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**Validation of a measure of youth-friendly primary
healthcare services in Tshwane District**

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DECLARATION

Student No: 25106750

I declare that the thesis

VALIDATION OF A MEASURE OF YOUTH-FRIENDLY PRIMARY HEALTHCARE SERVICES IN TSHWANE DISTRICT

is my original work and that it has not been submitted before for any degree or examination at any other institution. All the sources that have been used or quoted have been acknowledged by means of complete references in the text and in the list of references.

GEERTIEN CHRISTELLE BOERSEMA

DATE

“Youth is happy because it has the capacity to see
beauty.”

Franz Kafka (1883-1924).

DEDICATION

The study is dedicated to:

- My husband, Gerhard. Your love and support made all this possible.
- My children, Louis and Wian. May you be inspired to explore and investigate the beautiful truths God has created in His Almighty wisdom. May you always see and seek the beauty in life through the capacity you were blessed with.
- The young people in South Africa. May your voices be heard and your needs met by those who provide a service to you.

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ABSTRACT

The purpose of this study was to adapt an existing measure of youth-friendliness (the Youth-Friendly Health Services-World Health Organization+ questionnaire [YFHS-WHO+ questionnaire]) to validly and reliably measure youth-friendliness of public PHC services in the Tshwane District. Validity of a measure is specific to the context it is used in and adaptation of the existing YFHS-WHO+ questionnaire was therefore required.

The existing YFHS-WHO+ questionnaire is a measure developed and validated by an international collaboration for use in a study of youth-friendly primary care medical services in Herzegovina and Bosnia. This YFHS-WHO+ questionnaire is the first questionnaire to comprehensively measure youth-friendliness according to the perceptions of the youth themselves. The YFHS-WHO+ questionnaire uniquely also contributes to research as it measures all characteristics of youth-friendly health services (YFHS) as described by the WHO and quantifies the result.

The YFHS-WHO+ questionnaire was originally developed in English, but only validated in the languages of Herzegovina and Bosnia. It has not been validated in English. This study adapted the English version of the questionnaire to fit the circumstances of the youth in the metropolitan municipality of Tshwane District. The YFHS-WHO+ questionnaire was further adapted to establish good psychometric properties while reducing its length. The YFHS-WHO+ questionnaire length was reduced to 57 items. The validity of the adapted YFHS-WHO+ questionnaire was tested through hypotheses for construct validation. The hypotheses were supported.

The adapted YFHS-WHO+ questionnaire can therefore be used for research purposes and for quality improvement to measure youth-friendliness of PHC in the Tshwane District. The voice of the youth can be heard through measurement with the adapted YFHS-WHO+ questionnaire to identify barriers in access to the required youth-friendly health services. The morbidity and mortality among South African youth require interventions to address such barriers.

Key words: youth-friendly, youth, YFHS-WHO+ questionnaire, measurement, validation

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LIST OF ABBREVIATIONS

AYFS:	Adolescent and Youth-Friendly Services package
GBV:	Gender-based violence
GD:	Group discussion
NAFCI:	National Adolescent Friendly Clinic Initiative
NDoH:	South African National Department of Health
PHC:	Primary health care
PHC service:	Refers to a fixed public PHC clinic facility where healthcare services are provided.
RHRU:	Reproductive Health Research Unit
YFHS:	Youth-friendly health services
YFHS-WHO+ questionnaire:	Youth-friendly health services-World Health Organization+ questionnaire
YFS:	Youth-Friendly Service

CHAPTER 1

BACKGROUND TO THE STUDY

1.1 INTRODUCTION

At the beginning of the second decade of the 21st century, young people (between 10 and 24 years old) represented 27 per cent of the global population (Gore et al 2011:2093). According to Sawyer et al (2012:1630) and Gore et al (2011:2093), this percentage is the highest ever for this age group of the world population and it is still expected to grow with a predicted peak in 2032. Contrary to the assumption that young people are generally healthy (Patton et al 2012:1665), over the past 50 years the health of young people worldwide has not improved as significantly as that of younger children (Sawyer et al 2012:1630). In South Africa the health of young people is influenced by many challenges.

Living in a country at a time when socioeconomic challenges are persistent (National Youth Policy [NYP] 2015:11; Statistics South Africa [StatsSA] 2010:3), the South African youth is experiencing a quadruple burden of disease (NYP 2015:13-14; Mayosi et al 2009:934). Young South Africans aged 15 to 24 years represent about 19% percent of the national population (StatsSA 2015:9; United Nations Population Fund [UNPF] 2012:66). Internationally and nationally governments and various organisations are therefore intensifying their focus on adolescent and youth health as a critical determinant of future adult health and socioeconomic development (NYP 2015:3; Cappa et al 2012:2324; Sawyer et al 2012:1635-1636).

Worldwide, pronounced and daunting barriers such as restrictive laws, a lack of visibility and publicity of the health services, a lack of financial means for transport, inconvenient opening hours and a fear of being stigmatised have prevented young people from accessing developmental appropriate health services in the past (Tylee et al 2007:1556,1571); unfortunately such barriers still exist in present times with detrimental effect on the morbidity and mortality of this age group (Gore et al 2011:2093; Ozer et al 2011:480).

Since the 1990s the World Health Organization (WHO) has steered the development of a 'Youth-Friendly Health Services' (YFHS) approach to address the barriers with regard to young

people accessing healthcare services. Its aim is to further improve access to these services in accordance with the demands of the youth (WHO 2002a:25). Developed over the last two-and-a-half decades, this YFHS approach to healthcare services is currently characterised by the following internationally agreed-upon and evidence-based qualities: accessibility, equitability, acceptability, appropriateness and effectiveness (WHO 2009:1-3). Although these qualities were attended to by many initiatives on all levels (nationally and internationally in both developed and developing countries) (Tylee et al 2007:1569; Dick et al 2006:151), a lack of strong evidence existed on how effective these initiatives were to improve the health outcomes of young people (Tylee et al 2007:1571). This lack of evidence related not only to the methods of assessment that threatened the validity thereof (Tylee et al 2007:1569-1570) but also to a lack of initiatives that include and describe all five the WHO qualities of YFHS in a comprehensive manner (Haller et al 2012:423; Tylee et al 2007:1571). Dr DM Haller and team identified a need for a validated instrument to comprehensively measure the performance of the healthcare services against all five of the WHO's qualities of YFHS and according to the perception of the youth themselves to be used in a randomized controlled trial of a YFHS intervention to rebuild primary care in Herzegovina and Bosnia (Haller et al 2012:423, 429). This led to the development of the Youth-Friendly Health Service-World Health Organization+ questionnaire (YFHS-WHO+ questionnaire). Originally developed in English by an international team of experts, the existing English version was then translated to the language of Herzegovina and Bosnia before it was adapted and validated to measure the youth-friendliness of primary care services suitable to the context of Herzegovina and Bosnia (Haller et al 2012:423).

This study aimed to provide the first valid English version of the YFHS-WHO+ questionnaire to measure youth-friendliness in the metropolitan context of the Tshwane District in South Africa. Dr DM Haller, who led the development of the YFHS-WHO+ questionnaire, provided the existing English version of the YFHS-WHO+ questionnaire for this study and recommended validation in English for use in research on an international level (Haller et al 2012:429). Reference were made to the study by Dr DM Haller for the validation of the measure in Herzegovina and Bosnia, where similar methods were used.

1.2 BACKGROUND TO THE PROBLEM STATEMENT

The first initiative in South Africa to improve the quality of health services to young people at primary care level was implemented from 1999 to 2005 – the National Adolescent Friendly Clinic Initiative (NAFCI) (Dickson, Ashton & Smith 2007:80). The NAFCI was coordinated by the Reproductive Health Research Unit (RHRU) (the University of the Witwatersrand) and

the Chris Hani Baragwanath Hospital, Johannesburg, South Africa and established in recognition of the need to improve the sensitivity of public health services to young people to address the crisis with regard to their sexual and reproductive health problems at the time (Ashton, Dickson & Pleaner 2009:12; Dickson-Tetteh, Pettifor & Moleko 2001:161; Dickson-Tetteh & Ladha 2000:400). The NAFCI was implemented in the public sector in primary healthcare (PHC) clinics as the most sustainable way to reach the majority of young people in South Africa (Ashton et al 2009:12).

Quality improvement of youth-friendly services was implemented and standardised in South Africa according to 10 standards and 41 associated criteria (Dickson et al 2007:86-87; Dickson-Tetteh et al 2001:162). These standards were informed by young people themselves, by principles of good patient care and by principles of youth-friendly services that already existed such as patient confidentiality and privacy; an attractive clinic environment; non-judgemental healthcare providers, and policies specific to young people (Dickson et al 2007:81).

After 2005, the NAFCI was incorporated into the South African National Department of Health (NDoH) with the aim of sustainable nationwide implementation (Ashton et al 2009:33) and was renamed the 'Youth Friendly Service' (YFS). The national implementation guidelines for adolescent and youth-friendly health services: 2012 – 2016, which is currently still unpublished, indicates that a review of the YFS approach was needed since nationwide implementation was impeded by competing health priorities, resource limitations, and divided commitments to several quality-improvement projects (NDoH 2013a:7-8). This reviewed approach is called the 'Adolescent and Youth Friendly Services Package' (AYFS) and was introduced in 2009. The AYFS approach aims at broad systematic change with inclusion of adolescents and a variety of applicable settings. Adolescents, defined by the WHO as young people aged 10 to 19 (WHO 2001a:2), were made one of the targets of friendly services since adolescents' health challenges are similar to those of the youth.

Current assessment of the youth friendliness of services in South Africa involves internal and external assessment by trained assessors and, to a certain extent, also the youth (NDoH 2013a:18; Kirby 2007:5, 14)

1.3 PROBLEM STATEMENT

The health of the youth in South Africa is of great concern (Mayosi et al 2009:934). The public primary healthcare (PHC) clinics attended by the majority of youths therefore need to

be user-friendly to the youth and provide optimal developmental appropriate care. Haller et al (2012:423) mention “the potential of YFHS is to increase young people’s awareness of their health needs and their ability and willingness to access services and return for sensitive health issues”. The development and improvement of the youth-friendliness of PHC services is thus essential to address the disease burden among the South African youth.

Focused and effective quality improvement depends on the evaluation of the youth-friendly status of services. The youth-friendliness of health services in South Africa is currently measured against the standards and criteria as originally set out by the NAFCI within the revised AYFS approach (NDoH 2013a:13). This AYFS evaluation is currently still in process. The instrument currently used has not recently been validated and the youth is only partially involved in the evaluation of the services (NDoH 2013a:18; Dickson et al 2007:82; Dickson-Tetteh et al 2001:162). Otwombe et al (2015:7) argue that although adherence to the NAFCI standards and criteria have shown to improve the youth-friendliness of health services (Mathews et al 2009:190), it is not yet sufficient since the voice of young people should be made even stronger to determine their own needs.

The YFHS-WHO+ questionnaire is unique in that it measures youth-friendliness only from the perspective of the youth. Measurement of the youth’s perception is essential since the concept ‘youth-friendliness’ contains the qualities preferred by young people as defined by the WHO (WHO 2002a:25). As the recipients of the healthcare, the youth should therefore be given a strong voice (Resnick et al 2012:1564; Sawyer et al 2012:1638). Dr DM Haller and team argued that the YFHS-WHO+ questionnaire addresses this gap which relates to the lack of a validated research instrument that measures youth-friendliness from the perspective of the youth themselves (Haller et al 2012:423). The YFHS-WHO+ questionnaire is also unique as a measure to provide valid and reliable findings for research purposes. This uniqueness of the YFHS-WHO+ questionnaire therefore allowed for the adaptation and validation thereof within the multifarious South African context (Streiner & Norman 2008:10; Viswanathan 2005:66).

To date, an English version of the YFHS-WHO+ questionnaire has not been adapted to suit the South African circumstances. The distinctive diversity of the South African population also necessitates instruments for the evaluation of healthcare services that are context specific. The metropolitan context of the Tshwane District provided an opportunity for the validation of the English version of the YFHS-WHO+ questionnaire. The research question for the current study was subsequently formulated with the aim to determine how an English

version of the YFHS-WHO+ questionnaire would need to be adapted to validly and reliably measure the youth-friendliness of primary healthcare services in Tshwane District.

1.4 RESEARCH AIM, OBJECTIVES AND HYPOTHESES

This study aimed to adapt an existing English version of the YFHS-WHO+ questionnaire to validly and reliably measure the youth-friendliness of public PHC services in the Tshwane District of South Africa.

1.4.1 Objectives of the study

This study had three objectives:

- to adapt the YFHS-WHO+ questionnaire to suit the context of the public PHC clinics in the Tshwane District;
- to determine the construct validity of the adapted YFHS-WHO+ questionnaire, and
- to determine the reliability of the adapted YFHS-WHO+ questionnaire.

1.4.2 Hypotheses

Two hypotheses were originally planned to test the validity and reliability of the adapted questionnaire. The second hypothesis was, however, disregarded (see rationale for this decision under **Hypothesis 2** below).

The first hypothesis implied the construct validity of the adapted YFHS-WHO+ questionnaire.

- **Hypothesis 1:**

Primary healthcare services specifically aimed towards young people (reflected in a higher score of youth-friendliness when scored by experts) have a higher score of youth-friendliness when scored by young people (aged 18 to 24) than primary healthcare services that do not have this aim (reflected in a lower score of youth-friendliness scored by experts).

The second hypothesis implied the reliability of the adapted YFHS-WHO+ questionnaire.

- **Hypothesis 2:**

The proportion of young people aged 18 to 24 attending a primary healthcare service, is higher in the primary healthcare services with higher score of youth-friendliness than in the primary healthcare services with lower score of youth-friendliness when scored by young people aged 18 to 24.

The second hypothesis was considered since it was a hypothesis also tested by Dr DM Haller, but it was disregarded in this study since it would not yield reliable results in the South African context. Many variables affect the youth's attendance to clinics. These variables cannot be controlled and it can therefore not be assumed that higher proportions of attendance can be ascribed to the youth-friendliness of the primary healthcare service. One such significant factor in the country is not having the financial means for transport. In general, most of the younger population (including the youths who participated in the current study) cannot afford private healthcare and is dependent on free public healthcare. Most youths therefore attend the clinic closest to them or nearest to the transport routes (Nteta, Mokgatle-Nthabu & Oguntibeju 2010:6).

1.5 IMPORTANCE AND BENEFITS OF THE STUDY

This study aimed to avail a measure that can be used for research purposes to validly and reliably measure the youth-friendliness of public PHC services in Tshwane District. This YFHS-WHO+ questionnaire would be the first research measure of youth-friendliness of PHC services from the perspective of the South African youths themselves. The adapted research measure would be fundamental to define the criteria delineating 'youth-friendly health services' for the improvement of health services according to the demands and expectations of the youth (WHO 2002a:25). The adapted YFHS-WHO+ questionnaire would provide a measure for monitoring the success of the AYFS programme and could further be used for convergent validation of other measures of youth-friendly health services. Convergent validation is supported when an experimental measure yields similar results as an existing measure with good psychometric properties (Streiner & Norman 2008:9)

Although validity remains context specific, increasing amounts of evidence proving that the YFHS-WHO+ questionnaire measures what it is intended to measure (Viswanathan 2005:68) strengthen the construct validity of the YFHS-WHO+ questionnaire. A similar study for the validation of the YFHS-WHO+ questionnaire is planned for the Canadian context. Validation studies of the YFHS-WHO+ questionnaire in different contexts allow for comparison of different youth-friendly situations both nationally and internationally (Gjersing, Caplehorn & Clausen 2010:1) and for monitoring of youth-friendly initiatives that provides "knowledge of the diffusion, adaptation, impact, sustainability and scale" as stated by Resnick et al 2012:1566).

1.6 DELINEATIONS AND ASSUMPTIONS

1.6.1 Delineations

Delineations are explained by Burns and Grove (2009:40) as the restrictions that limits the generalisability of the study findings. Delineations are therefore the boundaries that secure the study. Following are the delineations defined for the current study.

- The YFHS-WHO+ questionnaire would be validated in English. The youths who were not able to read and converse in English were therefore excluded. English was the preferred language for validation to accommodate the multifarious population, even though, according to Census 2011, it is spoken by only 8,4% of the Tshwane District population as first language (StasSA 2010/2011:n.p.). English is the language of “technology, commerce, education and training” (De Wet & Wolhuter 2009:364) and therefore more often spoken in a metropolitan context. Many youths have been exposed to English through their schooling since English is the preferred and most common medium of instruction in schools (Setati et al 2010:133; Uys et al 2007:69; De Wet 2002:119). According to the Annual Survey of Ordinary Schools 2010/ 2011, more than 80% of single medium schools in South Africa are English medium and parallel medium schools offering English together with another language (Department of Basic Education [DBE] 2013:16-28). A study conducted by Van der Linde et al (2015:190) at public PHC clinics in the Tshwane District found that all participants were proficient in either English or Afrikaans as an additional language. It was, however, envisaged that a validated English YFHS-WHO+ questionnaire for the use in South Africa would provide evidence and recommendations for translation, adaptation and validation of the YFHS-WHO+ questionnaire in any other South African context and language.
- The geographical context of the study (the metropolitan municipality of Tshwane District) would limit generalisation of the use of the YFHS-WHO+ questionnaire with the youth in other areas (such as rural areas) in South Africa. Future validation of the YFHS-WHO+ questionnaire in other contexts/areas might, however, contribute to depict the effect of contextual differences in the youths’ perception of the youth-friendliness of the PHC clinics.
- This study focused on 18- to 24-year-old youths. Generalisation to the age group 15 to 18 would therefore be limited.

1.6.2 Assumptions

This study followed the positivist paradigm. Assumptions of the positivist paradigm imply that an objective reality exists independent of human observation and is driven by real natural causes (Polit & Beck 2012:12-13). The reality of the youth-friendliness of health services

exists independently of the researcher's observation and as a result of adherence to the YFHS characteristics as described by the WHO (WHO 2009:1-3). The reality of youth-friendliness would therefore be measured in PHC services using objective criteria and the findings would be quantifiable.

The statements that were assumed to be true for this study are set out below.

