % of young people were given an opportunity to ask service providers important issues on RH and 63% of young people had sufficient time to ask questions. This implies that sometimes service providers do not give adolescents a chance to ask questions relating to RH issues, or if given a chance, they do not take their time to respond to the questions appropriately. Giving adolescents a chance to ask questions would help the service providers to identify any misconceptions or gaps in knowledge and be able to clear the misconceptions and provide the relevant information. Service providers need to take their time and give an opportunity to adolescents to ask questions and answer their questions accordingly. If service providers will not give adolescents opportunity to ask questions, adolescents will perceive the services as of poor quality because they may not verbalise their concerns due to fear of being embarrassed (Biddlecom et al., 2007; Wittenberg et al., 2007).

The results showed that few adolescents (M = 4.85; SD = 0.652) thought that service providers were not polite. The findings suggest that service providers did not welcome some adolescents in a polite manner. The findings are similar to a study conducted in Botswana where 84.2% of adolescents agreed that health providers greeted youth receiving sexual and reproductive services in a polite manner (Lesedi et al., 2011). Contrary to this finding, a substantial number of studies reveal that adolescents feel unwelcome or uncomfortable due to service providers who are rude mostly in government facilities (Alli et al., 2013; Atuyambe et al., 2009; Erulkar et al., 2005). Rude service providers create a tense environment which can prevent adolescents from sharing their RH issues freely and can influence their perception towards quality of YFHS. Alternatively when service providers are welcoming and polite, there is a good working and trusting relationship which enables adolescents to share their RH issues freely with the service providers.

Although the results showed that most adolescents felt safe with the providers, there was a small negative gap between adolescents' expectations and perceptions on behaviour of service providers who did not instil confidence in adolescents which made them not to feel safe when transacting with the service providers. A number of studies have indicated that most adolescents feel safe with service providers and that their issues will be kept confidential (Biddlecom et al., 2007; Kipp et al., 2007). On the contrary adolescents in Northern Thailand preferred to seek RH services in private clinics than in government facilities due to lack of privacy and confidentiality in government facilities (Tangmunkongvorakul et al., 2012). Similarly a number of studies report that lack of privacy and confidentiality by service providers in health facilities prevents adolescents from seeking RH services (Agampodi et al., 2008; Amuyunzu-Nyamongo, Biddlecom, Ouedraogo, & Woog, 2005; Berhane et al., 2005;

Wittenberg et al., 2007). This suggests that when service providers are welcoming and treating adolescents with respect, adolescents will be assured that whatever they discuss with the service providers will be kept confidential and this will in turn influence their perception to quality of services.

Empathy of Service Providers in Providing YFHS

Although there were small gaps between the expectations of adolescents and their perception on empathy dimension of service providers, the results showed negative gaps meaning that expectations of adolescents were higher than their perceptions.

The results showed that to some extent, the service providers did not understand the specific needs of adolescents. For adolescents to perceive that YFHS are of good quality, there has to be a good interpersonal relationship between service providers and adolescents which will later influence utilization of RH services (Alli et al., 2013). Similar to this finding, Agampodi et al. (2008) reported that adolescents in Sri Lanka need a service provider who would listen and understand their problems. This suggests that service providers need to develop a trustworthy working relationship with adolescents so that they should interact at a personal level. A good working relationship enables an open communication where adolescents are free to verbalise their concerns and service providers understand and assist them accordingly. This statement is similar to Berhane et al.(2005), Shaw(2009) and Warenius et al.(2006) who suggested that there should be an understanding of the attitude of service providers because their personal values and views will affect provider-adolescent relationship which will in turn affect provision of quality care.

The results further showed that service providers did not give individual attention to adolescents. This finding is in agreement with Muir et al.(2012) who

reported that service providers need to be sensitive to the needs of young people and be able to provide individual attention to the needs of adolescents. For service providers to provide individualised care there is need for developing a good provider-adolescent relationship. When there is such a relationship, service providers will have a positive attitude towards adolescents and this will in turn influence perception of adolescents towards YFHS.

The results revealed that to some extent, the clinic's operating hours were not convenient to all adolescents. This is so because adolescents' expectations were higher than their perception. Adolescents expect a youth friendly clinic to have convenient operating hours, since there are some adolescents who go to school, some who go to work and others who are doing business. This statement is similar to the findings of a substantial number of authors who suggested that youth clinics should be open for some specific hours convenient to adolescents or during weekends for those adolescents who are either in school or at work during the week (Alli et al., 2013; Berhane et al., 2005; Erulkar et al., 2005; Regmi, Van Teijlingen, Simkhada, & Acharya, 2010; Tylee et al., 2007) . This will prevent adolescents from absenting themselves from school at the same time enable them to access the required RH services. This implies that service providers may need to strategize to find ways of providing RH services to accommodate all adolescents in order to improve access, utilization and quality. In addition, there is also a need to strategize on whether the services should be provided specifically to adolescents only or if they can be integrated with adult RH services.

Important Quality YFHS Parameters to Adolescents

The results of the study showed that the service quality gap was in the negative zone (M = -0.531; SD = 0.369). This means that adolescents' perception of

service quality at Chikwawa district hospital was below their expectation since it was in negative zone. This implies that adolescents did not perceive the services provided to them as of good quality in all the five dimensions of quality.