- All PHC clinics provide the same standardised 'basket' of services and aim to adhere to the same quality norms and standards (City of Tshwane 2014:145; Engelbrecht & Van Rensburg 2012:497). The manner in which services are provided is, however, assumed to differ: for example, the attitude of the healthcare provider; the acceptability of the technique; the provision of privacy and so forth. This basket of services includes preventive, promotive services and basic curative and rehabilitative services (Engelbrecht & Van Rensburg 2012:497; NDoH 2000:n.p.). This standardised basket of services, quality norms and standards were first prescribed to all primary care levels in 2001 through the Comprehensive PHC Service Package (Engelbrecht & Van Rensburg 2012:497-500). A revision of the PHC service package was commenced in 2010 to improve service delivery and align it with the reengineering of PHC (Engelbrecht & Van Rensburg 2012:499, 501).
- Youths most probably attend PHC services within the specific PHC services' catchment area, but they do have a choice of which PHC services they want or prefer to attend.

1.7 DEFINITIONS OF KEY CONCEPTS

The key concepts applicable to this study are explained next.

- **Validity in measurement** refers to the degree to which a measure measures what it intends to measure (Polit & Beck 2012:339).
- **Reliability in measurement** refers to the consistency with which a measure will produce similar results when an attribute is measured on different occasions (stability) by different observers (interrater reliability) and when measured with similar items (internal consistency) (Polit & Beck 2012:331-333; Streiner & Norman 2008:7).
- **Validation** refers to the on-going act or process of gathering "evidence both for and against validity" (Kelly et al 2005:1617) since validity is not "an all or nothing state" but rather an inference founded in sufficient evidence (Polit & Beck 2012:236).
- **Youth** refers to young people aged 15 to 24 years as defined by the United Nations (UN) and WHO (Sawyer et al 2012:1632). For the purpose of this study, the

participants had to be in the age group 18 to 24 years since the legal age for consent to participate in research is 18 years and above (Strode, Slack & Essack 2010:247) and in South Africa parents seldom accompany youths to the PHC clinic. The terms 'youth' and 'young people' are used interchangeably in this study to refer to the same age group (18 to 24). Although South African policymakers often use the term 'youth' when referring to the population from age 14 to 35 (NYP 2015:10) in the country, the National Department of Health supports the aforementioned definition used by the UN and WHO (NDoH 2013b:8).

- **YFHS-WHO+ questionnaire** refers to a measure of the YFHS that was developed through an international collaboration for use in a study of youth-friendly primary care medicine in Herzegovina and Bosnia (Haller et al 2012:423; Meynard, Pejic & Haller 2009:22). The YFHS-WHO+ questionnaire was adapted from two existing instruments. The first was a WHO quality improvement tool for assessing reproductive health services to adolescents (Haller et al 2012:423; WHO 2009:64-67). Items were then added from an Australian survey tool that assesses youth-friendly primary care services to include a wider range of services delivered to youth at primary care level (Haller et al 2012:423). Dr DM Haller provided information on the institutions and people involved in developing and validating the first version of the YFHS-WHO+ questionnaire:
 - Geneva University, Switzerland: Anne Meynard, Françoise Narring, Nicolas Perone, Delphine Courvoisier, Dagmar M Haller.
 - Foundation fami, Herzegovina and Bosnia: Ana Sredic & Daliborka Pejic.
 - University of Melbourne, Australia: Lena Sancic.

The following people kindly provided copies and instructions for the instrument developed at the WHO: Venkatraman Chandra-Mouli & Paul Bloem from the WHO in Geneva. Lena Sancic from the University of Melbourne also provided a copy of the questionnaire she developed as part of the PARTY study in Australia.

The YFHS-WHO+ questionnaire was developed to include the assessment of the performance of healthcare services against all five qualities prescribed by the WHO for youth-friendly health services: accessibility, equitability, acceptability, appropriateness and effectiveness. Each principle was assessed by asking several questions. The response format included a mix of ordinal and nominal scales.

- **Youth-friendly primary healthcare services** refers to PHC services that complies with the WHO qualities of youth-friendly services that are equitable (provided to all who require it), accessible (obtainable), acceptable (young people are willing to obtain the health services available), appropriate (the right and needed health services), and

effective (right health services provided in the right way to produce positive contributions to health) (WHO 2009:2-3; WHO 2012:8). In this study the term 'primary healthcare services' refers to fixed public PHC clinics that represent the first point of entry into the healthcare system (Willemse 2011:32; Dookie & Singh 2012:2) and that provides services according to the Primary Health Care Service Package (Nteta et al 2010:1).

- **Tshwane District** refers to the geographical area in the northern part of Gauteng (one of the nine provinces in South Africa) that shares the same geographical boundaries as the City of Tshwane metropolitan municipality (City of Tshwane 2012:13). Tshwane District is one of five districts in Gauteng and is demarcated into seven sub-districts (also called 'service delivery regions') (Gauteng Provincial Department of Health 2013:38).

The demography of Tshwane District represents that of a South African metropolitan area with a densely populated urban core (464 persons/ km²) (Pretoria city) and surrounding suburbs, townships and neighbouring towns (StatsSA 2010/2011:n.p.). According to Census 2011, Tshwane District is populated by 2.9 million people within a region of 6368 km² (StatsSA 2010/2011:n.p.). Rural areas (areas with a low population density mostly focused on farming) are minimal. Young people aged 20 to 29 comprises the largest sector of the population (340 844 people) and Tshwane District is therefore referred to as a 'young city' (StatsSA 2012b:37). According to the census report of 2011 (StatsSA 2012b:10), the population groups distribution are as follows:

Black African: 75.9%

White: 20.2%

Coloured: 2.0%

Indian or Asian: 1.9%

Despite economic vibrancy in this District, approximately 24.3% of the population still lives in poverty and unemployment among the youth was determined as 32.6% (StatsSA 2010/2011:n.p.).

There is a high dependency on the public health sector in Tshwane District since 74.2% of the population does not have medical insurance income (Ganief & Thorpe 2013:10). As the first contact of the population with the public sector healthcare system, PHC services is delivered by 85 clinics (fixed, community healthcare centres and mobile and satellite clinics) in Tshwane District (City of Tshwane 2014:147). There are 58 fixed public PHC clinics (City of Tshwane 2014:147).

There is, however, much potential for economic growth since more than half of the population in the district has some secondary school or higher level of education (StasSA 2012b:52).

The language mostly spoken as first language is Sepedi (19.4%) followed by Afrikaans (18.4%), Setswana (14.7%), Xitsonga (8.4%), English (8.4%), isiZulu (8.3%) isiNdebele (5.6%), Sesotho (5.1%), Tshivenda (2.3%), IsiXhosa (2.1%), Siswati (1.5%), sign language (0.3%) and a small percentage of other languages (3.0%) and classified as not applicable (2.4%) (StatsSA 2010/2011:n.p.).

1.8 CONCLUSION

This study aimed to adapt an existing questionnaire that thoroughly measures youth-friendliness against all five the WHO qualities of the youth-friendliness of health services. The adaptation is essential since validity is specific to a context. In this study the context was health services delivered by public PHC clinics provided to mostly economically deprived youths in a metropolitan area in South Africa. The questionnaire remained in English to accommodate the diversity of the population since many were able to read and communicate in English. This would then also be the first validation of the YFHS-WHO+ questionnaire in English.

The study further aimed to provide empirical evidence for the psychometric properties of the adapted questionnaire that would allow researchers and managers of quality improvement projects to confide in the findings.

The following chapter provides an in-depth discussion of the youth health profile, the need for YFHS, and the development of YFHS both internationally and nationally.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

Youths have their own developmental specific health problems. They should therefore receive a developmental appropriate comprehensive package of healthcare that includes preventative, health promotive and curative services (Catalano et al 2012:1653; Haller et al 2007:775; WHO 2001b:7).

The mortality and morbidity among young people are mostly psychosocial in nature and related to risk-taking behaviours (Salerno & Marshall 2011:S16; Haller et al 2008:517). The primary healthcare services (PHC) are therefore in the ideal position to address these causes through preventative care services such as health education and screening. According to Willemse (2011:312), for most youths the first contact they have with health services is through PHC services. Therefore, if they experience judgemental attitudes from the staff, long waiting queues and general unfriendly PHC services the first time, youths are not likely to make use of these health services again in future (Tylee et al 2007:1566)

In this chapter the youths' need for youth-friendly healthcare services, the barriers they experience in accessing developmental appropriate healthcare as well as the history and development of the approach to make healthcare services youth-friendly on international and national level, are discussed. The health profile of the South African youth and the current healthcare services provided to them in the South African context are presented and discussed to allow for a better understanding of why an adaptation of the YFHS-WHO+ questionnaire was required. Finally, the measurement of youth-friendly health services serves as the background to justify the validation of the existing YFHS-WHO+ questionnaire in the South African (Tshwane District) context.

2.2 ADOLESCENCE AND YOUTH: A TIME OF TRANSITION AND THE NEED FOR FRIENDLY HEALTHCARE SERVICES

Adolescence and youth is a period of biological, psychological, social and economic transitions (Lawrence, Gootman & Sim 2009:17) during which individuals are prepared for assuming their social roles as young adults with regard to employment, financial independence, marriage, parenting and civic responsibilities (Gouws, Kruger & Burger 2008:3). Obviously then this stage of a person's life is accompanied by multiple personal and social adjustments that can render one emotionally and physically vulnerable and insecure. This significant change begins at the onset of puberty when the body reaches sexual maturity (Blakemore, Burnett & Dahl 2010:926; Gouws et al 2008:3).

Gouws et al (2008:4) determine the current onset of puberty at age 11 to 13 with the transitional phase usually ending between the ages 17 and 22 years. Sawyer et al (2012:1632) state until the early 20th century the transition from childhood to young adulthood was sudden; thus, confirming Louw and Louw's (2007:279) view that the taking up of adult social roles occurred shortly after the onset of puberty. Sawyer et al (2012:1631) agree with Gouws et al (2008:4) that presently the onset of puberty is at a younger age (around 12 to 13 years). On the other hand, the age of assuming adult social roles has also become less clear as young people extend their education and tend to marry and have children at an older age (Catalano et al 2012:1653; Mortimer et al 2008:45). Due to globalisation, urbanisation, industrialisation and the social media most countries allow for a more gradual transition into adulthood (Sawyer et al 2012:1632), but in other (mostly poorer) countries, economic, cultural, familial and community influences still impact on young people's development as parental and societal control are not affected by the aforementioned worldwide growth and developmental processes (Sawyer et al 2012:1632).

The physical, cognitive and affective changes taking place during this time of transition makes young people prone to engage in risk behaviours (Blakemore et al 2010:926; Forbes & Dahl 2010:66). Young people, however, do not yet have the ability to make optimal decisions because the limbic system in the brain responsible for pleasure seeking develops much earlier during puberty than the prefrontal cortex responsible for executive and emotional control, planning, decision making and self-awareness (Casey, Jones & Hare et al 2008:111). Decisions and actions are therefore mostly risky and centred around emotions. Risk-taking behaviour includes tobacco, alcohol and substance misuse, unsafe sex and early age of sexual debut, physical inactivity, violence, tattooing, body piercing and self-harm (Catalano et al 2012:1653; Patton et al 2012:1665; Willemse 2011:322). Many of the habits

or behaviours during the adolescent's time of transition affect one's health in later adult life; Resnick et al (2012:1565) state "at least 70% of premature adult death reflects behaviour that commenced or was reinforced during adolescence".

Therefore, adolescence and youth is a crucial turning point in the life of an individual. During this time young people experience a feeling of physical and emotional awkwardness which unnerve them and make them highly susceptible to risk-taking behaviours to 'fit in'. Adolescence and youth is thus perceived as the opportune time for PHC services and workers to strengthen young people's mental and physical well-being. PHC services that are adolescent and youth-friendly will attract young people to attend and provide the appropriate services. Adolescent and youth-friendly services are characterized by the qualities: accessibility, acceptability, equitability, appropriateness and effectiveness. Investing in their overall healthcare can provide a strong basis for the growth of a new, healthier generation.

2.3 BARRIERS TO UTILISATION OF PRIMARY HEALTHCARE (PHC) SERVICES

A review by Tylee et al (2007:1566) indicates young people worldwide experience various barriers when it comes to accessing PHC health services. Additionally, youths who do visit PHC services seldom do so for preventative reasons (Nordin, Solberg & Parker 2010:511). Dermatological, respiratory and other physical ailments were found to be the most common reasons for young people's encounters with health services (Booth, Knox & Kang 2008:699; Haller et al 2007:777). Young people also miss opportunities for developmental appropriate preventative care if they do not present a true reflection of their condition due to a lack of awareness and knowledge, unwillingness to disclose due to fear for stigmatisation, a perception of being treated unfriendly or a lack of trust in the healthcare services or provider (Tylee et al 2007:1566; Haller et al 2007:779). Young people furthermore miss opportunities for developmental appropriate preventative care when healthcare providers do not screen them during visits (Haller et al 2012:423). Unfortunately, the much needed preventative care is then only provided to the minority of young people who access health services where healthcare providers regard each consultation with a young person as an opportunity for preventative care (Ozer et al 2011:476; Nordin et al 2010:511).

The most common barriers the youth encounters in relation to the expected qualities of healthcare services are summarised in Table 2.1.

Table 2.1: Barriers to utilisation of primary healthcare services

Quality	Barriers
Accessibility	<ul style="list-style-type: none"> • Unaffordable healthcare services or medication (Tylee et al 2007:1566). • Long travelling distances or a lack of transport (Coker et al 2010:136). • Inconvenient operating hours; a lack of timely appointments (Sylvia et al 2012:101). • Lack of awareness of services among young people (Tylee et al 2007:1566). • Restrictive policies and laws (e.g. laws against the provision of contraception) (Mishtal & Dannefer 2010:233). • Cultural beliefs restricting availability of services in certain areas (e.g. the belief that mental health is caused by evil spirits) (WHO 2001b:11).
Acceptability	<ul style="list-style-type: none"> • Lack of confidentiality (Coker et al 2010:141). • Judgemental, rude and insensitive healthcare worker/s (Tylee et al 2007:1566). • Lack of the healthcare provider's flexibility, confidence and skills to effectively communicate with young people and their parents (Tylee et al 2007:1566; Kang et al 2003:949). • Insufficient time spent during consultation (Coker et al 2010:137; Tylee et al 2007:1566). • Structural barriers including long waiting times (Sylvia et al 2012:101) and a lack of continuity of care with the same healthcare provider (Coker et al 2010:136).
Equitability	<ul style="list-style-type: none"> • Young people who are not aware of their rights (e.g. drug abusers) (Sylvia et al 2012:101). • Racial, cultural, gender or financial discrimination (Tylee et al 2007:1566; Harris et al 2011:S119). • Lack of insurance coverage (Tylee et al 2007:1566).
Appropriateness	<ul style="list-style-type: none"> • Gap between the services provided and the disease burden (Tylee et al 2007:1566; Catalano et al 2012:1569). • Young people who do not communicate sensitive health problems/health risk behaviours to the healthcare provider (Tylee et al 2007:1566; Haller et al 2012:423; Haller et al 2007:779). • Lack of screening for developmental specific health problems (Haller et al 2012:423). • Lack of adequate financial reimbursement for provision of developmental appropriate services (Catalano et al 2012:1659). • Lack of research endeavours or processes to identify context-specific health needs of youth patients (Catalano et al 2012:1660).
Effectiveness	<ul style="list-style-type: none"> • Healthcare providers lack the required competencies to work with young people and to provide appropriate healthcare services (Tylee et al 2007:1566). • Insufficient time spent with the adolescent patient during consultation (Coker et al 2010:137; Tylee et al 2007:1566). • Protocols and guidelines for the provision of youth-friendly healthcare services are not in place (Catalano et al 2012:1659). • The required equipment, supplies and infrastructure are not in place to provide youth-friendly healthcare services (WHO 2012:31; Tylee et al 2007:1567).

2.4 OVERCOMING THE BARRIERS: YOUTH-FRIENDLY HEALTH SERVICES

In the health discipline, placing the focus on the health of young people originated in the United States of America (USA) in the 1950s as a medical subspecialty (Prescott 2000:1;

Tonkin & Frappier 2003:73) that contributed significantly to adolescent health in clinical practice (Sawyer et al 2012:1637). Since the late 1990s a growing concern for young people's health worldwide has emerged (WHO 2001b:6). The WHO intervened and steered the development of a 'Youth-Friendly Health Services' (YFHS) approach to address the barriers that prevented or discouraged adolescents from accessing health services (WHO 2001b:6).

The YFHS approach process was initiated by establishing a study group in 1995 with the aim of developing a 'Common Agenda for Action' to improve health services to young people. The WHO worked in collaboration with other major role players in adolescent and youth health, such as the United Nations Children's Fund (UNICEF) and the United Nations Population Fund (UNFPA) (WHO 2001b:6). The 'Common Agenda for Action' aimed to inform those involved with young people and encourage them to give health education and help build life skills among adolescents and the youth. This initiative was followed by extensive research studies on the topic and the development of health provision to young people. Literature reviews were done from 1996 to 2001 on successful initiatives. With all the research evidence at hand a global consultation on adolescent-friendly health services was held in 2001 in Geneva, with representatives of adolescent service provision from 20 countries worldwide. The consultation resulted in a collective understanding of global issues on adolescent health that cumulated in ten consensus statements. The statements addressed the needs of adolescents to access developmental appropriate preventative and curative care and provided recommendations to improve health services to young people (WHO 2001b:6-7).

Following are the ten consensus statements quoted from the WHO (2001b:7):

- 1. Promoting adolescent health and development requires a shared vision with complementary actions by different players; actions which are aimed at fulfilling their rights, and address their special needs.*
- 2. All adolescents should be able to access promotive, preventive and curative health services relevant to their stage of maturation and life circumstances.*
- 3. For a variety of reasons, adolescents in many places are unable to obtain the health services they need.*
- 4. Adolescents have many ideas about how to make services user-friendly; generally they stress the ethos more than the technical quality of the services.*

5. *A user-friendly health service does not necessarily ensure service utilization by adolescents.*
6. *There are a number of approaches for increasing service utilization by adolescents (in places where a user-friendly health service exists).*
7. *To complement and extend coverage of government-run health facilities for adolescents, other channels could be made available. Adolescents are much more likely to obtain the services they need if existing service-providers are networked.*
8. *It would be helpful to define the elements of a core package, and how it could be developed and provided in different settings/contexts.*
9. *Health care providers require technical competence relevant to adolescent health and development.*
10. *Quality assurance/improvement methods, which empower health care providers to deliver client-centred care, should be applied to health services for adolescents.*

The 'WHO Agenda for Change' was published in 2002 as a result of the global consultation in 2001 as well as a discussion of a WHO expert advisory group. The 'WHO Agenda for Change' describes adolescent needs and motivates the need for youth-friendly services (WHO 2002a:4,9-17). This agenda also stipulates the characteristics of adolescent-friendly services which are grounded in the dimensions of quality care: accessibility, acceptability, equity, appropriateness and effectiveness (WHO 2002a:27). The WHO has since published a guidebook for making health services adolescent-friendly through development of national quality standards for adolescent-friendly health services (WHO 2012:7-8; 31-37).

It is important to note the concepts 'adolescent-friendly' and 'youth-friendly' are used interchangeably in literature. However, both concepts refer to the same principles of user-friendly service delivery specifically to young people (Haller et al 2012:1-2; WHO 2009:2-3). The supposition can be made that, depending on the definition of age given by the author and the literature sources consulted, he or she will either use 'adolescent-friendly' or 'youth-friendly'. For example, the WHO (2001a:2) indicates 'adolescents' as being between 10-19 years old while Sawyer et al. (2012:1632) define individuals between 15-24 years as 'youth'. As detailed in Chapter 1 (section 1.7 DEFINITIONS OF KEY CONCEPTS), the South African National Department of Health (NDoH) upholds the definition of the United Nations (UN) and the WHO that youths are those aged 15 to 24 years (NDoH 2013b:8). This was the

policy adhered to in the current study. The qualities and characteristics of adolescent-friendly health services as defined by the WHO (2012:31) are presented in Table 2.2.

Table 2.2: WHO qualities and characteristics of adolescent-friendly health services (adapted from WHO 2012:31)

Quality of accessibility: adolescents are able to obtain the health services that are available
<i>Characteristics:</i>
<ul style="list-style-type: none"> • Policies and procedures are in place that ensure that health services are either free or affordable to adolescents. • Point of service delivery has convenient working hours. • Adolescents are well informed about the range of reproductive health services available and how to obtain them. • Community members understand the benefits that adolescents will gain by obtaining the health services they need, and support their provision. • Some health services and health-related commodities are provided to adolescents in the community by selected community members, outreach workers and adolescents themselves.
Quality of acceptability: adolescents are willing to obtain the health services that are available
<i>Characteristics:</i>
<ul style="list-style-type: none"> • Policies and procedures are in place that guarantee client confidentiality. <p>Point of service delivery ensures privacy.</p> <ul style="list-style-type: none"> • Healthcare providers are non-judgemental, considerate, and easy to relate to. • Point of service delivery ensures consultations occur in a short waiting time, with or without an appointment, and (where necessary) swift referral. • Point of service delivery has an appealing and clean environment. • Point of service delivery provides information and education through a variety of channels. • Adolescents are actively involved in designing, assessing and providing health services.
Quality of equitability: all adolescents, not just selected groups, are able to obtain the health services that are available
<i>Characteristics:</i>
<ul style="list-style-type: none"> • Policies and procedures are in place that do not restrict the provision of health services. • Healthcare providers treat all adolescent clients with equal care and respect, regardless of status. • Support staff treat all adolescent clients with equal care and respect, regardless of status.
Quality of appropriateness: the right health services (i.e. the ones they need) are provided to them
<i>Characteristic:</i>
<ul style="list-style-type: none"> • The required package of healthcare is provided to fulfil the needs of all adolescents at the point of service delivery or through referral linkage.
Quality of effectiveness: The right health services are provided in the right way, and make a positive contribution to their health
<i>Characteristics:</i>
<ul style="list-style-type: none"> • Healthcare providers have the required competencies to work with adolescents and to provide them with the required health services. • Healthcare providers use evidenced-based protocols and guidelines to provide health services. • Healthcare providers are able to dedicate sufficient time to deal effectively with their adolescent clients. • The point of service delivery has the required equipment, supplies, and basic services necessary to deliver the required health services.

Over the years, these characteristics were incorporated in many initiatives with some success in the following countries (countries arranged here chronologically according to the year and not the successfulness of its initiatives): Zimbabwe (2000); Australia (2000, 2001, 2003 and 2005); the USA (2001, 2002, 2003 and 2005); the United Kingdom (UK) (2002); Zambia (2003); Bangladesh (2004); China (2004); Bolivia (2004), and South Africa (2004) (Tylee et al 2007:1568-1570).

2.5 THE SOUTH AFRICAN CONTEXT

The first initiative for youth-friendly health services in South Africa commenced in 1999 and was in reaction to the health crisis among young South African adolescents and the youth. To understand the context of YFHS, the health profile of adolescents and youth and the organisation of health services provided to them are described below.

2.5.1 Youth health profile: challenges for successful transition to adulthood

The challenging socioeconomic context in which the South African youth lives denies many of them gradual and successful transition to young adulthood; this is especially the case for young women (Robinson & Seiber 2008:121). The South African National Youth Policy (NYP) indicates young women are more likely to be unemployed (NYP 2015:3). Panday et al (2013:101) state “four of the fundamental building blocks for successful transition to adulthood are: completing education, starting work, staying healthy and engaging in civic life”. These building blocks are interdependent; having difficulty in achieving one affects the other.

For the youth in South Africa the building blocks of completing their education and starting to work are significantly compromised by economic constraints. The Millennium Development Goals Report (WHO 2014:9) shows that the “overwhelming majority of people living on less than \$1.25 a day belong to two regions: Southern Asia and sub-Saharan Africa.” In South Africa (being part of sub-Saharan Africa) it was reported by StatsSA (2010:3) that for the period 2002 to 2009 “almost 60% of youth ages 15-24 live in households with a monthly per capita income of less than [R555] per month”. Such impoverished families cannot even meet their most basic needs let alone pay for their children’s education to find a decent work.

Poverty limits opportunities for education. According to a report by the United Nations Educational, Scientific and Cultural Organization (UNESCO) (UNESCO 2013:96), enrolments in secondary schools are less than enrolment in primary schools and approximately 70% of young people complete their National Senior Certificate. This fall in

the enrolment rate to secondary schools is present despite policies that grant high access to secondary schooling (UNESCO 2013:96). According to the South African Census 2011, 23.5% of the people 20 years and older attained an educational level higher than the National Senior Certificate (StatsSA 2012b:52). It is challenging for uneducated young people to find productive employment. A lack of education therefore affects employment as a building block for successful transition into adulthood. The NYP (2015:3) indicates the unemployment rate for young people aged between 15 and 35 are low at an estimated 36.1%. This is a huge concern in that employment opportunities are not sufficient for the growing labour force.

Maintaining good health is also a building block to successful transition into adulthood. This is another major challenge in the South African context as evidenced by the youth health profile that reflects the country's quadruple burden of communicable, non-communicable, perinatal and maternal and injury related diseases (Mayosi et al 2009:934). The South African youth is most adversely affected by sexual and reproductive health disorders, violence, trauma and injuries as well as non-communicable diseases (Panday et al 2013:114). Death from HIV/AIDS and violence peaks in the youth years while risk factors related to non-communicable diseases in later adult life are also introduced in youth years (Panday et al 2013:114). Sexual and reproductive health, violence, injuries and trauma as well as non-communicable diseases are discussed in the next section.

2.5.1.1 Sexual and reproductive health

Sexual and reproductive health (more specifically HIV/AIDS and teenage pregnancies) remain a major health challenge among the youth despite multiple initiatives over the past years to create awareness and improve their sexual and reproductive health (Mchunu et al 2012:433; MacPhail et al 2007:1). Contributing factors are engagement in sexual risk behaviour and also sexual assault and gender-based violence (GBV).

- *HIV/AIDS and other sexually transmitted infections (STIs)*

The South African youth aged 15 to 24 years has one of the highest HIV prevalence in the world (Harrison et al 2010:1). However, the incidence of HIV among male and female youths aged 15 to 24 has declined significantly from 8.6% in 2008 to 7.1% in 2012 (Shisana et al 2014:42). This can be attributed to safer sexual behaviour (Reddy et al 2010:11). Despite this decline, the HIV incidence remains unacceptably high especially among female youths with incidence rates four times higher than that of males of the same age (Shisana et al 2014:xxix).

- *Teenage pregnancies*

Teenage pregnancies are currently a serious health and social problem not only in South Africa but also globally since many of these pregnancies are unplanned and unwanted (Mchunu et al 2012:426; MacPhail et al 2007:3) and have adverse health and socioeconomic ramifications. The National Youth Risk Behaviour Survey of 2008 reports that 19% of secondary school learners have been pregnant or made someone pregnant (Reddy et al 2010:11). Pregnancy and childbirth before the age of 15 is regarded a high risk due to likely complications such as hypertensive disorders, pre-eclampsia, complicated labour, and death (NDoH 2013b:17). Having a child at young age also bounds opportunities for furthering education, occupation and financial security in later life.

- *Sexual risk-behaviour*

Teenage pregnancies and HIV infection is mostly attributed to sexual risk-behaviour such as early sexual debut, high levels of sexual activity, multiple partners, and unprotected sex (Shisana et al 2014:111,126-127).

A tenth of the South African youth aged 15 to 24 reported to have had sex before the age of 15 (Shisana et al 2014:xxx). Sexual activity increases with age and it was reported that two-thirds of 24-year-old females are sexually experienced (MacPhail et al 2007:5). A survey among a representative sample of youth in South Africa found that only 52% of the sexually active used contraception (including hormonal and barrier methods) (MacPhail et al 2007:3). It was reported by the National Youth Risk Behaviour Survey that among secondary school learners correct and constant condom use was only 31% (Reddy et al 2010:11). Correct and persistent condom use is essential to protect against HIV and other sexually transmitted infections (STIs).

Mchunu et al (2012:432-433) found that a lack of knowledge and insight are the main reasons for the youth to make unfavourable decisions and engaging in sexual risk-behaviour. Mthobeni and Peu (2013:6) found young people often experience resistance from parents who consider it religiously or culturally taboo for older people to talk about safe sex, condom use and the transmission of HIV to younger people. Without support, young people may have unnecessary, ungrounded fears about contraception and may not know how to prevent HIV/AIDS and STIs. Youth-friendly healthcare services that allow young people to visit the clinic for sensitive health issues (such as sexual and reproductive health issues) are therefore essential to prevent engagement in sexual risk-behaviour and address the morbidity and mortality related to it.

Physical and sexual violence also makes it difficult for young women to practice safe sexual behaviour and therefore the risk for STIs are increased (Speizer et al 2009:S425).

- *Sexual assault and gender-based violence (GBV)*

Sexual assault is common among young people in South Africa. According to the NDoH (2012:24), 40% of rape and attempted rape survivors in South Africa are younger than 18 years but this statistic might be higher since sexual assaults are underreported (Bornman et al 2013:41). According to the WHO (2002b:18), most “acts of sexual violence are experienced predominantly by women and girls and perpetrated by men and boys”. Victims of sexual abuse are often prone to a low self-esteem. Feelings of self-blame, fear and guilt in adolescent rape victims can gradually escalate to earlier engagement in sexual risk behaviour that can typically continue into adulthood (NDoH 2012:24). Publicly funded crisis centres that provide support services to rape victims (called Thuthuzela Care Centres) exist nationwide but there are limited reports on the success of this program (Bornman et al 2013:41). Public PHC clinics that are, for many rape victims, still the first contact with healthcare therefore need to be sensitive and provide acceptable and appropriate services for them to share their sensitive concerns.

In many of South Africa’s communities marked inequalities between men and women and rigid gender roles are culturally and traditionally acceptable and weak sanctions against such behaviour exist (WHO 2002b:16). Sexual coercion or violence and submissiveness to men are therefore accepted as part of a normal relationship. Anguita (2012:489), stating GBV is a widespread problem in South Africa, adds that it is a “hate crime” against a female whereby she is raped because of her sexual orientation and/or gender identity; a female of any age (thus including an adolescent female) is made to suffer simply because of her gender.

2.5.1.2 Violence, injuries and trauma

In 2007 the Medical Research Council in South Africa indicated that the main causes of death for young people between 15 and 24 were homicide followed by transport-related injuries, suicide and burns (Dalton 2008:4-9).

- *Violence-related injuries*

The youth is particularly vulnerable to become victims of violence and crime (Burton 2006:1). Young people aged between 10 and 29 years account for almost half of the deaths in South Africa as a result of violence (Foster 2012:29). Young men (aged 15-29 years) are disproportionately more vulnerable to be victims and/or perpetrators of violence than females (Seedat et al 2009:1011). Crimes and violence that youths fall victim to or are engaged in

include assaults, sexual assaults (rape), theft, and house and car hijacking (Burton 2006:1). Schools are also associated with violence. Jewkes and Abrahams (2002) did a survey on the epidemiology of rape and sexual coercion in South Africa. Questions included in the survey pertained to the experience of rape before the age of 15 years, and it was found that “school teachers were responsible for 32% of disclosed child rapes” (WHO 2002b:18). Moreover, a recent survey conducted by the South African Institute of Race Relations (SAIRR) indicated that only 23% of learners felt safe at school (Mohapi 2014:263). Learners are subjected to assault, sexual assault, bullying, physical fights and gang activities (Reddy et al 2010:49-51). Many such reports were published in the South African news such as a report by Ahmed in News 24 (2015, 17 June) regarding the bullying of a male student by a fellow learner that was allowed by a teacher.

- *Substance abuse*

Substance abuse is a continued concern among the youth and is associated with delinquent behaviour, fatal and non-fatal injuries, suicide, sexual violence and engagement in sexual risk behaviour (Panday et al 2013:117; Foster 2012:29). Substance abuse initiated during adolescence usually has adverse effects on later adult life. If experimentation of the substance were not initiated in childhood or adolescence, it is unlikely to occur in adult life (Panday et al 2013:117).

Tobacco and alcohol are usually the first substances that are experimented with (Panday et al 2013:117). The National Youth Behaviour Survey 2008 (Reddy et al 2010:10-11) reports that 50% of secondary school learners consume alcohol. Other drugs that are commonly used are nyaope (a combination of cannabis, heroine and other cutting agents), cannabis, and methamphetamine (referred to as ‘tik’) (Mohapi 2014:267-268; Moodley, Matjila & Moosa 2012:4). Panday et al (2013:119) suggest substance abuse is escalating and that more substances such as heroin, cocaine and other drugs are becoming more accessible to the youth. Youths therefore need to receive services at public PHC clinics (or be referred for more specialised services) to alert them of the dangers of substance abuse and also to deal with substance abuse problems and concerns. The YFHS-WHO+ questionnaire therefore also included an item to measure the perception of whether they receive help at the clinic for concerns related to substance abuse.

- *Unintentional injuries*

Unintentional injuries include transport related injuries or injuries due to burns, falls and poisoning (Donson 2008:ix). Transport related injuries remain a leading cause of death among the youth in many South African communities with males affected more than females (NDoH 2012:24). Transport related injuries accidents are strongly associated with alcohol abuse. The Youth Risk Behaviour 2002-2009 reports that 38% of secondary school learners “had been driven by someone who had been drinking alcohol and 18% reported that they had walked alongside a road after drinking” (Reddy et al 2010:11). Youth-friendly PHC services should therefore include health education on road and traffic safety and its association with alcohol abuse but community awareness campaigns are also essential. Burns account for the 37,9% of non-transport related injuries (Donson 2008:10).

2.5.1.3 Non-communicable diseases

Non-communicable diseases are a growing concern in South-Africa especially among poor people living in urban areas (Mayosi et al 2009:934). Although non-communicable diseases are perceived to be uncommon during adolescence and youth, unhealthy lifestyle behaviours (such as smoking, alcohol abuse, unhealthy eating habits and physical inactivity) during this phase of life increase the risk for non-communicable, chronic diseases in later life (NYP 2015:13; Peer et al 2013:2). The development of healthy lifestyles such as physical activity and healthy eating habits need to be encouraged during adolescence and youth.

The National Youth Risk Behaviour Survey of 2008 indicates that 13% of secondary school learners suffer from stunting, 8% from underweight and 4% from wasting. Overweight was found to be 20% and obesity 5% (Reddy et al 2010:11). Reddy et al (2012:264) also found a rapid increase in obesity and overweight among adolescents from 2002 to 2008. Obesity is symptomatic of a sedentary lifestyle which is a problematic issue since almost a third of secondary school learners indicated they watch TV or play computer games for longer than 3 hours a day (Reddy et al 2010:11).

- *Mental health*

The transition into adulthood is in itself a risk factor for mental health problems when an imbalance in the coordination of emotions and behaviour in the social and intellectual context occur (Casey, Jones & Hare et al 2008:120). In the challenging South African context prevailing socioeconomic factors such as widespread poverty, limited employment opportunities, familial disruption, high violent crime rates and epidemics such as HIV/AIDS contribute to the risk of more and more young people being diagnosed with mental health problems (NYP 2015:14; Panday et al 2013:124).

Although norms for child and adolescent mental health services exist in South Africa, the provision thereof is still lacking behind (Lund et al 2009:1121). Barriers in access to mental health care in South Africa is mostly related to a denial for the need of treatment, fear of the associated stigma, availability and affordability of mental health care and a lack of trained mental healthcare professionals (Bruwer et al 2011:774,780). Young people without health insurance, who live in poverty, are unemployed, who have a low level of education or those involved with substance abuse are most at risk for defaulting mental health treatment (Bruwer et al 2011:775). A young person experiencing anxiety, sadness, depression or mental health problems often does not have a frame of reference for the condition, does not recognise it as an illness and may therefore neglect treatment (NDoH 2013b:18). Raising awareness of mental health problems, screening and early diagnosing as well as effective management and rehabilitation is an essential aspect of youth-friendly health services.

2.5.2 South African healthcare services

2.5.2.1 The South African healthcare system

The South African healthcare system is historically and still today characterised by fragmentation. There is currently a free market privatised healthcare system existing alongside a large public healthcare system (Van Rensburg 2012:105; Coovadia et al 2009:825). A third player in the provision of healthcare services is non-governmental organisations (NGOs) and private-public partnerships that address the gaps left between the public and private healthcare services (Kautzky & Tollman 2008:26).