Although all the dimensions were in the negative zone, adolescents allotted maximum weight to assurance dimension of quality. This means that adolescents would want to be assured first that youth friendly reproductive health services that are provided are of good quality. This implies that for YFHS to be of good quality, service providers need to have the competence, show some courtesy to adolescents, be credible and should offer security to adolescents. When adolescents feel respected and safe, they will be able to interact freely with service providers and this will improve the quality of services. In addition, service providers need to be approachable, have good communication skills and positive attitudes towards adolescents. This enables service providers to get to know individual adolescents and understand their specific needs. Furthermore services that are provided to adolescents need to be reliable at all times so that adolescents should be assured that they will receive the care they are expecting.

Conversely to assurance having maximum weight, adolescents weighted responsiveness and tangibility as less important. This does not mean that responsiveness and tangibility are not important in service quality, but it implies that the gap between service quality expectations and service quality perceptions of adolescents was large in these two dimensions than in assurance dimension. Service providers therefore need to respond to the individual needs of adolescents by making sure that the waiting time is reduced, make a rapid and accurate assessment and manage the problem accordingly. In addition, the physical environment of the clinic and the physical structures need to be made attractive, appealing and welcoming to

the adolescents. A study that was conducted in India by Abuja (2011) on quality management of eye hospitals found that maximum weight was allotted to reliability and assurance. The difference in the findings could be attributed to the setting of the studies and availability of resources. The present study was conducted at a government setting while the Indian study was conducted in both government and non-governmental hospitals. It is important however to note that all the five dimensions are necessary in provision of quality YFHS. Therefore there is need to identify the areas which need specific actions and address the shortfalls in order to improve the quality of YFHS in all dimensions.

Study Limitations

The study had the following limitations

- The study was conducted at one facility; therefore the results may not be generalized to the whole country.
- There were only four male adolescents who participated in the study; therefore the results may be biased towards female adolescents' service quality perceptions and expectations.
- There was need to add some background information on the research tool such as number of visits made to the facility by individual adolescents, number of children for those adolescents who were married, and whether the adolescents have an experience of receiving RH services from another facility. These variables may influence the expectation and perception of adolescents towards YFHS.
- The study used one method of data collection using SERVQUAL tool. There was need to use other methods of collecting data such as observation in order

to validate some of the variables in tangibility, reliability, responsiveness, assurance, and empathy dimensions of quality.

Recommendations

According to the findings of the study presented in this paper, the researcher recommends the following:

- Management of the facility should make sure that they procure necessary equipment and supplies for provision of quality services to adolescents. Service providers need also to make sure that the physical facilities are visually appealing to adolescents by cleaning the equipment, making the clinic attractive and making sure that the environment is always clean.
- There is need for service providers to have a positive attitude towards adolescent sexual and reproductive health services by showing interest in solving the concerns and problems of adolescents. This positive attitude can be demonstrated by welcoming adolescents in a friendly manner, respecting adolescents, providing privacy when transacting with adolescents and keeping all adolescents' issues confidential.
- Service providers need to conduct thorough assessment when caring for adolescents, make a right diagnosis and provide accurate treatment during the first contact with adolescents.
- Service providers need to keep records of adolescents accurately by recording services given to adolescents separately from the adults accessing similar services. This will enable the service providers and the management to easily identify challenges in provision of YFHS which will allow for interventions tailored for improving quality of YFHS.

- There is need for service providers to strategize on making RH information easily obtainable by adolescents. This can be done by offering YFHS at specific hours or days of the week to enable service providers to give group RH education to adolescents. This will also allow service providers to provide prompt treatment and give individual RH education depending on individual specific needs. Adolescents will also feel safe when transacting with service providers
- Health workers (nurses and clinicians) should be trained/ oriented in YFHS in order to acquire knowledge, clinical skills, and interpersonal skills to manage adolescents promptly when they come to a youth friendly clinic for RH services.

Conclusion

Youth Friendly Health Services is an essential package for provision of RH services to adolescents. Findings of this study using SERVQUAL tool to assess quality have shown that adolescents at Chikwawa district are not receiving quality care in all the dimensions of service quality. The study revealed that adolescents have high service quality expectations in all the five dimensions of quality. This calls for service providers to provide quality services in order to meet the expectations of adolescents. The study also revealed that service quality perception of adolescents towards YFHS was lower than their expectations mostly in tangibles and responsiveness dimensions.

The study highlighted that assurance, empathy and reliability are important dimensions of quality which service providers need to take into consideration when providing RH services to adolescents. There is need for service providers to make sure that privacy and confidentiality are maintained at all times in order for

adolescents to utilize and access RH services. It is also important that service providers have interpersonal skills which will assist in building provider- adolescent relationship. This will create a sense of safety in adolescents which will enable them to share their RH concerns with the providers.

The use of SERVQUAL tool highlighted the gaps that exist between service quality expectations and service quality perceptions. Hospital management team and service providers need to identify the quality gaps and strategise on how to improve the quality of YFHS services provided to adolescents

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Appendices

Appendix 1.A: Demographic characteristics for adolescents

Quality of Youth Friendly Health Services at Chikwawa district hospital: Perspectives of adolescents

Participant identification number……..