The public healthcare system is government and tax funded and provides health services to the majority of the population. In 1994, when the post-Apartheid era began, the healthcare system was restructured to overcome the undemocratic culture and disparities of the past (Van Rensburg & Engelbrecht 2012:122). The PHC approach became the underlying philosophy of this restructuring. The PHC approach foregrounds comprehensive, promotive, preventative, rehabilitative and curative care with priority in rural and impoverished areas through community involvement and intersectoral collaboration (Van Rensburg & Engelbrecht 2012:124). This approach further entails free healthcare to all women in pre- and postnatal care and to all children under the age of six. The policy was extended in 1996 to include free PHC to all who uses the public PHC facilities (Van Rensburg & Engelbrecht 2012:127-128). Coovadia et al (2009:827) reported in 2009 that 64% of the population was entirely dependent on the public healthcare system. The public healthcare system is,

however, constrained by shortages of healthcare professionals, especially in the poor peri-urban and rural areas (Van Rensburg & Engelbrecht 2012:171). This, in combination with the growing disease burden and public healthcare service dependent population, seriously hinders the implementation of quality health programmes such as youth-friendly services.

The private healthcare system on the other hand is well developed and has abundant resources. However, the private sector provides services for profit mostly funded by health insurance schemes. South African citizens have the freedom of choice to attend the public or private healthcare sectors. Only about 15% of the South African population pay for membership of a health insurance and a further 21% makes use of a mix of private-sector and public-sector services (mostly out-of-pocket payment for primary care and free public hospital services (Coovadia et al 2009:826).

A new healthcare system approach is emerging in South Africa to unify the fragmented health services (public and private sector) into one National Health Insurance (NHI) system. This approach was motivated by the continuous inequities reflected in the health outcomes of citizens of different socioeconomic status, race, insurance status and demographic origin (living in rural or urban areas) (Harris et al 2011:S103). The NHI system aims to improve access to quality healthcare services for all South Africans through equitable universal health coverage. The NHI Green Paper was launched in 2011 followed by the White Paper in 2015 (Van den Heever 2016:1; Matsoso & Fryatt 2013:156). Several barriers to the roll out of the NHI still exist (Moosa et al 2016:5).

2.5.2.2 Primary healthcare services

The majority of the youth in South Africa receive healthcare through the public healthcare system (Ashton et al 2009:12) due to economic restraints and not being able to pay health insurance. This study therefore focused on the public sector.

The organisation of the public health sector, more specifically the district health system that provides healthcare on primary care level, was centred on. Primary care is referred to as an individual's first level of contact with the healthcare system (Willemsse 2011:312) and identified as the most sustainable way to address youth health problems in the country (Ashton et al 2009:12).

The current public healthcare system functions through the South African Government's National Department of Health, nine provincial departments of health (one in each of the nine provinces of the country), and the various district health systems within each of the nine

provinces. There are currently 53 districts and metropolitan municipalities in South Africa. Each district health system is responsible for the provision and management of a full range of comprehensive PHC services within its jurisdiction (Van Rensburg & Engelbrecht 2012:133). This study was conducted within one such district, the Tshwane District.

Primary healthcare services are delivered at various facilities within a district. Table 2.3 provides a summary of the spectrum of facilities. The majority of public PHC facilities in South Africa are fixed public PHC clinics (Engelbrecht & Van Rensburg 2012:507).

Fixed public clinics deliver varying packages of PHC services and operates on an 8-hour basis from Monday to Friday and some over weekends (City of Tshwane 2014:145). These clinics are staffed with nurses and may or may not have doctors' services at their disposal (Engelbrecht & Van Rensburg 2012:505). All PHC clinics in the public sector do not, however, fall under the same authority. Most PHC clinics are governed by the provincial government but some fall under the authority of local governments (municipalities) (Engelbrecht & Van Rensburg 2012:505). This study involved provincial clinics governed by the Gauteng Department of Health and municipal clinics governed by the Tshwane metropolitan municipality.

Table 2.3: Facilities providing PHC services (adapted from Engelbrecht & Van Rensburg 2012:504-505).

Facility	Services provided	Health personnel	Service delivery time
<ul style="list-style-type: none"> Stationary (fixed) PHC clinic 	<ul style="list-style-type: none"> Varying PHC package to catchment population (About 5km radius) – ambulatory patients 	<ul style="list-style-type: none"> Professional nurses Enrolled nurses Assistant nurses Support staff Visiting doctors (not always available every day) Visiting specialised services 	<ul style="list-style-type: none"> 8 hours a day
<ul style="list-style-type: none"> Mobile clinic (Extension of a fixed clinic) 	<ul style="list-style-type: none"> PHC services on outreach style to more outlying areas with PHC equipped vehicles 	<ul style="list-style-type: none"> Health workers 	<ul style="list-style-type: none"> Non-continuous basis at regular intervals
<ul style="list-style-type: none"> Satellite clinic (Extensions of fixed PHC clinics) 	<ul style="list-style-type: none"> PHC services to more outlying areas at predetermined points within a fixed structure 	<ul style="list-style-type: none"> Health workers 	<ul style="list-style-type: none"> Non-continuous basis at regular intervals
<ul style="list-style-type: none"> Community health centres (CHC) 	<ul style="list-style-type: none"> Maternity Termination of pregnancy (if accredited) Emergencies Minor operations Diagnostic (X-ray; laboratory) Physiotherapy Occupational therapy Dental services Medico-legal services Rehabilitation services 	<ul style="list-style-type: none"> Professional nurses Enrolled nurses Assistant nurses Doctor Dentist Rehabilitation personnel Pharmacists Social workers Oral hygienists 	<ul style="list-style-type: none"> 24-hour centres
<ul style="list-style-type: none"> District hospitals 	<ul style="list-style-type: none"> Referral facility for surrounding referring clinics and CHCs to provide generalist hospital services 	<ul style="list-style-type: none"> Most levels of healthcare professionals except highly specialised services 	<ul style="list-style-type: none"> 24 hours
<ul style="list-style-type: none"> District hospital (Out-patient departments [OPDs]) 	<ul style="list-style-type: none"> PHC package to ambulant patients 	<ul style="list-style-type: none"> Professional nurses Enrolled nurses Assistant nurses Doctor 	<ul style="list-style-type: none"> 8 hours per day
<ul style="list-style-type: none"> Special PHC facilities 	<ul style="list-style-type: none"> Services to specific groups of patients such as maternal and obstetric unit, dental care, mental care, school health services 		

All PHC facilities deliver the comprehensive PHC service package as prescribed by the National Department of Health. This comprehensive PHC service package entails a standardised, comprehensive ‘basket’ of services to deliver at primary care level that comprises preventative, promotive as well as basic curative and rehabilitative services and allows patients to receive all services at one visit – “one-stop” approach (Engelbrecht & Van Rensburg 2012:497-503). The comprehensive PHC service package specifically also focuses on prevention and curative care for sexual and reproductive health issues (NDoH 2013b:6)

The PHC model of service delivery is currently being re-engineered to make provision for improved access for disadvantaged groups since considerable inequities in access, availability and acceptability of health services still remain – especially for the disadvantaged, vulnerable groups (Black African, poor, uninsured and rural residents) (Harris et al 2011:S102,S118). The main difference between the current PHC approach and the envisaged approach is, firstly, the district management team will have the authority to manage the districts population’s health and, secondly, the PHC service delivery will no longer be passive. The re-engineering envisages PHC services that will reach the family through home visits, schools and the community. Prevention will therefore be more effective (Engelbrecht & Van Rensburg 2012:524-526).

The role of the private-not-for-profit sector (through NGOs, faith-based organisations, community-based organisations or academic and research institutions) is also essential in the provision of PHC services (Engelbrecht & Van Rensburg 2012:508). The main NGO involved in the provision of youth-friendly health services is *loveLife*. *loveLife* focuses on the prevention of HIV, STIs and unplanned teenage pregnancies among youth through a range of strategies such as nationwide media campaigns, clinic services, sports, branding and health education sessions (Ashton et al 2009:12). This NGO was involved with the launching of the National Adolescent Friendly Clinic Initiative (NAFCI) in 1999 to address health issues specifically among the youth. Another initiative is *Soul City* which focuses on health promotion through popular youth media to raise public awareness on a broad array of social and health issues (Kautzky & Tollman 2008:26).

2.5.3 History of adolescent- and youth-friendly healthcare services in South Africa

During the late 1990s surveys indicated that sexual and reproductive diseases among the South African youth were spreading fast and becoming a crisis (Dickson-Tetteh et al 2001:161).

Research conducted by *loveLife* and the South African Department of Health (DoH) indicated that youth refrained from attending public PHC services (Kirby 2007:23) for several reasons such as the inaccessibility of clinics, lack of confidentiality or a fear to attend due to the judgemental and hostile attitudes of the staff (Dickson-Tetteh et al 2001:160).

2.5.3.1 The National Adolescent Friendly Clinic Initiative (NAFCI)

The NAFCI was conceptualised and implemented in South Africa in 1999 in recognition of the need for health services that are aimed towards young people (Dickson et al 2007:80; Ashton et al 2009:12). The NAFCI was driven by a consortium of prominent NGOs which included the Planned Parenthood Association of South Africa (PPASA), the Reproductive Health Research Unit (RHRU) at the University of the Witwatersrand, and the Health Systems Trust (Ashton et al 2009:12) in partnership with *loveLife*. The NAFCI ran concurrently with governmental developments for youth and adolescent health and mutual support and interest was thus provided (Ashton et al 2009:13). The NAFCI project was initiated at a meeting held by the stakeholders in 1999. The main objective of this meeting was to reach national consensus on the NAFCI's key concepts, aims, objectives and principles. The aim of NAFCI was established as follows: "NAFCI aims to improve the quality of adolescent health services at the primary care level and to strengthen the public sector's ability to respond appropriately to adolescent health needs." (Ashton et al 2009:13). The public sector PHC clinics were recognised as the most sustainable way to improve youth health problems.

Once the aim and objectives had been established, standards were developed to define what an 'adolescent-friendly clinic' should be like. Expert members from the WHO, (Department of Child and Adolescent Health and Development) and other international and national youth-serving organisations were involved. In addition, focus groups were held with the youth to determine their needs and expectations. Ten standards and 41 corresponding criteria were developed (Ashton et al 2009:13-15; Dickson et al 2007:86-87). (The ten standards and 41 corresponding criteria are attached as Annexure 1).

The following are the ten NAFCI standards quoted from Ashton et al (2009:15).

1. *Management systems are in place to support the effective provision of adolescent-friendly health services.*
2. *The clinic has policies and processes that specifically support the rights of adolescents.*
3. *Clinic services appropriate to the needs of adolescents are available and accessible.*

4. *The clinic has a physical environment conducive to the provision of adolescent-friendly health services.*
5. *The clinic has the drugs, supplies and equipment to provide the essential service package for adolescent-friendly health services.*
6. *Information, education and other communication consistent with the essential service package are provided.*
7. *Systems are in place to train staff to provide adolescent-friendly services.*
8. *Adolescents receive an accurate psychological and physical assessment.*
9. *Adolescents receive individualised care based on standard service delivery guidelines.*
10. *The clinic provides continuity of care for adolescents.*

The essential service package as referred to in the ten NAFCI standards indicates a set of “basic clinical sexual and reproductive health services” (Ashton et al 2009:17) as prescribed in the comprehensive PHC service package by the National Department of Health at that time (Engelbrecht & Van Rensburg 2012:497).

By 2001 the NAFCI project had been expanded to all nine provinces with quality improvement teams within each clinic as the heart of the project. Each team had one young person who helped to define the role of young people in the project. The first clinics were ready for external assessment by 2003 (Ashton et al 2009:13-16).

The accreditation model followed a quality improvement approach and is illustrated in Figure 2.1.

By 2005 the NAFCI project had further expanded to 350 primary healthcare clinics (NDoH 2013a:7) and was subsequently incorporated into the South African National Department of Health (NDoH) as a strategy within the Sub-directorate for Youth and Adolescent Health of the Maternal, Child and Women’s Health Directorate and named ‘Youth-Friendly Services” (YFS) (Kirby 2007:3). The support from the NDoH would also improve consistent and sustainable implementation by all PHC facilities (Kirby 2007:3). The roll out of the NAFCI standards through the YFS strategy was, however, not as successful as planned due to competing health priorities, resource limitations and divided commitments to several quality improvement projects (NDoH 2013a:7-8).

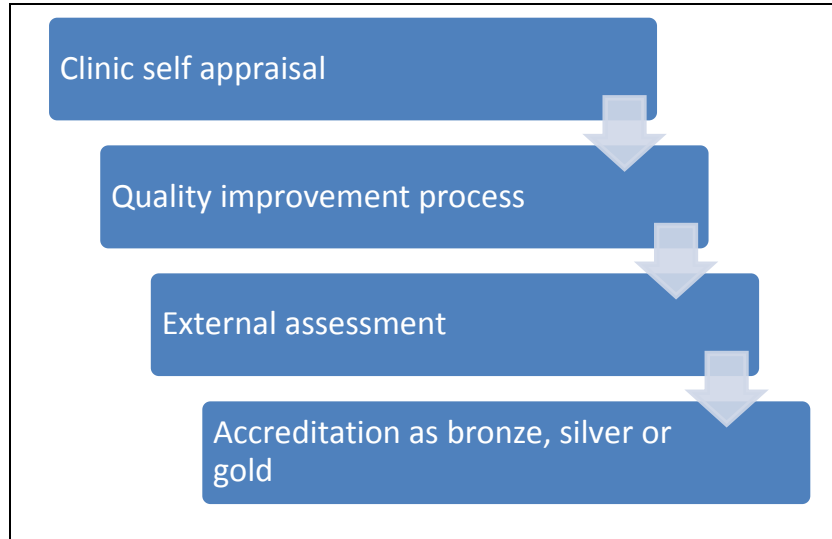


Figure 2.1: NAFCI accreditation model (adapted from Ashton et al 2009:16)

2.5.3.2 Youth-Friendly Services (YFS)

Both the NAFCI and the YFS models had some success and developed essential elements towards youth-friendly services (Dickson et al 2007:88), but successful broad nationwide change had unfortunately not been achieved and a review of the YFS model became imperative (NDoH 2013a:7). The review resulted in the development of the Adolescent and Youth-Friendly Services package since 2006 (NDoH 2013a:7).

2.5.3.3 Adolescent and Youth-Friendly Services (AYFS)

The new AYFS model is similar to the NAFCI, but with the inclusion of adolescents in the focus of YFHS and with less strict accreditation criteria (NDoH 2013a:7). The AYFS model allows recognition when a facility meets a minimum of at least the following five of the ten NAFCI standards (NDoH 2013a:7,14).

- *Management Systems Support for the effective provision of adolescent and youth programmes through capacity development of manager and service providers at all levels.*
- *Accessibility and availability of youth and adolescent services.*
- *Provision of a safe and supportive environment.*
- *Relevant information, education and communication (IEC) including counselling.*
- *Continuity of care: proper referral systems are in place at the different settings and all levels of health care.*

The AYFS model is also more comprehensive in that it focuses on prevention, risk reduction, advocacy, and information sharing in all settings where adolescent and youth populations are present and not only in public clinics. These settings include health facilities at all levels, households, schools, the workplace, community-based organisations, residence centres, the street, multipurpose youth centres, and other areas with dense adolescent and youth populations. The AYFS initiatives are therefore in line with the re-engineering of PHC in that the clinics and youth centres will work collaboratively with the school health teams and community outreach teams (NDoH 2013a:9-16).

Adolescents were specifically included in the focus of YFHS since the government recognised that adolescent development is the key to prevention of health problems (NDoH 2013a:6). The South African youth already engages in risk behaviour from early adolescent years and prevention should therefore be early enough (Mchunu et al 2012:426).

loveLife has been involved with the training of personnel since 2007 whereafter the toolkit was rolled out in 2009 (NDoH 2013a:7). The AYFS toolkit is currently slowly incorporated in all nine South African provinces. The number of health facilities implementing AYFS per sub-district is the indicator for measuring the success of the AYFS roll out. The aim was to have the AYFS package implemented by all health facilities by 2016 (NDoH 2013a:19).

The implementation of youth-friendly services still follows the YFS toolkit, but with additional AYFS training to ensure a systematic broad implementation. The implementation of youth-friendly services is structured according to the 11 steps listed next (Kirby 2007:7).

1. Ensure that management support is strong.
2. Hold a YFS orientation workshop.
3. Ensure that community support is strong.
4. Establish YFS team and select a leader.
5. Conduct YFS team meetings.
6. Conduct a baseline YFS self-appraisal.
7. Learn how to measure YFS standards and criteria.
8. Implement YFS services and quality improvements.
9. Monitor and evaluate the impact of YFS.
10. Conduct subsequent YFS self-assessments.

11. Apply for YFS recognition.

The roll-out of the AYFS follows the decentralised organisation of the South African Health Care System. The NDoH is responsible to provide strategic guidance and an oversight with regard to implementation and monitoring of the AYFS. Workshops are conducted to orientate each province to the AYFS model. The Department of Health of each province is then responsible for adapting the model according to the province's specific health priorities and implement the model accordingly. At the district and sub-district level, the adapted model is implemented through adherence to the ten priority standards and corresponding criteria (NDoH 2013a:15).

The YFS team spearheads the implementation of YFS at facility level and aims to have everything in place to ensure sustainable implementation at the facility. The core of the YFS team should consist of 6–8 members who are most critical to the success of the YFS programme (Kirby 2007:3,4). Members that can be considered are any one of the following: physician, facility manager, nurse, community outreach workers, counsellors, social workers, youth peer educators (called 'groundbreakers' and Mpintshi's) (Ashton et al 2009:46), adolescent clients, receptionists, cleaners, security guards, gardener, providers from YFS' referral sites, other youth stakeholders, and concerned parents (Kirby 2007:3,4)

2.6 EVALUATION OF YOUTH-FRIENDLY HEALTH SERVICES (YFHS)

Worldwide there is a lack of strong research evidence with regard to the effectiveness of initiatives to make healthcare services youth-friendly (Tylee et al 2007:1569-1570). This lack of strong evidence relates to weak methods of assessment of youth-friendliness since most used uncontrolled observational studies (Tylee et al 2007:1569-1570). There are also a lack of initiatives that included and described all five the WHO qualities of YFHS in a comprehensive manner (Haller et al 2012:423; Tylee et al 2007:1571). Dr DM Haller and team identified a need for a validated instruments to measure the performance of the healthcare services against all five of the WHO's qualities of YFHS and according to the perception of the youth themselves (Haller et al 2012:423).

The Youth-Friendly Health Service-World Health Organization+ questionnaire (YFHS-WHO+ questionnaire) is the first instrument to measure the youth-friendliness of health care services from the perspective of youth themselves (Haller et al 2012:423). It uniquely measures youth-friendliness against all five of the qualities of YFHS and in a quantitative and rigorous manner for research purposes (Haller et al 2012:423).

2.6.1 Context of the Youth-Friendly Health Service-World Health Organization+ questionnaire (YFHS-WHO+ questionnaire)

The YFHS-WHO+ questionnaire was developed and validated for use in postwar Herzegovina and Bosnia as part of the FaMI project that aimed to rebuild primary care services with special focus on vulnerable populations (Haller et al 2012:423; Meynard et al 2009:22). FaMI project was driven by foundation fami, an organization supported by the Swiss Agency for Cooperation and Development (Haller et al 2012:423). The civil war that ravaged Herzegovina and Bosnia from 1992 –1995 had appalling effects on society and especially on young people: unemployment, poverty, children being brought up in homes with traumatised parents, and an increasing prevalence of STIs and extreme drug abuse (Meynard et al 2009:22). Young people (aged 10 to 25 years) were therefore regarded vulnerable and it was recognized that investment in young people's health were an investment in their future health and economic growth of the country. Major barriers also existed to access healthcare services in Herzegovina and Bosnia since it is mainly a rural country (Meynard 2009:22). The YFHS-WHO+ questionnaire was therefore a measure of the youth's perception of how friendly services are towards them in terms of all the five WHO qualities of YFHS and indicated barriers that still existed. The YFHS-WHO+ questionnaire was used in a randomized controlled trial of an intervention to improve the youth-friendliness of family practices in Herzegovina and Bosnia (Haller et al 2012:423). Improved YFHS has the potential to raise young people's awareness of their health needs, increase young people's ability and willingness to attend healthcare services and to return for sensitive health problems (Haller et al 2012:423). Primary care services in the study context of the canton of Zenica in Herzegovina and Bosnia were mostly provided by doctors at family medicine clinics (Haller et al 2012:423).

2.6.2 Evaluation of youth-friendly health services (YFHS) in South Africa

In South Africa assessing PHC clinics for youth-friendliness is focused on quality improvement through the AYFS approach (NDoH 2013a:8). The assessment of the quality improvement follows the NAFCI model of an initial self-appraisal followed by quality improvements and subsequent self-assessments until a final external assessment for recognition is achieved (Ashton et al 2009:16; NDoH 2013a:8). Adolescents and youth are involved throughout the process during self-appraisal (Kirby 2007:5), quality improvements (Kirby 2007:12) and final external assessment (Kirby 2007:15) by means of focus groups, interviews and completion of questionnaires but not as sole assessors of the youth-friendliness of the clinics (Kirby 2007:5,6,12,15).

2.7 CONCLUSION

Focusing on the health of young people is critical to address the growing morbidity and mortality. Making the health of young people the focal point of healthcare services is also essential for socioeconomic wealth worldwide. Healthcare services best address these problems when the services adhere to the five qualities of YFHS. Evaluating the healthcare services also against the five YFHS qualities is therefore essential. The YFHS-WHO+ questionnaire is the first to comprehensively and rigorously measure YFHS against all five qualities of YFHS from the perspective of the youth only. Although a well-developed implementation plan exists in South Africa, the YFHS-WHO+ questionnaire will be of value for research purposes as well as measure the perspective of the youth on the five qualities of YFHS.

Accurate inferences about the youth-friendliness of services are, however, only as accurate (valid and reliable) as the measurement instrument itself. In the next chapter the methods for adaptation and validation of the YFHS-WHO+ questionnaire for the use as a research measure within the Tshwane District are discussed.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

In the previous chapters the need to adapt and validate an existing measure (YFHS-WHO+ questionnaire) to validly and reliably measure the youth-friendliness of public primary healthcare (PHC) services in the metropolitan context of the Tshwane District was presented and confirmed. A description of the development of youth-friendly PHC services both internationally and nationally was provided.

In this chapter the design and methods to adapt and validate the existing YFHS-WHO+ questionnaire are explained. The existing YFHS-WHO+ questionnaire was developed by an international team of experts and validated for use in Herzegovina and Bosnia (Haller et al 2012:423).

3.2 RESEARCH DESIGN

A research design refers to the arrangements of elements that serve as the blueprint for a study to yield rigorous results (Grove, Burns & Grey 2013:214; LoBiondo-Wood & Haber 2010:158). In this study a methodological design was used. Methodological research is used to make an intangible construct measurable (LoBiondo-Wood & Haber 2010:208). To do this, a measurement instrument that is valid and reliable must be developed. Houser (2008:297) confirms the validity and reliability of an instrument need to be determined, examined and described to enable researchers to select instruments that measure constructs with precision. The methodological design focuses on developing instruments with sound psychometric properties for research purposes.

Methodological designs differ from other research designs in that it consists of steps to develop an instrument and evaluate the psychometric properties thereof (LoBiondo-Wood & Haber 2010:207-208). The steps of a methodological design involve conceptualisation of the construct,

the generation of the items in the instrument, a preliminary review of the items, instrument refinement, and validation (Polit & Beck 2012:356-370; LoBiondo-Wood & Haber 2010:207-208; Viswanathan 2005:69-72). All the steps of the methodological design were not implemented in this study since it was a follow-up study on the research that had been done by Dr DM Haller and her international expert team. They developed the YFHS-WHO+ questionnaire in English (referred to as the existing YFHS-WHO+ questionnaire) followed by its translation, adaptation and validation for use in the Herzegovinian and Bosnian context (Haller et al 2012:423). Their study is referred to as the Herzegovina and Bosnia study (HB study). The current follow-up study will be referred to as the Tshwane District study (TD study) as it entails an adaptation of the existing YFHS-WHO+ questionnaire for use in the Tshwane District context.

In the TD study the questionnaire was adapted to suit the context since a questionnaire will not measure the construct with accuracy if the items are not well understood or relevant to the population it is applied to (Polit & Beck 2012:357; Streiner & Norman 2008:129). The TD study focused on the last steps (steps 3, 4 and 5) of the methodological design. Table 3.1 presents the steps of the methodological design as adapted from Polit and Beck (2012:351-370) and LoBiondo-Wood and Haber (2010:208) and explains the involvement of the HB and TD studies.

Table 3.1: Steps of methodological design applied to this study

Steps		The steps as applied to the study
1	Conceptualisation of the construct	<ul style="list-style-type: none"> Youth-friendliness is the construct. It has been well conceptualised by the WHO in terms of the five qualities of youth-friendliness in health services as comprehensively described in Chapter 2.
2	Item generation (HB study)	<ul style="list-style-type: none"> In the HB study, the existing YFHS-WHO+ questionnaire was compiled by selecting items from two other instruments (Haller et al 2012:423).
3	Review of the items to enhance readability and ensure content validity (HB study) Review for contextual relevance (TD study)	<ul style="list-style-type: none"> In the HB study, the existing YFHS-WHO+ questionnaire was reviewed by an English-speaking international team of YFHS and PHC experts during its development to enhance readability and ensure that all requirements of youth-friendliness were met (Haller et al 2012:423). In the TD study the items of the existing YFHS-WHO+ questionnaire were reviewed by youths at PHC clinics in the Tshwane District (through a pre-test). Items were adapted accordingly (referred to as 'initial adaptation'). YFHS and PHC experts in the Tshwane District reviewed the items for face validity.
4	Instrument refinement (TD study)	<ul style="list-style-type: none"> After initial adaptation of the questionnaire to suit the Tshwane District context, it was administered to 102 respondents (aged 18 to 24). Item and reliability analyses' statistical formulas were used to remove redundant items in the questionnaire and optimise its psychometric properties (referred to as 'final adaptation').

	Steps	The steps as applied to the study
5	Validation of the adapted questionnaire (TD study)	<ul style="list-style-type: none"> Hypothesis testing supported the construct validity of the adapted questionnaire to suit the context in the Tshwane District.

The existing YFHS-WHO+ questionnaire (refer to Annexure 6.1) used for this study claims good content and face validity (Haller et al 2012:423) and the YFHS-WHO+ questionnaire as adapted and validated for the use in the Herzegovina and Bosnia context further claims good construct validity and reliability (Haller et al 2012:423). These psychometric properties are summarised in Table 3.2.

Table 3.2: Validity and reliability of existing and adapted YFHS-WHO+ questionnaire for use in Herzegovina and Bosnia context

Type of validity and reliability	Applied to the YFHS-WHO+ questionnaire
Content validity	<ul style="list-style-type: none"> Content validity of the items of the existing YFHS-WHO+ questionnaire was supported by an English speaking international team of YFHS and PHC experts.
Face validity	<ul style="list-style-type: none"> The face value of items in the existing YFHS-WHO+ questionnaire was supported by the users of the two instruments from which it was adapted (Haller et al 2012:423).
Construct validity	<ul style="list-style-type: none"> Construct validity of the YFHS-WHO+ questionnaire adapted for the Herzegovina and Bosnia context was supported through hypothesis testing. Hypothesis 1 was confirmed (with one reasonable exception) as well as hypothesis 2. With reference to hypothesis 1, Haller et al (2012:424) state “services that are specifically aimed towards young people should have higher YFHS-WHO+ scores than services that do not have this aim”. As regards hypothesis 2 they state “the proportion of young people attending the service should be higher in the service with higher YFHS-WHO+ scores (provided patients have a choice of services they can attend)” (Haller et al 2012:424).
Reliability (stability)	<ul style="list-style-type: none"> Haller et al (2012:425) report a test-retest reliability “with a kappa value ranging from .87 to 1.00 and a mean kappa value (standard deviation) of .93 (.04)” was suitable and used for the YFHS-WHO+ questionnaire used in Herzegovina and Bosnia.

3.3 RESEARCH METHODOLOGY

The methodology of a study refers to the procedures used for gathering and analysing data to answer the research questions (Polit & Beck 2012:733). This study aimed to adapt the existing YFHS-WHO+ questionnaire to validly and reliably measure the youth-friendliness of public PHC

services in the Tshwane District of South Africa. Adaptation and validation were therefore the two components of this study and are described in the research objectives.

3.3.1 Objectives

The objectives of the TD study were:

1. to adapt the YFHS-WHO+ questionnaire to suit the context of the public PHC clinics in the Tshwane District;
2. to determine the construct validity of the adapted YFHS-WHO+ questionnaire, and
3. to determine the reliability of the adapted YFHS-WHO+ questionnaire.

The objectives were reached through three consecutive phases as discussed in the research methodology to allow for systematic and sequential data collection. Phase 2 followed Phase 1 and Phase 3 followed Phase 2. This sequence was used to first establish an expert norm, then adapt the questionnaire (through initial and final adaptation) followed by the establishment of a youth score. Tables 3.3 to 3.6 present the research objectives and methodology. Tables 3.3 and 3.4 concerns objective 1, Table 3.5 objective 2 and Table 3.6 depicts objective 3.

Table 3.3: Objective 1: Initial adaptation of YFHS-WHO+ questionnaire

Method	Unit of analysis and study population	Sampling method and sample	Data collection (Phase 2)	Statistical analysis	Outcome
Pre-test of questionnaire	<ul style="list-style-type: none"> Youths (aged 18 to 24) attending 4 selected PHC clinics in the Tshwane District. 	<ul style="list-style-type: none"> Convenient sampling of 25 youths. Purposive sampling of four clinics. 	<ul style="list-style-type: none"> Pre-test. Cognitive methods of item testing applied during six group discussions. 	<ul style="list-style-type: none"> Similar inputs from two or more groups were decisive to rephrase, remove or add items of the existing questionnaire. 	<ul style="list-style-type: none"> Contextual relevant IA YFHS-WHO+ questionnaire with items that were understood by the study population.
Face validation through review by experts.	<ul style="list-style-type: none"> Items of the questionnaire. 	<ul style="list-style-type: none"> Purposive sampling of two experts. 	<ul style="list-style-type: none"> Reviews of the items were e-mailed. 	<ul style="list-style-type: none"> None. 	<ul style="list-style-type: none"> Reviews served to support the suggestions the youths had made during the pre-test.

Table 3.4: Objective 1: Final adaptation of YFHS-WHO + questionnaire

Method	Unit of analysis and study population	Description of the method (Phase 3)	Outcome
Quantitative analysis of responses	<ul style="list-style-type: none"> Responses from 102 youths to the IA YFHS-WHO+ questionnaire. 	<ul style="list-style-type: none"> Frequencies were determined per item. Items to which equal or more than 20% of the respondents did not respond were considered for removal. 	<ul style="list-style-type: none"> Reduced length of the questionnaire through the exclusion of items that were not successful in obtaining a response.
Item and reliability analysis	<ul style="list-style-type: none"> Responses from 102 youths to the IA YFHS-WHO+ questionnaire 	<ul style="list-style-type: none"> Item and reliability analyses statistical formulas were used. The analyses diagnostics and relevance of the item construct were considered for inclusion and exclusion of items. 	<ul style="list-style-type: none"> Final adapted YFHS-WHO+ questionnaire with inclusion of only the most informative and reliable items to measure youth-friendliness.

Table 3.5: Objective 2: Construct validation of the adapted YFHS-WHO+ questionnaire

Method	Variables of the hypothesis test	Unit of analysis and study population	Sampling method and sample	Data collection (Phases 1 and 3)	Data management	Statistical analysis
Construct validation through hypothesis testing with contrasted groups “youth-friendly” and “less or not youth-friendly” clinics).	<ul style="list-style-type: none"> Mean expert score per clinic (norm of youth-friendliness). 	<ul style="list-style-type: none"> Fixed public PHC services (clinics) in Tshwane District with patients and staff (key informants). Experts conducted evaluations. 	<ul style="list-style-type: none"> Purposive sampling to select 10 PHC clinics that represented more youth-friendly characteristics and also represented less youth-friendly characteristics. Convenient sampling of key informants. 3 experts selected purposively for their expertise. 	<ul style="list-style-type: none"> Expert evaluation through face-to-face interviews in Phase 1. 	<ul style="list-style-type: none"> Determining a mean expert score of youth-friendliness per clinic. 	<ul style="list-style-type: none"> Sample distribution of the mean experts’ scores to select two extreme groups: “more youth-friendly” and “less or not youth-friendly” clinics.
	<ul style="list-style-type: none"> Mean youth score per clinic. 	<ul style="list-style-type: none"> Youths (18 to 24) attending fixed public PHC clinics in Tshwane District. 	<ul style="list-style-type: none"> Convenient sampling of 102 youths (aged 18 to 24). 	<ul style="list-style-type: none"> Face-to-face interview or self-administered questionnaire in Phase 3. 	<ul style="list-style-type: none"> Determine a mean youth score per clinic. 	<ul style="list-style-type: none"> Hypothesis test by comparing the ranking of expert and youth scores; Independent t-test.

Table 3.6: Objective 3: Determination of reliability of adapted YFHS-WHO+ questionnaire

Method	Data	Description of method	Outcome
Reliability analysis.	<ul style="list-style-type: none"> 102 youth responses to the adapted YFHS-WHO+ questionnaire. 	<ul style="list-style-type: none"> Internal consistency was evaluated and optimised during final adaptation of the YFHS-WHO+ questionnaire. 	<ul style="list-style-type: none"> Homogeneity was ensured (items within a subscale measured the same underlying attribute of the construct).

To achieve the aim of a study, it is necessary to produce empirical evidence to the validity with which the adapted questionnaire measures the intended construct. In the view of Streiner and Norman (2008:9), the assessment of the validity of an instrument presents itself in two situations. Firstly, when other measures of the same or similar construct is available and, secondly, when no measure of the same/similar construct is available.

When a measure exists, the experimental measure and the existing measure are administered to the same sample and the strength of the correlation of the findings then provides evidence for the validity of the experimental measure. The literature describes this approach as convergent, criterion or concurrent validation (Streiner & Norman 2008:9). When no measure exists, no norm to compare the experimental measure with is available.

At the time of this study no validated similar measure to determine all aspects according to the WHO requirements of the youth-friendliness of PHC services in South Africa was available to compare the adapted YFHS-WHO+ questionnaire with. There was therefore no recent norm of youth-friendliness of PHC services in the Tshwane District context from the perspective of the youth. The adapted YFHS-WHO+ questionnaire would therefore be a unique measure of youth-friendliness from the perspective of the youth only. Thus, for the purpose of the study, the second situation mentioned by Streiner and Norman (2008:9) was assumed as no measure of the same/similar construct was available. The set of approaches to determine validity of measures where no “gold standard” exists is known as construct validation (Streiner & Norman 2008:10,257,274; Viswanathan 2005:68).

Construct validation is a method to determine how accurate an instrument measures a construct when no norm of the construct exists (Polit & Beck 2012:237; Streiner & Norman 2008:10,257,274; Viswanathan 2005:68). The construct is often abstract in nature and is therefore linked to its underlying attributes (Streiner & Norman 2008:10,274). An instrument that represents the underlying attributes should therefore be able to measure the construct accurately. The accuracy of measurement is determined by administering the instrument to two populations with differing amounts of the underlying attributes. The instrument is valid if it is able to distinguish between these two populations as with differing amounts of the attribute. The method refers to construct validation by extreme (or contrasting) groups (LoBiondo-Wood & Haber 2010:293; Streiner & Norman 2008:261). In this study the construct referred to the youth-friendliness of health services and the underlying attributes to the WHO qualities of health

services (accessibility, acceptability, equitability, appropriateness and effectiveness). The items in the YFHS-WHO+ questionnaire were developed to capture these attributes; thus, to represent youth-friendliness (Haller et al 2012:423). The adapted YFHS-WHO+ questionnaire was administered to two clinic groups: Group 1: “more youth-friendly” and Group 2: “less or not youth-friendly”. The statistical *t*-test was used to test whether the YFHS-WHO+ questionnaire was able to significantly distinguish between the score of clinics that were “more youth-friendly” and clinics that were “less or not youth-friendly”.

Experts evaluated the presence of the underlying attributes in the clinics to select the two extreme groups. These experts also established a norm of youth-friendliness through this evaluation. The ranking of the experts’ norms was compared to the ranking of the youth’s score (measured with the adapted YFHS-WHO+ questionnaire) to test whether the adapted YFHS-WHO+ questionnaire measured the construct as intended. The hypothesis is illustrated in the diagram (Figure 3.1).