Date of interview_____

Gender M / F

NO	ITEM	CODE
A1	How old are you?	_____ Years
A2	What is your marital status?	Single……1 [ ] Married…….2 [ ]
A3	What is your highest level of education?	Primary ……1 [ ] Secondary ...…….2 [ ] Tertially ……...3 [ ]

Appendix 1B: Demographic Characteristics (Chichewa Version)

Quality of Youth Friendly Health Services at Chikwawa district hospital: Perspectives of adolescents

Participant identification number……..

Date of interview_____

Gender M / F

NO	ITEM	CODE
A1	Muli ndi dzaka zingati?	Dzaka _____
A2	Muli pa banja?	Osakwatiwa …….1 [ ] Okwatiwa ...…….2 [ ]
A3	Sukulu munaphunzira mpaka pati?	Pulayimale……..1 [ ] Sekondale…….2 [ ] Ukachenjede……..3[ ]

Appendix 2A: Questionnaire on Expectations

Quality of Youth Friendly Health Services at Chikwawa district hospital: Perspectives of adolescents

This section deals with your opinion of YFHS. Please, show the extent to which you think YFHS 'should' possess the following features. We are interested in knowing your **EXPECTATIONS** from ideal YFHS in Chikwawa. You should rank each statement as follows; 1= strongly disagree, 2= somewhat disagrees, 3 = agrees, 4 = somewhat agrees, 5= strongly agree. Put a cross (X) on your choice of answer.

	Tangibles					
1	Ideal youth friendly clinic should have modern equipment	1	2	3	4	5
2	Their physical facilities (shelves, lights, furniture,) should be visually appealing	1	2	3	4	5
3	The service providers should be well dressed and appear neat	1	2	3	4	5
4	The physical environment of the clinic should be clean	1	2	3	4	5
	Reliability					
5	When service providers promise to do something by a certain time, they should do so	1	2	3	4	5
6	When an adolescent has a problem, service providers should show a sincere interest in solving it	1	2	3	4	5
7	Service providers should perform the service right the first time	1	2	3	4	5
8	The service providers should keep their records accurately	1	2	3	4	5
	Responsiveness					

9	Service providers should make information easily obtainable by adolescents	1	2	3	4	5
10	Service providers should give prompt service to adolescents	1	2	3	4	5
11	Service providers should always be willing to help adolescents	1	2	3	4	5
12	Providers in a youth friendly clinic should never be too busy to respond to adolescent's requests	1	2	3	4	5
	Assurance					
13	The behaviour of service providers should instil confidence in adolescents	1	2	3	4	5
14	Adolescents should be able to feel safe in their transactions with service providers in the clinic	1	2	3	4	5
15	The service providers should be polite	1	2	3	4	5
16	Service providers should have the knowledge to answer adolescents' questions	1	2	3	4	5
	Empathy					
17	Service providers should give adolescents' individual attention	1	2	3	4	5
18	The clinic's operating hours should be convenient to all adolescents	1	2	3	4	5
19	Service providers should have adolescents' best interest at heart	1	2	3	4	5
20	Service providers should understand the specific needs of adolescents	1	2	3	4	5

Appendix 2B: Questionnaire on Expectations (Chichewa version)

Quality of Youth Friendly Health Services at Chikwawa district hospital: Perspectives of adolescents

Gawo ili likukhudza maganizo anu a chisamaliro chimene chimaperekedwa kwa a chinyamata.Chonde nenani mulingo umene mukuganizira za mmene chisamaliro cha achinyamata chiyenera kukhalira.Tili osangalatsidwa kudziwa za zimene **mukuyembekezera kuzipeza** kuno ku chipatala cha Chikwawa. Muyankhe funso lili lonse motere; 1= simukugwirizana nazo kwambiri, 2= simukugwirizana nazo pang'ono, 3 = mukugwirizana nazo, 4 = mukugwirizana nazo pang'ono, 5= mukugwirizana nazo kwambiri. Ikani chizindikiro cha (X) pa yankho lomwe mwasankha.

	Maonekedwe					
1	Chipatala chabwino chothandizira achinyamata chimayenera kukhala ndi zipangizo zamakono	1	2	3	4	5
2	Maonekedwe a zipangizo monga mashelefu, mipando, matebulo akhale okongola	1	2	3	4	5
3	Opereka chithandizo avale mwaukhondo ndi modzilemekeza	1	2	3	4	5
4	Kunja kwa chipatala kukhale kowoneka mwa ukhondo	1	2	3	4	5
	Chodalilika					
5	Opereka chithandizo asunge malonjezo awo pakuchita zinthu munthawi imene alonjeza	1	2	3	4	5
6	Wachinyamata akakhala ndi vuto, opereka chithandizo awonetsa chidwi pakumuthandiza	1	2	3	4	5
7	Opereka chithandizo apereke chithandizo choyenera nthawi yoyamba kukumana nawo	1	2	3	4	5
8	Opereka chithandizo asunge kaundula wawo mosamala	1	2	3	4	5
	Chisamaliro					

9	Opereka chithandizo azionetsetsa kuti achinyamata akupeza uthenga oyenerera mosavuta	1	2	3	4	5
10	Apereke chithandizo mwansanga kwa achinyamata	1	2	3	4	5
11	Opereka chithandizo akhale okonzeka kuthandiza achinyamata nthawi zones	1	2	3	4	5
12	Opereka chithandizo asakhale otanganidwa kuyankha zofuna za achinyamata	1	2	3	4	5
	Chilimbikitso					
13	Khalidwe la opereka chithandizo lizipereka chikhulupiliro kwa achinyamata	1	2	3	4	5
14	Achinyamata azimva kuti ndi otetezeka akamapanga zinthu ndi ogwira ntchito ku chipatala	1	2	3	4	5
15	Opereka chithandizo akhale aulemu	1	2	3	4	5
16	Opereka chithandizo azitha kuyankha mafunso a achinyamata	1	2	3	4	5
	Kumvetsetsa					
17	Opereka chithandizo azitha kumuthandiza wachinyamata payekha payekha	1	2	3	4	5
18	Nthawi yotsegula chipatala ikhale yosavuta kufikilika ndi achinyamata onse	1	2	3	4	5
19	Chidwi cha opereka chithandizo chizikhala pa zokhumba za achinyamata	1	2	3	4	5
20	Opereka chithandizo azimvetsa zofuna za achinyamata	1	2	3	4	5

Appendix 3A: Questionnaire on Perception

Quality of Youth Friendly Health Services at Chikwawa district hospital: Perspectives of adolescents

This section deals with your **perception** of YFHS. Please, show the extent to which you think YFHS possess the following features. We are interested in knowing your **PERCEPTION** of YFHS in Chikwawa after receiving care. You should rank each statement as follows; 1= strongly disagree, 2= somewhat disagrees, 3 = agrees, 4 = somewhat agrees, 5= strongly agree. Put a cross (X) on your choice of answer.

	Tangibles					
21	Youth friendly clinic have up to date equipment	1	2	3	4	5
22	Physical facilities (like shelves, counters, furniture, lights) are visually appealing	1	2	3	4	5
23	The service providers are well dressed and appear neat	1	2	3	4	5
24	The physical environment of the clinic is clean	1	2	3	4	5
	Reliability					
25	When service providers promise to do something by a certain time, they do	1	2	3	4	5
26	When an adolescent has a problem, service providers show a sincere interest in solving it	1	2	3	4	5
27	Service providers perform the service right the first time	1	2	3	4	5
28	The service providers keep their records accurately	1	2	3	4	5
	Responsiveness					
29	Service providers make information easily obtainable by adolescents	1	2	3	4	5
30	Service providers give prompt service to adolescents	1	2	3	4	5
31	Service providers are always willing to help adolescents	1	2	3	4	5
32	Providers in a youth friendly clinic are never be too busy to respond to adolescent's requests	1	2	3	4	5
	Assurance					
33	The behaviour of service providers instil confidence in adolescents	1	2	3	4	5

34	Adolescents feel safe in their transactions with service providers in the clinic	1	2	3	4	5
35	Service providers are polite with adolescents	1	2	3	4	5
36	Service providers have the knowledge to answer adolescents' questions	1	2	3	4	5
	Empathy					
37	Service providers give adolescents' individual attention	1	2	3	4	5
38	The clinic's operating hours are convenient to all adolescents	1	2	3	4	5
39	Service providers have adolescents' best interest at heart	1	2	3	4	5
40	Service providers understand the specific needs of adolescents	1	2	3	4	5

Appendix 3B: Questionnaire on Perception (Chichewa version)

Quality of Youth Friendly Health Services at Chikwawa district hospital: Perspectives of adolescents

Gawo ili likukhudza maganizo anu momwe mwaonera za chisamaliro chimene chimaperekedwa kwa achinyamata. Chonde nenani mulingo umene **mwaonera** mokhudzana ndi chisamaliro chimene mwalandira pa chipatala cha Chikwawa. Muyankhe funso lili lonse motere; 1= simukugwirizana nazo kwambiri, 2= simukugwirizana nazo pang'ono, 3 = mukugwirizana nazo, 4 = mukugwirizana nazo pang'ono, 5= mukugwirizana nazo kwambiri. Ikani chizindikiro cha (X) pa yankho lomwe mwasankha.

	Maonekedwe					
21	Chipatala chili ndi zipangizo zamakono	1	2	3	4	5
22	Maonekedwe a zipangizo monga mashelefu, mipando, ndi matebulo ndi okongola	1	2	3	4	5
23	Opereka chithandizo ndi wovala mwa ukhondo ndi modzilemekeza	1	2	3	4	5
24	Kunja kwa chipatala ndi kowoneka mwa ukhondo.	1	2	3	4	5
	Chodalilika					
25	Opereka chithandizo amasunga malonjezo awo pakuchita zinthu munthawi imene alonjeza	1	2	3	4	5
26	Wachinyamata akakhala ndi vuto, opereka chithandizo amawonetsa chidwi pakumuthandiza	1	2	3	4	5
27	Opereka chithandizo amapereka chithandizo choyenera nthawi yoyamba kukumana nawo	1	2	3	4	5
28	Opereka chithandizo amasunga kaundula wawo mosamala	1	2	3	4	5
	Chisamaliro					
29	Opereka chithandizo amaonetsetsa kuti achinyamata akupeza uthenga oyenerera mosavuta	1	2	3	4	5