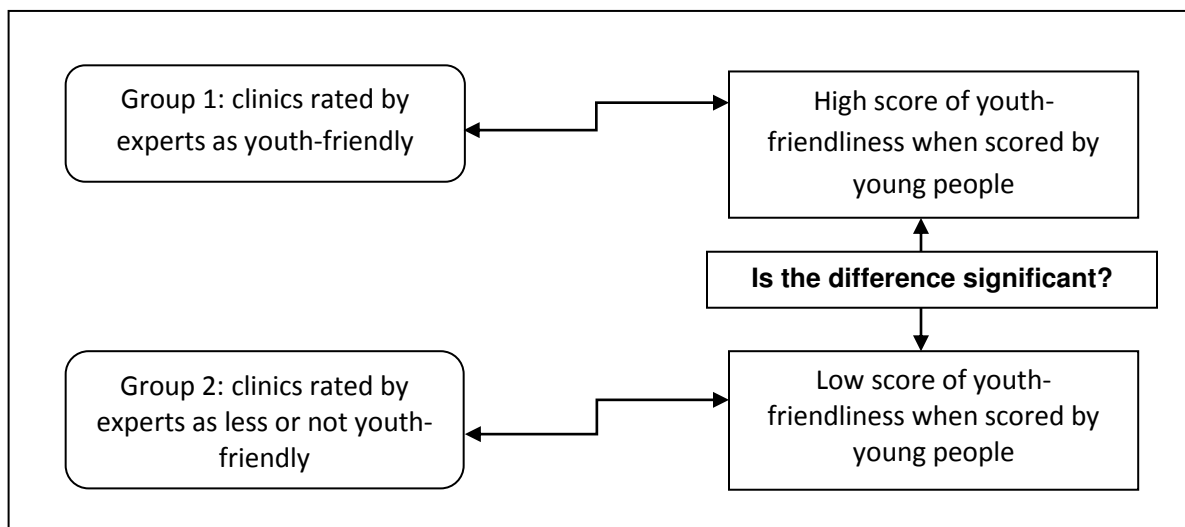


Figure 3.1: Illustration of study hypothesis

3.3.2 Study phases

The objectives were reached through three consecutive phases. These three phases are illustrated in Figure 3.2.

- Phase 1:** Expert evaluation of PHC services to establish a norm of youth-friendliness to test the hypothesis and therefore reach *objective 2*. Three experts were involved with the evaluation.
- Phase 2:** Preliminary review of the YFHS-WHO+ questionnaire for the initial adaptation to reach *objective 1*. The result is referred to as the Initial Adapted YFHS-WHO+ questionnaire (IA YFHS-WHO+ questionnaire). This phase involved a pre-test with youth and reviews for face validation by two experts.
- Phase 3:** Collecting the youths' responses to the IA YFHS-WHO+ questionnaire followed by a quantitative analysis of responses, item and reliability analyses for final adaptation to achieve *objectives 1 and 3*. The result is referred to as the Final Adapted YFHS-WHO+ questionnaire (FA YFHS-WHO+ questionnaire). The hypothesis for construct validity was tested in Phase 3 to reach *objective 2*.

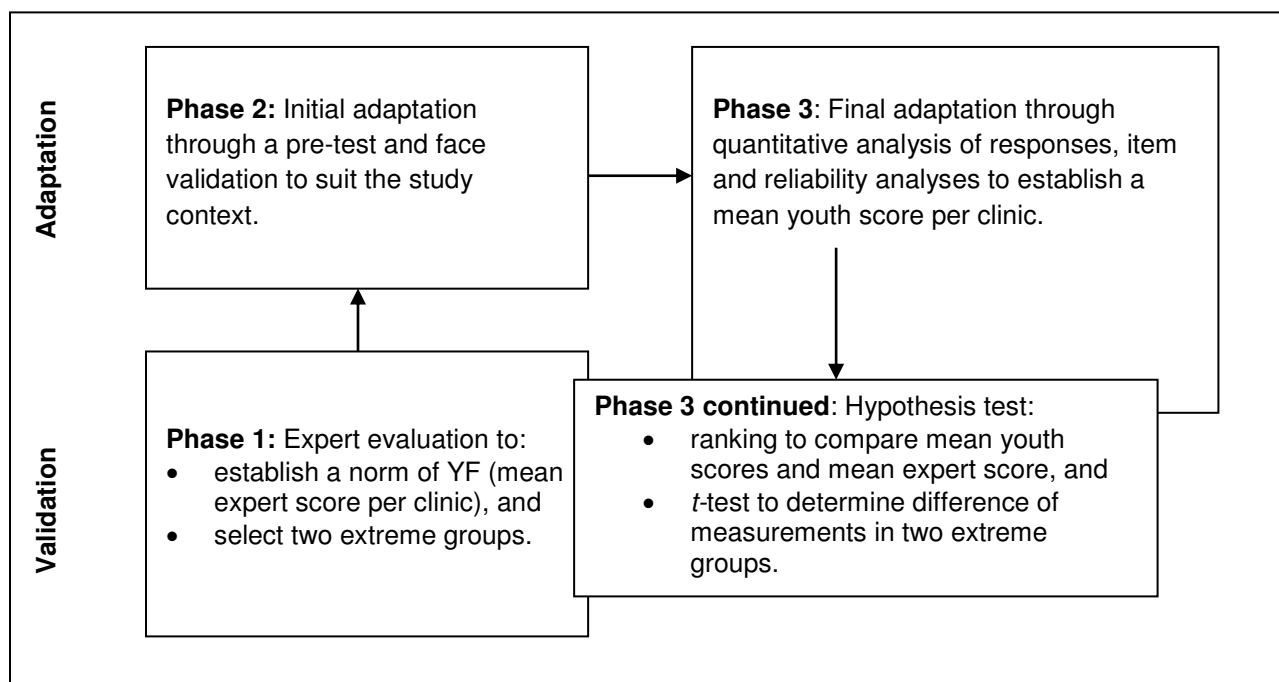


Figure 3.2: Flow diagram of study phases

3.3.2.1 Phase 1: Expert evaluation of PHC services

a) Introduction

Phase 1 aimed to identify two extreme groups of fixed public PHC clinics: “more youth-friendly” and “less or not youth-friendly”). Experts in YFHS and PHC services evaluated the clinics by means of interviews with key informants to establish a norm of youth-friendliness per clinic. The norm was used in phase 3 to test the hypothesis.

Three experts were identified through referral of their expertise in YFHS and PHC. Table 3.7 is a summary of their qualifications and expertise as provided by them. The expert information document and agreement between the principle investigator and expert is attached as Annexure 2. Each expert interviewed a similar number of key informants per clinic to prevent distortion of the data (for example, each expert interviewed three youths for a total sample size of nine youths).

Table 3.7: Qualifications and expertise of experts

Expert	Qualification	Expertise
Expert 1	<ul style="list-style-type: none"> • Bachelor of Nursing degree. • Honours degree in nursing education. • Master’s degree in community nursing. 	<ul style="list-style-type: none"> • Initiated community nursing training for nursing auxiliaries at a college for 4 years. • Lectured PHC at nursing school for 20 years. • Was Head of Department of PHC at a nursing college for 10 years.
Expert 2	<ul style="list-style-type: none"> • Diploma in general, community, psychiatric nursing and midwifery. • Diploma in advanced midwifery and neonatal nursing. • Degree in nursing education, administration and community nursing. • Master’s degree in community nursing. 	<ul style="list-style-type: none"> • Practised midwifery in a public hospital for 13 years. • Was a midwife in a maternity obstetric unit in a community healthcare clinic for 7 years.
Expert 3	<ul style="list-style-type: none"> • Bachelor of Nursing degree. • Master’s degree in community nursing. 	<ul style="list-style-type: none"> • Worked in PHC clinics for 9 years. • Lectured at a nursing college for 16 years. • Was a professional advisor for accreditation, registration, education and training at a nursing council for 8 years. • Was a clinic instructor for midwifery nursing students for 3 years.

b) Unit of analysis and study population

The unit of analysis referred to fixed public PHC clinics. The study population referred to the key informants (clinic staff and patients). Different categories of key informants were interviewed (refer to Table 3.7).

The eligibility criteria included any staff member or patient aged 18 years and above. The patients' referred to youths registered at the clinic as a patient and the 'staff' to personnel employed at the clinic. Key informants were excluded from this study if they presented with any condition that could affect their ability to consent to participate. Such conditions included any acute illnesses requiring immediate attention and severe mental disorders such as psychosis. The demographic characteristics of the key informants are presented in Table 4.1 in Chapter 4.

c) Sampling method and sample

Purposive sampling was used to select 10 fixed public PHC clinics to represent a range of youth-friendly services. A manager of the public PHC services identified the 10 clinics in the Tshwane District. Of these 10 clinics, she further identified the five which, in her view, were "more youth-friendly" and the five which were "less or not youth-friendly". The sample of 10 clinics represented approximately 17% of the clinics (fixed, provincial and municipal clinics) in the Tshwane District (City of Tshwane 2014:147).

Convenient sampling was used to select 12 to 19 key informants per clinic. The sampling of key informants was guided by the *WHO 2009 Quality Assessment guidebook: a guide to assessing health services for adolescent clients* (WHO 2009:14). The guidebook describes the guidelines for assessment of the youth-friendliness of health services. The sampling guidelines have been adjusted for this study to better suit the context and available resources (refer to Table 3.8).

Table 3.8: Guideline for sampling of key informants (adapted from WHO 2009:14)

Key informant category	Planned sample size per clinic	Rationale for sample size	Actual sample size per clinic: average and range
Facility manager	1	<ul style="list-style-type: none"> There is typically one (1) facility manager per clinic. 	1
Healthcare provider (referring to a professional nurse)	3	<ul style="list-style-type: none"> This study included less key informants than the number recommended by the WHO (2009:14) since most PHC clinics were short of nursing staff. 	<ul style="list-style-type: none"> Average: 2.9 per clinic Minimum: 2 Maximum: 3
Support staff	3	<ul style="list-style-type: none"> The WHO recommended three (3) (WHO 2009:14). At least one (1) receptionist was interviewed 	<ul style="list-style-type: none"> Average: 2.9 per clinic Minimum: 2 Maximum: 3
Youth patients (aged 18 –24)	9	<ul style="list-style-type: none"> This study included more youth patients than recommended by the WHO since it made the voice of youth stronger. This was especially good since the YFHS-WHO+ questionnaire measures the perception from the youth only. 	<ul style="list-style-type: none"> Average: 7.4 per clinic Minimum: 5 Maximum: 9
Other patients (older than 24 years)	3	<ul style="list-style-type: none"> The WHO (2009:14) recommends an interview with community members. For this study, patients older than 24 years served as representatives of the community members. 	<ul style="list-style-type: none"> Average: 2.8 per clinic Minimum: 2 Maximum: 3
Total	19		<ul style="list-style-type: none"> Minimum: 12 Maximum: 19

d) Instrument for data collection

An instrument named the ‘Expert evaluation instrument to identify more youth-friendly and less youth-friendly PHC services’ (refer to Annexure 3) was developed to guide the key informant interviews. Six separate interview guides were derived from this instrument because not all the items in the instrument were applicable to each key informant category (refer to Table 3.9). Each guide consisted of closed-ended questions which were direct translations of the WHO characteristics of youth-friendliness adapted from the WHO Quality Assessment Guidebook (WHO 2009:110-111). The interview guides were used to avoid bias and to allow for numerical scoring for the statistical *t*-test.

The youth patients (YP) had to answer every item since the adapted YFHS-WHO+ questionnaire which had to be validated, focused on the youths’ perception of whether they experienced the rendered healthcare services as youth-friendly or not. The facility manager (M) had to answer the items related to managerial issues such as policies and procedures and the

healthcare providers (HP) had to answer items regarding health service delivery. The support staff (SS) had to answer items regarding service delivery while other patients (OP) answered items regarding service delivery by healthcare providers and support staff and also commented on the involvement of community members in health service provision. Each expert also completed a guide for observation (GO) of the clinic facilities.

The interview guides are included as:

- Annexure 4.1. Guide to expert evaluation: Facility manager
- Annexure 4.2. Guide to expert evaluation: Healthcare providers
- Annexure 4.3. Guide to expert evaluation: Support staff
- Annexure 4.4. Guide to expert evaluation: Youth patients
- Annexure 4.5. Guide to expert evaluation: Other patients
- Annexure 4.6. Guide to expert evaluation: Observation.

Table 3.9: Focus of interview (items included in each interview guide)
(adapted from WHO 2009:10-11)

CHARACTERISTICS	M	HP	YP	OP	SS	GO
1. EQUITABLE: All young people, not just some groups, are able to obtain the health services that are available.						
1.1 Policies and procedures are in place that does not restrict the provision of services to young people.	X	X	X			
1.2 Healthcare providers treat all their youth patients with equal care and respect, regardless of status.		X	X	X		X
1.3 Support staff treats all youth patients with equal care and respect, regardless of status.			X	X	X	
2. ACCESSIBLE: Young people are able to obtain the health services that are available.						
2.1 Policies and procedures are in place to ensure that health services are either free or affordable to young people.	X		X		X	
2.2 Point of service delivery has convenient working hours for young people to attend.	X	X	X		X	
2.3 Young people are well-informed about the range of health services available and how to obtain them.	X	X	X		X	X
2.4 Community members understand the benefits that young people will gain by obtaining the health services they need, and support their provision.		X	X	X		

CHARACTERISTICS	M	HP	YP	OP	SS	GO
2.5 Some health services and health-related commodities are provided to young people in the community by selected community members, outreach workers, and youths themselves.	X	X	X	X		
3. ACCEPTABLE: Young people are willing to obtain the health services that are available to them.						
3.1 Policies and procedures are in place that guarantees client confidentiality.	X	X	X	X	X	X
3.2 Point of service delivery ensures privacy.	X	X	X			X
3.3 Healthcare providers are non-judgemental, considerate, and easy to relate to.			X	X	X	X
3.4 Point of service delivery ensures consultations occur in a short waiting time, with or without an appointment, and (where necessary) swift referral.	X	X	X		X	X
3.5 Point of service delivery has an appealing and clean environment.			X			X
3.6 Point of service delivery provides information and education through a variety of channels.	X	X	X			X
3.7 Young people are actively involved in the assessment and provision of health services.	X	X	X			
4. APPROPRIATE: The right health services (the ones they need) are provided to the youth.						
4.1 The required package of healthcare is provided to reflect and fulfil the individual needs of all youths either at the point of service delivery or through referral linkages.	X	X	X			
5. EFFECTIVE: The right health services are provided in the right way, and make a positive contribution to their health.						
5.1 Healthcare providers have the required competencies to work with the youth and to provide them with the required health services.	X	X	X			X
5.2 Healthcare providers use evidenced-based protocols and guidelines to provide health services.	X	X	X			
5.3 Healthcare providers are able to dedicate sufficient time to deal effectively with the youth as patients.	X	X	X			X
5.4 The point of service delivery has the required equipment, supplies, and basic services necessary to deliver the required health services.	X	X	X			X

Key: YP = youth patient (age 18 –24); OP= other patient (older than age 24); HP = healthcare provider (professional nurse); M = facility manager; SS = support staff (receptionist/clerk/cleaner/security guard); GO = observation

e) Data collection

The three experts independently evaluated the youth-friendliness of the 10 PHC clinics by means of face-to-face interviews with the key informants. Each key informant was provided with an information document and gave written consent (refer to Annexure 5). The key informants agreed with the question ('Yes'), disagreed ('No') or discussed their opinion. The expert captured the discussion in the comment box provided on the interview guide and used their expert knowledge to decide whether the informant's discussion agreed or disagreed with the question. 'Don't know' responses were allowed. Interviews were conducted in an area in the clinic in which the informants felt comfortable.

f) Data management and analysis

The 'Yes' (Y), 'No' (N) and 'Don't know' (D) responses on the key informant guides were transferred to the expert evaluation instrument to identify "more youth-friendly" and "less or not youth-friendly" PHC services (see Annexure 3).

Each 'Y' response was given the weight of one mark. The total score per instrument was computed by adding all 'Y' responses and dividing it by the total amount of responses ('N' + 'Y'). 'D' responses were not included in the final score. In this document, the total score is depicted as a percentage and the mean of the three total scores is the mean expert score per clinic and represents the norm of youth-friendliness (refer to Table 4.2 in Chapter 4).

The distribution of the scores of the 10 clinics was investigated. The analysis indicated the distribution was normal (see Table 4.3 in Chapter 4). In this document the mean value therefore represents the central tendency. The standard deviation (SD) indicates the average deviation of values from the mean (Field & Miles 2010:38). In this study, clinic scores lying outside one value from the mean (1 SD) were representative of the most and least youth-friendly clinics. The means and standard deviations of the 10 clinics are presented in Table 4.5 in Chapter 4.

The score of two clinics (Clinic L and Clinic A) was one value outside the mean in the positive direction while the score of two other clinics (Clinic B and Clinic S) was one value outside the mean in the negative direction. Two extreme groups were identified. According to the experts' observations, both Clinic L and Clinic A were aimed more towards providing youth-friendly services than Clinics B and S. The structural and functional organisations of these four clinics are described in Table 3.10.

Table 3.10 Structural and functional organisation of Clinics L, A, B, S

Clinic	Clinic operating hours	Average waiting time and queue system	Clinic environment	Number of consultation rooms Availability of a youth room	Services provided by the clinic	Number of nurses and doctors	Nurses trained in AYFS	Youth-friendly initiatives
Clinic L	<ul style="list-style-type: none"> Monday to Friday: 07:30 – 16:00 Saturday: 08:00 – 13:00 	<ul style="list-style-type: none"> 70 to 127 minutes. Well-organised queuing system. Sufficient space. Separate queue for registration, consultation and the pharmacy. 	<ul style="list-style-type: none"> Clean, spacious and appealing. Many applicable health information posters and pamphlets aimed towards the youth. 	<ul style="list-style-type: none"> 11 private consultation rooms. Dedicated youth room. 	<ul style="list-style-type: none"> All services prescribed in the Service Package except termination of pregnancy (TOP), baby deliveries and trauma services/ counselling. Referrals for such services. 	<ul style="list-style-type: none"> 8 nurses 1 permanent doctor 	<ul style="list-style-type: none"> 1 nurse trained in AYFS. Other nurses trained by this nurse. 	<ul style="list-style-type: none"> Many youth-friendly initiatives. Active involvement of peer youth educators.
Clinic A	<p>Monday to Friday: 07:30 – 16:00</p> <p>Saturdays: 07:30 – 13:30</p>	<ul style="list-style-type: none"> 140 min Organised queuing system. Limited space. Queuing outside when full. Combined queue for registration and consultation. No pharmacy queue (dispense medication during consultation). 	<ul style="list-style-type: none"> Clean but crowded. Appealing interior. Health information posters are applicable but not attractive. 	<ul style="list-style-type: none"> 6 private consultation rooms. Dedicated youth room. (However, often used for other purposes). 	<ul style="list-style-type: none"> All services prescribed in the Service Package except TOP, baby deliveries and trauma services/ counselling. Referrals for such services. 	<ul style="list-style-type: none"> 6 nurses 1 permanent doctor 	<ul style="list-style-type: none"> 5 nurses who are AYFS trained. 	<ul style="list-style-type: none"> Some youth-friendly initiatives.