30	Opereka chithandizo amapereka chithandizo mwansanga kwa achinyamata	1	2	3	4	5
31	Opereka chithandizo amakhala okonzeka kuthandiza achinyamata nthawi zones	1	2	3	4	5
32	Opereka chithandizo sakhala otanganidwa kuyankha zofuna za achinyamata	1	2	3	4	5
	Chilimbikitso					
33	Khalidwe la opereka chithandizo likupereka chikhulupiliro kwa achinyamata	1	2	3	4	5
34	Achinyamata akumva kuti ndi otetezeka akamapanga zinthu ndi ogwira ntchito ku chipatala	1	2	3	4	5
35	Opereka chithandizo ndi aulemu	1	2	3	4	5
36	Opereka chithandizo akutha kuyankha mafunso a achinyamata	1	2	3	4	5
	Kumvetsetsa					
37	Opereka chithandizo akutha kumuthandiza wachinyamata payekha payekha	1	2	3	4	5
38	Nthawi yotsegula chipatala ndi yosavuta kufikilika ndi achinyamata onse	1	2	3	4	5
39	Chidwi cha opereka chithandizo chili pa zokhumba za achinyamata	1	2	3	4	5
40	Opereka chithandizo akumvetsa zofuna za achinyamata	1	2	3	4	5

Appendix 4A: SERVQUAL Importance Weights

Quality of Youth Friendly Health Services at Chikwawa district hospital: Perspectives of adolescents

Listed below are five features pertaining to Youth Friendly Health Services. We would like to know how important each of these features is important to you. Please allocate a total of 100 points among the five features according to how important it is to you. The more important a feature is to you, the more points you should allocate to it. Please ensure that the points you allocate to the five features add up to 100

	DIMENSION	RANK	POINTS
1	The appearance of the clinic's physical facilities, equipment, Personnel, and communication materials		
2	The clinic's ability to perform the promised service dependably and accurately.		
3	The provider's willingness to help adolescents and provide prompt service.		
4	The knowledge and courtesy of the clinic's service providers and their ability to convey trust and confidence.		
5	The caring, individual attention the service providers provide to adolescents.		
	TOTAL		100 POINTS

Note on ranking

Rank 1=30 points, 2 =25 points, 3=20 points, 4=15 points, and 5 =10 points

Appendix 4B: SERVQUAL Importance Weights (Chichewa version)

Quality of Youth Friendly Health Services at Chikwawa district hospital: Perspectives of adolescents

Mmusimu mwatchulidwa mfundo zisanu zokhudzana ndi chisamaliro chimene chimaperekedwa kwa achinyamata. Tikufuna kudziwa kufunikira kwa mfundo ina iliyonse kwa achinyamata. Chonde onetsani kufunikira kwa mfundo ina iliyonse kwa inu pogawa ma poyintsi 100 ku mfundo zisanuzi. Zimene zili zofunikira kwambiri kwa inu muzipatse ma poyintsi ochuluka ndipo zimene zili zosafunikira kwambiri muzipatse mapoyintsi ochepa. Onetsetsani kuti mapoyintsi onse azikwana 100 mukawaphatikiza.

	MFUNDO	RANKI	MAPOYINTI
1	Maonekedwe a chipatala, zipangizo ndi anthu ogwira ntchito.		
2	Kuthekera kwa chipatala kupereka chithandizo chodalilika ndi choyenerera		
3	Chidwi cha ogwira ntchito pothandiza achinyamata ndi kupereka chithandizo mwamachawi		
4	Chidziwitso ndi ulemu wa opereka chithandizo komanso kuthekera kwawo kopereka chikhulupiliro ndi chilimbikitso.		
5	Chisamaliro ndi kumvetsetsa kumene amaonetsa opereka chithandizo kwa achinyamata.		
	TOTA L		100 POINTS

Note on ranking:

Rank 1=30 points, 2 =25 points, 3=20 points, 4=15 points, and 5 =10 points

Appendix 5: Gap Score Analysis

In order to find the scores for expectations and perceptions, the researcher multiplied the frequency of responses for a particular statement by the corresponding scale. A gap score was calculated for each statement by subtracting expectations from perceptions (Gap Score = Perception – Expectation). A zero to positive score indicated a level of YFHS quality which is equal to or exceeds adolescents' expectations. Conversely, a negative score indicated a level of YFHS quality which is below that which is expected by the adolescents.

An average Gap Score for each of the SERVQUAL dimension was obtained by subtracting the average of each of the expectation dimensions from the average of each of the perception dimensions (Average Gap Score = average of each perception dimension – average of each of expectation dimension).

	Expectations (E)							Perceptions (P)						
	Frequency of Responses							Frequency of Responses						
Scale	QNo	1	2	3	4	5	**Average**	1	2	3	4	5	**Average**	**(P-E)**
Tangibility	1	0	0	0	4	545	4.99	9	42	18	32	330	3.91	-1.08
	2	0	0	0	4	545	4.99	9	76	42	48	185	3.27	-1.72
	3	0	0	0	0	550	5.0	0	0	6	16	520	4.92	-0.08
	4	0	0	0	0	550	5.0	30	50	27	64	150	2.92	-2.08
							4.996						**3.759**	**-1.236**
Reliability	5	0	0	0	0	550	5.0	0	8	3	24	495	4.82	-0.18
	6	0	0	0	0	550	5.0	2	4	12	4	505	4.80	-0.2
	7	0	0	0	0	550	5.0	2	10	27	192	230	4.20	-0.8
	8	0	0	0	0	550	5.0	0	4	0	8	530	4.93	-0.7
							5.00						**4.682**	**-0.318**
Responsiveness	9	0	0	0	0	550	5.0	31	16	30	16	285	3.43	-1.57
	10	0	0	0	0	550	5.0	8	52	18	16	330	3.85	-1.15
	11	0	0	0	0	550	5.0	1	6	6	12	505	4.82	-0.18
	12	0	0	0	0	550	5.0	0	8	12	20	485	4.77	-0.23
							4.998						**4.221**	**-0.777**
Assurance	13	0	0	0	0	550	5.0	0	4	12	4	515	4.86	-0.14
	14	0	0	0	0	550	5.0	1	2	0	12	525	4.91	-0.09
	15	0	0	0	0	550	5.0	1	6	3	8	515	4.85	-0.15
	16	0	0	0	0	550	5.0	1	0	3	8	520	4.84	-0.16
							5.00						**4.882**	**-0.118**
Empathy	17	0	0	0	0	550	5.0	0	8	24	64	410	4.60	-0.4
	18	0	0	0	0	550	5.0	0	12	18	12	475	4.70	-0.3
	19	0	0	0	0	550	5.0	0	2	3	4	535	4.95	-0.05
	20	0	0	0	0	550	5.0	0	4	0	4	535	4.94	-0.06
							5.0						**3.84**	**-0.205**
Overall							**4.999**						**4.468**	**-0.531**

Appendix 6: COMREC Approval certificate

CERTIFICATE OF ETHICS APPROVAL

This is to certify that the College of Medicine Research and Ethics Committee (COMREC) has reviewed and approved a study entitled:

P.02/16/1896 - Quality of youth friendly health services at Chikwawa District Hospital version 1 dated 23 February 2016 by Slyvia Perenje

On 30th March 2016

As you proceed with the implementation of your study, we would like you to adhere to international ethical guidelines, national guidelines and all requirements by COMREC as indicated on the next page

Dr. C. Dzamalala-Chairman COMREC

Approved by
College of Medicine
31 MAR 2016
(COMREC)
Research and Ethics Committee

30th March, 2016
Date

Appendix 7A: Consent Form for Adolescents

PART 1: Information sheet (to share information about the research with adolescent)

Quality of Youth Friendly Health Services at Chikwawa District Hospital: Perspectives of Adolescents

Investigator: Sylvia Perenje

Introduction

I am Sylvia Perenje, a student at Kamuzu College of Nursing. I am doing a study on quality Youth Friendly Health Services: Perspectives of adolescents. I am going to give you information and invite you to be part of this study. There may be some words that you do not understand. Please ask me to stop as we go through the information and I will take time to explain.

Purpose of the research

Adolescents are having reproductive health problems such as unwanted pregnancies, early marriages, sexually transmitted infections, HIV and AIDS. We would like to take your opinions on the current status on quality of YFHS provided in this facility. The information you will provide might help to identify ways of improving the quality of YFHS, thereby reducing adverse SRH conditions among the adolescents. In this study, adolescent aged between 15 – 19 years old who are attending ANC, HTC, FP, ART, STI clinics and willing to participate in the study will be interviewed using a questionnaire.

Type of Research Intervention

This research will involve you to answer three questionnaires. You will be asked one questionnaire before receiving a service and two questionnaires after receiving care.

Participant Selection

We are inviting all adolescents who are aged 15 to 19 years and are accessing antenatal clinic, family planning, sexually transmitted infections, HIV testing and counseling and antiretroviral therapy services for the first time. We feel you are in a better position to compare what you were expecting to receive and the actual care you will receive.

Voluntary Participation

Your participation in this study is entirely voluntary. It is your choice whether to participate or not. Be assured that whatever choice you make, it will not affect the care you receive at this hospital; neither will it affect your relationship with health care providers at this hospital. If you choose to participate, you are free to withdraw your consent and stop participating at any time even if you agreed earlier. You are also free not to answer some questions you are not comfortable with. If you choose not to participate in this study, you will be offered the service you were supposed to receive at this clinic.

Procedures

Before receiving a youth friendly service, you will be asked questions on your expectations about the service you are about to receive. The researcher will be reading statements, and giving you options. You are supposed to answer one option that best suit the degree to which you agree/disagree with the statement. After receiving care, the researcher will also ask you questions on perception of the care that you have received. The researcher will be reading statements, and giving you options. You are supposed to answer one option that best suit the degree to which you agree/disagree with the statement. You will be required to allocate points among the five dimensions of quality service according to how each dimension is important to you.

Duration

The research will take a maximum of one hour (30 minutes before receiving care and 30 minutes after receiving care.

Risks

There are no known risks associated with this study

Benefits

There will be no direct benefit for you for participating in this study. However, the outcome of this study will help to improve the quality of YFHS in the district.

Reimbursements

You will not be provided with any travel costs, food or drink as a result of your participation

Confidentiality

All the information that will be collected from you will be treated as confidential. All the discussions will be done in private and any documentation about you shall be treated with privacy. Any information about you will have a number on it instead of your name. Only the researcher will know what your number is and that information will be locked with a lock and a key. Your information will not be shared with or given to anyone except the supervisors who will have access to that information.