Clinic	Clinic operating hours	Average waiting time and queue system	Clinic environment	Number of consultation rooms Availability of a youth room	Services provided by the clinic	Number of nurses and doctors	Nurses trained in AYFS	Youth-friendly initiatives
Clinic B	<ul style="list-style-type: none"> Monday to Friday: 07:00 – 16:00 Saturdays: 08:00 – 13:00 	<ul style="list-style-type: none"> 160 min Queuing system in place but appears disorganised. Mostly queuing outside the building. Separate queue for registration and consultation. No pharmacy queue. 	<ul style="list-style-type: none"> Different small buildings with limited space giving the impression of lack of structure. Not appealing. Few health information posters are applicable to the youth. 	<ul style="list-style-type: none"> 10 private consultation rooms. No dedicated youth room. 	<ul style="list-style-type: none"> All services prescribed in the Service Package except TOP, baby deliveries and trauma services/ counselling Referrals for such services. 	<ul style="list-style-type: none"> 16 nurses. 1 permanent doctor. 	<ul style="list-style-type: none"> 1 nurse trained in AYFS. 	<ul style="list-style-type: none"> No youth-friendly initiatives.
Clinic S	<ul style="list-style-type: none"> Monday to Friday: 07:30 – 17:00 Saturdays: 07:30– 13:30 	<ul style="list-style-type: none"> 172 minutes Organised queuing system. Queuing at reception, then in different buildings for consultation and back to first building for pharmacy. 	<ul style="list-style-type: none"> Narrow corridors, crowded waiting area. Two separate buildings, 200 metres apart. Few posters and not aimed at the youth. 	<ul style="list-style-type: none"> 17 private consultation rooms. No youth room. 	<ul style="list-style-type: none"> All services prescribed in the Service Package except TOP, baby deliveries and trauma services/ counselling. Referrals for such services. 	<ul style="list-style-type: none"> 14 nurses. 1 permanent doctor 	<ul style="list-style-type: none"> None of the nurses trained in AYFS. 	<ul style="list-style-type: none"> No youth-friendly initiatives.

g) Rigour of the research design

The rigour of the research design, methods and research instrument for Phase 1 is motivated in Table 3.11. A rigorous method is essential to convey trust in the expert score per clinic against which the validity of the adapted YFHS-WHO+ questionnaire was tested.

Table 3.11: Rigour of the research design: Phase 1

Element of the design		Measures to prevent error
Sampling and sample	<ul style="list-style-type: none"> Sampling of 10 clinics through expert referencing. 	<ul style="list-style-type: none"> A sample of 10 clinics was sufficient to determine the distribution thereof. Purposive sampling with support from a manager of the public PHC services who was involved to select a range of clinics to increased the probability for identifying two extreme groups.
	<ul style="list-style-type: none"> Sampling of key informants were guided by the WHO Quality Assessment Guidebook. 	<ul style="list-style-type: none"> The WHO guideline is a trusted reference.
Instrument for data collection	<ul style="list-style-type: none"> The use of an instrument instead of crude expert judgment. 	<ul style="list-style-type: none"> An instrument was used to prevent bias and ensure that all youth-friendly characteristics were assessed numerically.
	<ul style="list-style-type: none"> The instrument items was a direct translation of each of the WHO characteristics of youth-friendliness into a question. 	<ul style="list-style-type: none"> WHO characteristics of youth-friendliness are internationally acknowledged as descriptive of youth-friendly healthcare services. The characteristics were transformed into questions to be used in the evaluation of the clinics. The same characteristics were used by Dr Haller and her team to develop the existing YFHS-WHO+ questionnaire. The expert evaluation was thus done according to the same characteristics that had been used to develop the measure.
Data collection	<ul style="list-style-type: none"> Experts conducted the interviews. 	<ul style="list-style-type: none"> Expert knowledge of the PHC public clinic context was essential for interpretation of the key informants' responses.
	<ul style="list-style-type: none"> Three experts independently evaluated each clinic. 	<ul style="list-style-type: none"> Interrater reliability could be determined to establish the reliability of the evaluation (refer to Tables 4.2.1-4.2.3 in Chapter 4). Three experts were involved to allow for a trustworthy mean score.
Data analysis	<ul style="list-style-type: none"> Statistician was involved with data analysis. 	<ul style="list-style-type: none"> Use of statistical software package by statistician.

3.3.2.2 Phase 2: Initial YFHS-WHO+ questionnaire adaptation

a) Introduction

In Phase 2 the existing YFHS-WHO+ questionnaire was adapted to suit the context in the Tshwane District. Items had to be adapted to suit the context since the understanding of the

person who developed the questionnaire and that of the persons who responded to it could not be assumed to be the same (Polit & Beck 2012:307; Streiner & Norman 2008:108). Words also have different meanings in different contexts; therefore, some items on a questionnaire may be relevant in one context but not in another. Poorly understood items will result in incorrect responses and thus not provide a true measurement of the construct. In the current study, the understanding of items was explored through a pre-test. A pre-test is defined by Polit and Beck (2012:738) as “the trial administration of a newly developed instrument to identify problems”. The pre-test involved a review of items through group discussions (also referred to as GDs) with a sample of the target population. The outcome of the pre-test was rephrasing, and the inclusion and exclusion of items (refer to Table 3.12).

Table 3.12 Pre-test item adaptation

Outcome	Reason for adaptation
Rephrasing of an item	An item needed to be rephrased to be understood by the study population and to be relevant to the context (Streiner & Norman 2008:78). Existing words or phrases were changed or additional words or phrases were added.
Exclusion of an item	An item needed to be removed if it was irrelevant to the context and not essential to measure youth-friendliness (Streiner & Norman 2008:78).
Inclusion of an additional item	An item was added to ensure comprehensibility of the questionnaire (Polit & Beck 2012:356).

The questionnaire was also subjected to an evaluation by two experts to determine its face validity.

b) Unit of analysis and study population

The unit of analysis for the pre-test consisted of the four fixed public PHC clinics in the Tshwane District and the study population referred to the youth (18 to 24 years) who made use of these four clinics. Eligibility criteria were: a youth age had to be between 18 and 24 years; the youths had to be literate as it would be expected of them to read English and use it in conversation. Respondents were excluded if they had any condition affecting their ability to consent to participate in the study. This included any acute illnesses requiring immediate attention and severe mental disorders such as psychosis. It was important for the items to be pre-tested with young patients similar to those the adapted YFHS-WHO+ questionnaire was intended for (Streiner & Norman 2008:128). The findings of responses to the most informative demographic characteristics of the pre-test youth’s respondents are presented in section Table 4.6 in Chapter 4. The study population for the face validation of the questionnaire was experts in healthcare services for the youth.

c) Sampling method and sample

Four clinics in the Tshwane District were purposively selected. Each clinic had a suitable venue for group discussions which was attended by at least two youths at a given time. The inclusion of different cultural groups was envisaged. People from different cultures understand the meaning of questionnaire items differently. In general, the majority of patients at the selected clinics were from the Black African population. At the time of study a number of white patients were observed at Clinic E and some coloured patients were observed at Clinic L. Clinic S was selected to represent variety in the settings in the metropolitan Tshwane District context since it was situated in the urban core while the other clinics were situated in the suburbs.

Convenience sampling was used to select the youth respondents for pre-test group discussions. Each group discussion was held with between two to seven youths (depending on their availability) that were selected from the clinic they attended on that day. Group discussions were held until similar input had been obtained from two groups with regard to the rephrasing, inclusion or exclusion of each item on the questionnaire. Similar input from two groups were obtained for most items after six group discussions and the total sample size grew to 25 respondents across the four clinics (Polit & Beck 2012:276) (refer to Table 3.13 for information about the youth respondents sample).

Table 3.13 Group discussions and sample size per clinic

Clinic	Group discussion	Respondents per group discussion	Sample size per clinic
Clinic S	Group discussion 1	2	6
	Group discussion 2	4	
Clinic L	Group discussion 3	6	6
Clinic E	Group discussion 4	3	6
	Group discussion 6	3	
Clinic K	Group discussion 5	7	7
Total sample size:			25

Two experts in youth-friendly services and PHC evaluated the existing YFHS-WHO+ questionnaire for face validation. They were not the same experts used in Phase 1. Face validity is described as the process of reviewing an instrument to indicate on the face of it whether the instrument appears to be assessing the intended construct (Streiner & Norman 2008:6). The experts' review did not serve to make final decisions for adaptation, but only to support suggestions made by the youth during the pre-test and to indicate whether the items in the existing YFHS-WHO+ questionnaire were relevant to the context of PHC services in the

Tshwane District. Table 3.14 contains the qualifications and work experience of the experts recruited for face validation in Phase 2.

Table 3.14: Qualifications and work experience of experts recruited for face validation

Expert	Qualifications	Work experience
Expert 1	<ul style="list-style-type: none"> • Diploma in general nursing science, psychiatry, community nursing and midwifery. • Degree in nursing education and administration. • Diploma in project management. • Short course in adolescence and youth-friendly services. 	<ul style="list-style-type: none"> • Project manager for coordinating youth-friendly services for 9 years. • Project manager for coordinating implementation of quality services for sexual transmitted infections in PHC clinics for 2 years.
Expert 2	<ul style="list-style-type: none"> • Degree in general nursing science, psychiatry, community nursing and midwifery. • Degree in nursing administration and community nursing. • Diploma in nursing education. • Master's degree in community nursing. 	<ul style="list-style-type: none"> • Professional nurse in community mental health for 6 years. • Area manager supervising PHC clinics for 6 years. • Leadership position in developing youth and adolescent programmes (involved with NAFCI / YFS) for 4 years. • Youth services and illness prevention specialist for 7 years.

d) Description of existing YFHS-WHO+ questionnaire

The existing YFHS-WHO+ questionnaire (refer to Annexure 6.1) was developed by Dr DM Haller and her team from two instruments, namely the adolescent client interview tool from the WHO Assessment Guidebook (WHO 2009) and an Australian questionnaire that assesses youth-friendliness of PHC services (Haller et al 2012:423). The Australian questionnaire was included to incorporate items to measure the wider range of services provided in primary care (Haller et al 2012:423). This existing YFHS-WHO+ questionnaire which consists of 98 items was received from Dr Haller to support the current study. Ninety of the items were grouped within 10 subscales according to the original grouping of items (referring to accessibility, acceptability, equitability, appropriateness and effectiveness of health services) within the WHO quality assessment tool (Haller et al 2012:424-425). Eight items were not included in a subscale but remained individual items. A combination of the Likert- and nominal-scales was used. References to receptionists in clinics were replaced by relevant terminology and two items were merged leaving the questionnaire with 97 items (referred to as Section B). For the current study the researcher added 13 socio-demographic items (referred to as Section A). The existing YFHS-WHO+ questionnaire as received from Dr DM Haller was formatted on Excel. Section A and section B of the existing YFHS-WHO+ questionnaire for the use in the 2nd phase of this

study is attached as Annexure 6.2. The demographic items were also tested during a group discussion for its suitability.

e) Data collection

One group discussion was conducted per clinic per day. It took place in the morning as most young patients visited the clinics during the morning sessions. The respondents were approached as they waited for consultations. Respondents were asked to individually complete the existing YFHS-WHO+ questionnaire after they gave written informed consent (refer to Annexure 7 for the pre-test respondent information document and informed consent). Individual completion of the questionnaire before the group discussion commenced allowed the respondents to become familiar with the questionnaire and for double interviewing. Double interviewing occurs when respondents explain their responses after they have completed a questionnaire (Streiner & Norman 2008:128).

The youth respondents were provided with highlighters and pens to complete the questionnaire. They were asked to highlight the questions they did not understand or wanted to comment on. Youths were sampled from approximately an hour before the group interview. The group discussion was only started when at least two youths had finished completing their questionnaires. Because many out-of-school youths are mothers, respondents who had children with them were given toys for their children to play with.

The group discussions were facilitated by a researcher who holds a PhD and has a vast experience in qualitative data collection (referred to as the group facilitator). The researcher, who was present during the group discussions, provided support and took notes.

The steps followed during each group discussion are explained next.

Step 1: The group facilitator explained to the respondents the aim of the session was to ensure the items on the questionnaire (for which they were given sufficient time to study before the group session) were understood by them. Should there be items they did not understand after going through the questionnaire by themselves, it was during this session that they were given the opportunity to indicate which items were not understood and to help the researcher to rephrase it. It was also explained that not all items would be discussed during each group discussion, but the group would only discuss some

items as the discussions were limited to one hour only. Their permission was asked and obtained to audio record the discussions.

Step 2: The group facilitator read an item and then asked the respondents whether the item was clear and easy for them to understand. Examples of probing were: “Is it clear?”; “Is it fine?”; “Do you understand?”; “Are there confusing words?”. All respondents could follow the question on the questionnaire provided to them.

Step 3: At times the respondents discussed the items at length and other times they only indicated that the items were clear and easy to understand. The group facilitator used a flipchart to assist the groups during discussions of items they found confusing or not easily understandable and also during the rephrasing of such items. An example of a flipchart as a record of the processes followed during a group discussion is attached as Annexure 10. Figure 3.3 illustrates the flow of the group discussion decision making process.

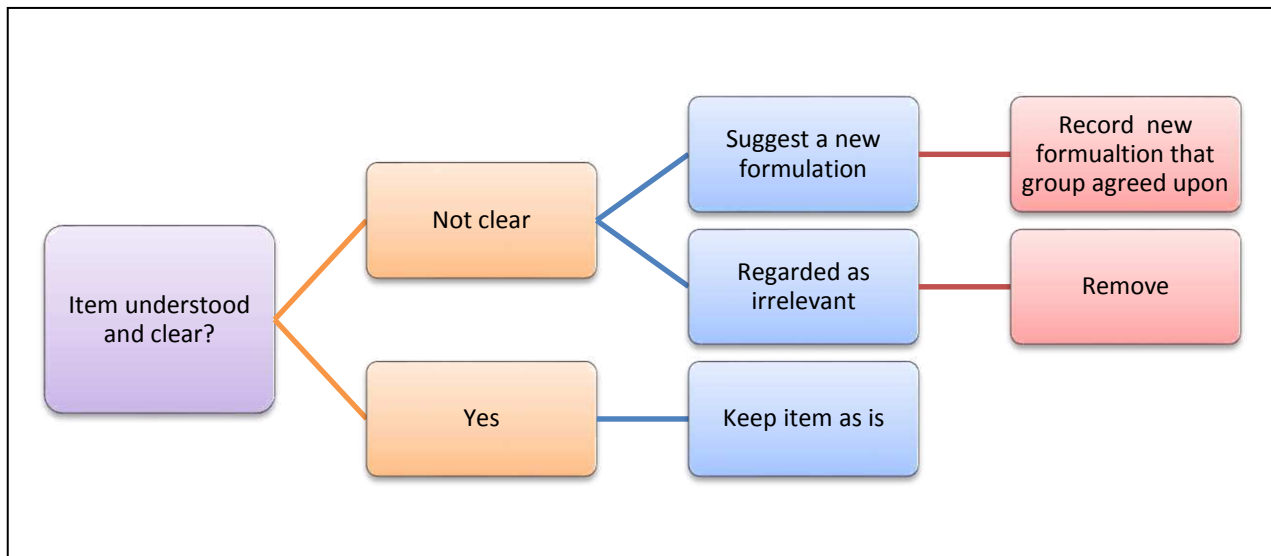


Figure 3.3 Flow diagram of the group discussion process (Step 3)

A combination of probing and rephrasing was used during the group discussions. Respondents were requested to rephrase items they did not understand while the group facilitator made use of probing questions, for example, “Which words are confusing?”; “Which words need to be replaced?” Streiner and Norman (2008:128) argue that probing and rephrasing is the best

technique to use when the concern is that respondents may not understand questionnaire items.

The meaning youth respondents attributed to items had to be similar to the expected meaning of the item as defined by the expert team who developed the existing YFHS-WHO+ questionnaire. This was to ensure that the items' meanings were not changed but rephrased when necessary for proper understanding. The expected meaning is provided in the 'Guide to the YFHS-WHO+ questionnaire' (refer to Annexure 8). The researcher checked that the meaning attributed by the youth during the group discussions remained similar to that provided by Dr Haller and her team in the guide to the YFHS-WHO+ questionnaire. The group facilitator was also orientated to the guide prior to data collection.

Each group discussed only a number of items because discussions consume a lot of time. Table 3.15 presents the items discussed during each group discussion. If two groups could not reach an agreement or similar conclusion on an item, the specific item(s) was/were discussed by the following group. Six group discussion sessions were conducted. Respondents were free to leave if they wanted to withdraw, but at least two respondents had to stay until the discussion had been completed.

To prevent bias, respondents involved in the pre-test were not allowed to participate in Phase 3 of the study during which data were collected from the youth for the final adaptation of the questionnaire.

Face validation reviews were collected from the two experts via e-mails. The existing YFHS-WHO+ questionnaire, an information leaflet and informed consent accompanied the e-mail (refer to Annexure 9). Each expert provided their subjective opinion of the relevance of items in the existing YFHS-WHO+ questionnaire at face value. Empirical evidence was not involved (Streiner & Norman 2008:6). The face validation reviews are presented in Table 4.7. A summary of the experts' general comments are given in section 4.3.2.3.