Who to Contact

If you have any questions concerning the study, you may contact Sylvia Perenje, Kamuzu College of Nursing, P.O. Box 415, Blantyre; Phone:-0888 898 591 or COMREC secretariat at College of Medicine, P/Bag 360, Blantyre; Phone:- 01 871 911.

PART II: Certificate of Consent for adolescents aged 15 – 19 years

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions that I have asked have been answered to my satisfaction**.** I freely and voluntarily agree to be part of this research study without prejudice to my legal and ethical rights.

_____ _____

_____

Name of Participant Signature Date

If illiterate

I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had the opportunity to ask questions. I confirm that the individual has given consent freely.

*Print name of witness*_____ *Thumb print of participant*

Signature of witness _____Date_____

Researcher's responsibility

I have explained the nature and purpose of this research study. I confirm that the participant was given an opportunity to ask questions and any questions have been answered fully to the participant's satisfaction. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily

_____ _____

_____

Name of Researcher Signature of Researcher Date

Appendix 7B: Consent Form for Adolescents (Chichewa version)

PART 1: Information sheet (to share information about the research with adolescent)

Quality of Youth Friendly Health Services at Chikwawa District Hospital: Perspectives of Adolescents

Investigators: Sylvia Perenje

Ine ndi Sylvia Perenje, wophunzira wa ku Kamuzu College of Nursing. Ndikupanga kafukufuku wa mmene achinyamata achisodzera amaonera chisamaliro chimene chimaperekedwa kwa achinyamata ku chipatala. Ndikupatsani ndondomeko wakafukufukuyu komanso kukupemphani kuti mutenge nawo mbali. Mwina pakhala zina zimene simukumvetsetsa, chonde mundifunse ndipo nditenga nthawi kukufotokozerani

Cholinga cha kafukufufu

Achinyamata akukumana ndi mavuto a za uchembere monga kutenga mimba zosakhonzekera, kukwatira/ kukwatiwa akadali achichepere, matenda opatsirana pogonana kuphatikizirapo HIV ndi AIDS. Tikufuna kudziwa za mmene mumaonera za chisamaliro chimene chimaperekedwa kwa achinyamata pa chipatala pano mokhudzana ndi uchembere. Mfundo zimene mutapereke zikhoza kuthandiza popeza njira zopititsira patsogolo chisamaliro choperekedwa kwa achinyamata ndicholinga chochepetsa mavuto obwera chifukwa cha uchembere. Mukafuku fukuyu achinyamata amene ali ndi zaka za pakati pa 15 mpaka 19 ndipo abwera kudzapeza chithandizo cha cha sikelo ya amayi oyembekezera, kalera, matenda opatsirana pogonana, kuyezetsa magazi za kachilombo ka HIV, ndi omwe akudzafuna chithandizo cha ART adzafunsidwa mafunso pa nkhaniyi ngati avomera kutenga

nawo mbali. Ngati muvomereza kulowa nawo mukafukuyu, mufunsidwa mafunso musanalandire chithandizo komanso mufunsidwa mafunso mukalandira chithandizo.

Kasankhidwe ka wolowa mukafukufuku

Achinyamata amene ali ndi zaka 15 mpaka 19 ndipo akufuna chithandizo cha cha sikelo ya amayi oyembekezera, kalera, matenda opatsirana pogonana, kuyezetsa magazi za kachilombo ka HIV, ndi omwe akudzafuna chithandizo cha ART kwa nthawi yoyamba ndi amene ali ololedwa kulowa nawo mukafukufukuyu. Tili ndi chikhulupiliro kuti achinyamata amenewa ndi amene angathe kusiyanitsa za chithandizo chimene amayembekezera kulandira ndi chithandizo chimene alandira

Kutenga nawo mbali mu kafukufuku sikokakamiza

Kutenga nawo mbali mukafukufukuyu sikokakamiza, ndipo muli ndi ufulu kukana kuyankha mafunso ena amene simungakwanitse kuyankha. Ngati mwasankha kutenga nawo mbali, muli omasuka kuganiza kusapitiliza kukhala nawo gawo la kafukufukuyu nthawi ina iliyonse mukaona kuti simukwanitsa kupitiliza. Musachite mantha kuti mukatero ndiye kuti simulandilidwa kapena kupatsidwa chisamaliro kuno kuchipatala, kapenanso kuti zidzasokoneza ubale wanu ndi anthu ogwira ntchito kuno ku chipatala.

Ndondomeko ya kafukufuku

Musanalandire chithandizo, mufunsidwa mafunso okhudzana ndi chithandizo chimene mukuyembekezera kulandira kuno kuchipatala. Opangitsa kafukufuku adziwerenga mfundo ndikupereka mayankho kuti muyankhe yankho limodzi limene mukugwirizana nalo. Mukalandira chithandizo opangitsa kafukufuku adzakufunsani mafunso za mmene mwaonera chisamaliro chimene mwalandira mokhudzana ndi zimene mumayembekezera. Opangitsa kafukufuku adziwerenga mfundo ndikupereka mayankho kuti muyankhe yankho limodzi limene mukugwirizana nalo. Mufunsidwa za kufunikira kwa mfundo ina iliyonse mwa mfundo zisanu zokhudzana ndi chisamaliro chimene chimaperekedwa kwa achinyamata. Kafukufukuyu atenga

pafupifupi ola limodzi; mphindi 30 musanalandire chithandizo, ndipo mphindi 30 mutatha kulandira chithandizo

Zoopsa komanso zolowa potenga mbali mukafukufuku

Kafukufukuyu alibe zoopsa zilizonse komanso palibe malipiro amtundu uliwonse monga ndalama, chakudya, kapena chakumwa ngati muvomereza kutenga nawo mbali. Zotsatira za kafukufukuyu zitha kuthandiza popititsa patsogolo chisamaliro chimene chimaperekedwa kwa achinyamata mokhudzana ndi uchembere.

Chinsisi

Zonse zomwe tidzikambirana nanu zikhala za chinsinsi ndipo zikalata zonse zomwe zili ndi mbiri yanu zidzasungidwa malo a chinsinsi. Wopangitsa kafukufuku ndi omuyang'anira ndi okhawo omwe adzathe kumaziona. Dzina lanu sililembedwa paliponse mmalo mwake tidzigwiritsa ntchito nambala pa zikalata zomwe zili ndi mbiri yanu.

Kodi mungathe kuyankhula ndi ndani

Ngati muli ndi mafunso kapena mukufuna kudziwa zina zokhudzana ndi kafukufukuyu mulankhule ndi Sylvia Perenje, Kamuzu College of Nursing, P.O. Box 415, Blantyre; Phone:-0888 898 591 kapena ogwira ntchito ku COMREC ku College of Medicine, P/Bag 360, Blantyre; Phone:- 01 871 911.

PART II :Kuvomereza kwa otenga nawo mbali pa kafukufuku (zaka 15 mpaka 19) Ndauzidwa zonse zokhudzana ndi kafukufukuyu ndipo ndamvetsetsa zonse zomwe ndauzidwa. Ndamvetsetsa kuti zonse zokhudzana ndi ine zikhala za chinsinsi ndipo ndakhutitsidwa ndi mayankho a mafunso onse omwe ndinali nawo okhudzana ndi kafukufukuyu. Ndikuvomereza mwa kufuna kwanga ndi mosakakamizidwa ndi wina aliyense kutenga nawo mbali mu kafukufukuyu.

_____ _____

_____

Dzina la otenga nawo mbali Sayini ya otenga nawo mbali Tsiku

Ngati sadziwa kulemba

Ndachitira umboni opangitsa kafukufuku akuwerenga ndondomeko ya kafukufuku kwa otenga nawo gawo, ndipo mafunso onse omwe otenga nawo mbali anali nawo ayankhidwa bwino. Ndikuvomereza kuti sanakakamizidwe kutenga nawo mbali mu kafukufuyu.

Dzina la wochitira umboni _____ kusindikiza chala (otenga mbali)

Sayini ya ochitira umboni _____Tsiku _____

Udindo wa opangitsa kafukufuku

Ndafotokoza mwatsatanetsatane ndi momveka bwino cholinga cha kafukufuku ameneyu. Ndapereka mwawi kwa otenga nawo mbali kuti afunse mafunso. Iwo akhutitsidwa ndi mayankho a mafunso awo ndipo amvetsetsa zofunika pa kafukufukuyu. _____ _____ _____

Dzina la opangitsa kafukufuku Sayini ya opangitsa kafukufuku Tsiku

Appendix 8: Permission Letter from Chikwawa District Hospital

Phone No: (+265) 01 420 266
Fax mail: (265) 01 420 264
Email: chikwawa-hmis@malawi.net

Communication should be addressed to:
The District Health Officer
Chikwawa District Hospital
P.O. Box 32
CHIKWAWA.

REF.NO: CDH/ADM/1

17TH February, 2016

Miss S Perenje
Kamuzu College of Nursing
P.O Box 415
Blantyre

Dear Madam,

PERMISSION FOR STUDY "QUALITY OF YOUTH FRIENDLY HEALTH SERVICES AT CHIKWAWA DISTRICT HOSPITAL: PERSPECTIVES OF ADOLESCENTS"

On behalf of Chikwawa District Health Management Team, I would like to convey our approval and hence our permission to the study captioned above to be conducted at Chikwawa District Hospital.

We believe this is a very important study as Youth Friendly Health Services are integral to our health services. Besides the findings of this study, will inform the Youth Friendly Health Services programme hence helping us improve service delivery.

I encourage you to give us feedback on the findings of the study.

Yours faithfully

Dr A Majidu
DISTRICT HEALTH OFFICER

District Health Officer
Chikwawa District Health Office
17 FEB 2016
P.O. Box 32
Chikwawa

Appendix 9: Permission Letter from Chiradzulu District Hospital

Ref.No.....
All correspondence to:
The District Health Officer
Tel: 01 693225/220
Fax: 01693271

Chiradzulu District Hospital
P.O. Box 21
CHIRADZULU

22nd February 2016

Kamuzu College of Nursing
P.O. Box 415
Blantyre

Dear Sir/Madam

RE: PERMISSION TO CONDUCT A PILOT STUDY

This is to certify that the District Health Office has permitted Miss Sylvia Perenje to conduct a Pilot Study entitled "**Quality of Youth Friendly Health Services at Chikwawa District Hospital**" at this hospital.

We are hopeful that the study will assist management of Chiradzulu district as well as the whole nation of Malawi.

Wishing you all the best in your study.

Yours faithfully

Dr. C. Kabaghe
DISTRICT MEDICAL OFFICER