Table 3.15: Items discussed per group discussion (GD)

Items per subscale	Clinic S GD 1	Clinic S GD 2	Clinic L GD 3	Clinic E GD 4	Clinic K GD 5	Clinic E GD 6	Items for which two groups did not come to a similar conclusion
Biographic section							
Items 1 –14 (similar to items 28–39)	Items 1–14	Items 1–14	Items 1 –14	Items 1, 2, 5, 6, 9, 10, 11, 13 & 14	Items 2, 5, 6 & 9 (item 2 kept as is)	Items: 5, 6 & 9	Items : 5, 6 & 9 (item 6 was kept as is)
Items 15–23		Items 15 – 23	Items 15 –23	Items: 16, 18 & 19			
Items 24, 25, 26 & 27 (not in a subscale)		Items 24, 25, 26 & 27	Items 24, 25, 26 & 27	Items: 26 & 27			
Items 28 –39 Similar to items 1 – 14 therefore not repeated							
Items 40 – 59		Items 40 –59	Items 40 –59	Items 44, 45, 49, 50, 51, 53, 55 & 57 (items 50 & 55 were kept as is)	Items 44, 45, 51 & 53 (item 53 was kept as is)	Item 51	Item 51
Items 60– 63		Items 60 –63	Items 60 –63				
Items 64–69		Items 64 –69	Items 64 –69	Item 64, 67	Item 64	Item 64	Item 64
Items 70– 77			Items 70 –77	Items 70– 77			
Items 78– 84		Items 78–84	Items 78–84	Items 78, 80, 82 & 83	Items 82, 78 & 83	Items 78	Item 78
Items 89 – 97			Items 89 –97	Items 89 –97	Item 93	Item 93	Item 93
Not in a subscale: 85, 86, 87 & 88.			Items 85, 86, 87 & 88	Items 85, 86, 87 & 88	Items 85		

f) Data management

Each item discussed in the group discussions was kept as is or rephrased or removed. The changes the group agreed upon were recorded on a flipchart. Items that were kept as is were not recorded on the flipcharts. Images of the flipcharts are attached as Annexure 10. The data on the flipchart were captured by the researcher on an Excel spreadsheet. Codes were then assigned to each item to decide whether the item needed to be discussed in subsequent group discussions. The first coding was done after the third group discussion (refer to the thick pink line in Table 3.15) when every item had been discussed at least twice. Further decisions were made after each subsequent group discussion. Every decision was coded on the Excel spreadsheet as set out below.

Code 1: At least two of the group discussions had had to come to a similar conclusion. In the explanation of code number 1, the word ‘similar’ implied that the decisions were not necessarily the same, but had the same implication. It meant that a phrase, word or punctuation mark was changed in order to clarify the meaning or, as was most often the case, the item was clearly understood.

Code 2: The conclusions of the group discussions varied consistently. In cases where no two groups responded with a similar response, the code number assigned was 2.

g) Data analysis

In the case of code 1 the final formulation of an item was based on the consensus of at least two groups. As soon as two groups were found to have given a similar response (i.e. code 1) the item was not further discussed in any of the subsequent or remaining group discussions and the questionnaire was adapted accordingly. In case of code 2 items, the item was discussed in the following group discussion until a code 1 could be assigned. In cases where no consensus was reached until after the last discussion, a comprehensive review of the responses was conducted by the researcher to identify the most suitable formulation of the item. Some items were kept as is and literature was reviewed for items that presented no obvious solution. Items were added where the context required it for a comprehensive assessment of youth-friendliness.

The outcome of the pre-test resulted in the rephrasing of 27 items (refer to Table 4.7 in Chapter 4), the removal of 4 items (refer to Table 4.8 in Chapter 4), and the addition of 8 items (refer to

Table 4.9 in Chapter 4). Items that were rephrased were not removed. The response alternatives (on the Likert-scales) of the existing YFHS-WHO+ questionnaire were also reviewed by the pre-test respondents. Several changes were made (refer to Table 4.10 in Chapter 4). The Initial Adapted YFHS-WHO+ questionnaire (IA YFHS-WHO+ questionnaire) therefore consisted of 101 items. The pre-test also resulted in the creation of an eleventh subscale. The subscales and corresponding items of the IA YFHS-WHO+ questionnaire (refer to Annexure 11) are presented in Table 3.18.

h) Rigour of the research design

The rigour of the research design, methods and research instrument for Phase 2 are motivated in Table 3.16.

Table 3.16: Rigour of design: Phase 2

Element of the designs		Rigour
Sampling and sample	<ul style="list-style-type: none"> Purposive sampling of four clinics. 	<ul style="list-style-type: none"> To allow for variation of demographic characteristics.
Instrument for data collection	<ul style="list-style-type: none"> Data were collected through group discussions of items in the existing YFHS-WHO+ questionnaire 	<ul style="list-style-type: none"> The existing YFHS-WHO+ questionnaire has good content and face validity.
Data collection	<ul style="list-style-type: none"> The group facilitator is an expert at qualitative data collection. 	<ul style="list-style-type: none"> Experienced researcher who holds a PhD enhanced the rigour for the pre-test results.
	<ul style="list-style-type: none"> The formulation(s) the respondents suggested corresponded with the expected meaning of the item. 	<ul style="list-style-type: none"> To ensure that rephrased items measured the intended construct.
Data management and analysis	<ul style="list-style-type: none"> Multiple methods to record responses. 	<ul style="list-style-type: none"> Prevent error and subjective interpretation.
	<ul style="list-style-type: none"> Consensus by at least two groups was required for rephrasing, inclusion or exclusion of an item. 	<ul style="list-style-type: none"> Prevents bias.

3.3.2.3 Phase 3: Final adaptation of the IA YFHS-WHO+ questionnaire and hypothesis testing

a) Introduction

The IA YFHS-WHO+ questionnaire required further refinement (referred to as 'Final Adapted') because, due to its length, it was unlikely to capture the respondents' attention throughout (Streiner & Norman 2008:108). After the initial adaptation, the questionnaire was administered

to 102 respondents (referred to as the developmental sample). Quantitative analysis, reliability and item analysis formulas were applied to the data collected to remove items that were not effective to obtain sufficient amount of responses, redundant items (Polit & Beck 2012:360,362) and items that did not fit well within the subscale. Only the items that were most informative and reliable for measuring the construct were included in the Final Adapted (FA) YFHS-WHO+ questionnaire thereby optimising its psychometric properties. Phase 3 discusses the methodology for the collection of the youth's responses followed by a discussion of the method of analysis and the hypothesis testing.

b) Study population

This study population referred to youths who attended the public PHC clinics selected in Phase 1 (Clinic L, Clinic A, Clinic B and Clinic S). Eligibility criteria were youths from 18- to 24-years old who were able to converse in English. Respondents were excluded if they had any condition affecting their ability to consent such as acute illness requiring immediate attention or severe mental disorders. Also excluded were youths who visited the clinic for the first time. The demographic characteristics of the developmental sample are presented in Tables 4.11 – 4.15 in chapter 4.

c) Sampling method and sample

Convenient sampling was used to select respondents as they were readily available while waiting for a consultation. Each eligible respondent was asked to complete the IA YFHS-WHO+ questionnaire following informed consent (refer to Annexure 12). The number of returned questionnaires determined the sample size. At least 23 questionnaires were returned at each clinic (refer to Table 3.17). The total sample size was 102 and was regarded sufficient for item and reliability analysis (Streiner & Norman 2008:94).

Table 3.17 Sample size per clinic: Phase 3

Clinic	Youth respondents
Clinic L	25
Clinic A	23
Clinic B	26
Clinic S	28
Total	102

d) Description of the IA YFHS-WHO+ questionnaire

The IA YFHS-WHO+ questionnaire consisted of two sections. Section A measured the demographic characteristics of the respondents and section B measured youth-friendliness. Section A consisted of 13 items and section B of 101 items and 11 subscales. The subscales and corresponding items of the questionnaire are presented in Table 3.18.

Table 3.18: Subscales and items contained in IA YFHS-WHO+ questionnaire

Subscale	Items
Subscale 1: Access A	Items 1 – 14
Subscale 2: Access B	Items 15 – 23
Subscale 3: Access C	Items 25, 80 – 88
Subscale 4: Parental support	Items 26 – 31
Subscale 5: Community support	Items 32 – 37
Subscale 6: Equity A	Items 38 – 53
Subscale 7: Equity B	Items 54 – 56
Subscale 8: Respect	Items 58 – 64
Subscale 9: Privacy	Items 65 – 71
Subscale 10: No judgement	Items 72 – 79
Subscale 11: Quality	Items 93 – 101
Individual items not included in a subscale	Items 24, 89, 90, 91 & 92

e) Data collection

The researcher and a trained research assistant collected the data at each of the four clinics on different days. Following informed consent, the respondents were informed they had two options on how to complete the IA YFHS-WHO+ questionnaire, namely a face-to-face interview with the researcher (or research assistant) or by themselves (pen and paper). Most respondents preferred to complete the questionnaire by themselves. They were then requested to respond to each item by marking one of the alternatives. The researcher or research assistant was available to clarify questions. Most respondents had sufficient time to complete the questionnaire while they were waiting for a consultation. Those who did not complete it before their consultations completed it afterwards.

f) Data management and analysis for final adaptation

The respondents answered each item by marking one response alternative on the Likert-scale. The responses were coded on the paper questionnaire and the codes were captured on an Excel spreadsheet by an independent typist. Each questionnaire was given a code to maintain anonymity. Data capturing errors were corrected. A wild code (a code that was not possible) and missing values were corrected by referring back to the respondent's completed paper

questionnaire. If the item was not answered it remained a missing value. If two alternatives were marked per item, the rounded average of the two items was entered into the spreadsheet.

The frequency of responses was determined for each item in Section A (refer to section 4.4.2 in Chapter 4). The demographic characteristics of the respondents were essential to identify limitations for the generalisation of the findings (Polit & Beck 2012:250). The study findings of Section B were analysed statistically to obtain empirical evidence for final adaptation. It involved two steps.

Step 1: Quantitative analysis of responses

The frequency of responses was determined for each item across the 102 questionnaires. An item to which equal or more than 20% of respondents did not respond, was removed since it was not successful to obtain sufficient responses (refer to subsection 4.4.3 in Chapter 4) (Polit & Beck 2012:464).

Step 2: Item and reliability analyses

Item and reliability analyses assess whether items in a scale (in this study referred to as a subscale) belong together (Viswanathan 2005:18) since each subscale intends to measure the same underlying attribute of the construct. An item that correlates well with other items in the subscale can therefore be assumed informative and reliable (Polit & Beck 2012:362). Item and reliability analyses of responses provide empirical evidence of the performance of an item within a scale (Polit & Beck 2012:362).

Item analysis in this study refers to the evaluation of the inter-item correlation and correlation between the item and the total subscale score (item-total correlation) (Polit & Beck 2012:362). Item-total correlation was evaluated to ensure that the items did not only correlate with each other, but also measured the intended underlying attribute of the construct (Polit & Beck 2012:362).

Reliability analysis in this study refers to the evaluation of the proportion of variance in the scale responses that is attributable to the true score and is referred to as internal consistency (Polit & Beck 2012:367). The average of the variance is represented as coefficient alpha (also referred to as Cronbach's alpha) (Polit & Beck 2012:367; Streiner & Norman 2008:8,89). A satisfactory Cronbach's alpha of the subscale indicates that all the items measure the same underlying

attribute of the construct. Cronbach's alpha was calculated for each subscale and for the effect on the subscale when each item in the subscale was excluded (referred to as Cronbach's alpha if item deleted) (Polit & Beck 2012:375; Field & Miles 2010:587).

Cronbach's alpha was used as an overall indicator of internal consistency reliability to refine the questionnaire (Viswanathan 2005:18). The aim of adaptation was therefore to maximize Cronbach's alpha. All the findings of item and reliability analysis were however considered simultaneously to identify the most informative items since reliability should not be enhanced in expense of content validity (Viswanathan 2005:18). It was furthermore a combined process since the programme used for reliability analysis also provided item analysis diagnostics (Polit & Beck 2012:367). A summary of the findings that supported decision making for adaptation are presented for each subscale in section 4.4.3.2 in Chapter 4. The combined item and reliability analysis diagnostics and how it influenced decision making for adaptation are discussed in Table 3.19.

The Cronbach's alpha was determined per subscale prior to exclusion of items as well as thereafter. The process of item inclusion and exclusion is repeated until Cronbach's alpha is acceptable (Streiner & Norman 2008:97-98; Viswanathan 2005:25-27). Only one round was, however, required for this study to reach an acceptable Cronbach's alpha for each subscale with consideration of the contextual relevance of the items. A summary of the items included and excluded following item and reliability analysis are presented in Table 4.29 in Chapter 4. These items represent the FA YFHS-WHO+ questionnaire.

Responses to the items remaining in the FA YFHS-WHO+ questionnaire were used to determine the score per clinic for the purpose of hypothesis testing.

Table 3.19: Item and reliability analysis diagnostics applied to this study for final adaptation of IA YFHS-WHO+ questionnaire

Diagnostic	Rationale for exclusion of an item
Item mean and standard deviation (SD)	Each item's mean was determined with regard to the sum of the item responses divided by the number of responses. Items were regarded similar when the mean values of two items differed with ≤ 0.05 . The meaning had to be related. These similar items were redundant (Viswanathan 2005:19) and removed.
	Items with an extreme mean and small SD (≤ 0.5) were removed since it resulted in poor scale variance (Polit & Beck 2012:362; Viswanathan 2005:19). Small SD indicated that all responses are close to the mean (Field & Miles 2010:38). Extreme means refer to values close to the maximum or minimum (e.g. for a Likert-scale of 1-4, an extreme high mean would be close to 4). Extreme means were identified relative to means of the other items.
	Items with an extreme endorsement frequency (≥ 0.8) of a response alternative (e.g. alternative 1 "disagree" was selected by 80% of respondents) were removed since it indicates that the response could be predicted with 80% accuracy and such an item held little information about how a person actually responded. Endorsement frequency is a function of the difficulty of the item or can indicate that the item was not carefully read or is bizarre (Streiner & Norman 2008:84).
Inter-item correlations	Items were assumed to be effective and informative if it correlated with other items that measure the underlying attributes of the construct. An item with a poor inter-item correlation (≤ 0.275) was removed (but with consideration of all the other diagnostics) (Polit & Beck 2012:362; Streiner & Norman 2008:97).
Corrected item-total correlations	An item with a poor corrected item-total correlation was removed if ≤ 0.3 . Corrected item-total correlation determined the correlation between individual items and the entire scale by excluding the item from the total score (Polit & Beck 2012:362; Streiner & Norman 2008:87).
Reliability: internal consistency (Cronbach's alpha)	A subscale with a Cronbach's alpha ≥ 0.7 was regarded acceptable. An item was removed if removing it improved the Cronbach's alpha of the subscale. Items were added or removed until the Cronbach's alpha of the subscale was optimised (Gerrish & Lacey 2010:371; Streiner & Norman 2008:9,86) but again with consideration of the item's contextual relevance (Viswanathan 2005:18,26,77).

g) Data management and analysis for, hypothesis testing

Items were given an equal weight (of one). It was therefore assumed that all the items were equally important (Polit & Beck 2012:367). Items with positive responses (for example, response alternatives “definitely” and “probably”) were given a higher value of 4 or 5 (reflecting youth-friendliness). Items with negative responses (for example, “definitely not” and “probably not”) were given a lower value of 0 or 1 (reflecting less youth-friendliness). The responses for which a value of 1 reflected youth-friendliness were reversed to ensure that high scores consistently reflected positive responses.

The Likert-scales of items did not consistently have the same amount of response alternatives. The number of response alternatives per subscale is indicated in Table 3.20.

Table 3.20 Response alternatives per subscale of FA YFHS-WHO+ questionnaire

Subscale	Amount of items	Amount of response alternatives
1: Access A	10	4-point scale 4 = most youth-friendly
2: Access C	2	5-point scale 1 = most youth-friendly (<i>The score had to be reversed</i>)
3: Access: Parental/community support	6	4-point scale 4 = most youth-friendly
4: Equity A	9	4-point scale 4 = most youth-friendly
5: Equity B	2	Y (1)/N (2) scale [range 0-2] No (2) = most
6: Respect (acceptability)	5	5-point scale 5 = most youth-friendly
7: Privacy	5	Two different scales within one subscale: B66, B67: 5-point scale 5 = most youth-friendly
		B70 B71: 4-point scale 4 = most youth-friendly
8: No judgement	6	4-point scale 4 = most youth-friendly
9: Quality	5	4-point scale 4 = most youth-friendly
Individual items	1 (B24)	3-point scale 3 = most youth-friendly
	1 (B89)	4-point scale 4 = most youth-friendly
	1 (B90)	Y (1)/ N (0) [range 0-1] (Y) 1 = most youth-friendly
	1 (B91)	5-point scale 5 = most youth-friendly

The inconsistency in the scales required weighting of item scores to ensure that each item reflected its true contribution to the total score (Polit & Beck 2012:301; Streiner & Norman 2008:135). Each youth respondent had a total score for the questionnaire they had completed. The following weighting formula was applied to the scores of a respondent to the questionnaire:

$$\frac{[(\text{Average of items in the 4-point scale}) \times 7] + [(\text{Average of items in the 5-point scale}) \times 4] + [(\text{Average of items in the 3-point scale}) \times 1] + [(\text{Average of items in the 1-point scale}) \times 1] + [(\text{Average of items in the 0-point scale}) \times 1]}{(7+4+1+1+1)}$$

The final score for each clinic was the mean of the youths' total score per questionnaire. This final score per clinic is referred to as the 'mean youth score per clinic' that was used for the hypothesis testing.

The hypothesis was tested in two ways (ranking and a statistical *t*-test). The ranking of the mean expert score per clinic and the mean youth scores per clinic was compared to test the hypothesis that, when experts scored the clinic high regarding its youth friendliness, the youth also scored the clinic high, and when experts scored the clinic low regarding its youth friendliness, the youth also scored the clinic low. A comparison indicated that the FA YFHS-WHO+ questionnaire measured the construct as intended. The outcomes of the ranking indicated that Clinic L and Clinic A were the highest ranking group, and Clinic B and Clinic S were the lowest ranking group (refer to Table 4.31 in Chapter 4).

The statistical independent *t*-test was performed to provide empirical evidence in support of the hypothesis. Botma et al (2010:173) state "the *t*-test allows a researcher to determine the difference in group means". The significance of the difference between the combined mean youth scores of the two highest ranking clinics (Clinic L and Clinic A) and the combined mean youth scores of the two lowest ranking clinics (Clinic B and Clinic S) was determined. The result (refer to Table 4.34 in Chapter 4) indicated that the FA YFHS-WHO+ questionnaire was able to distinguish between two groups with contrasted representation of the construct (Streiner & Norman 2008:261).

The statistical software used for analysis was IBM SPSS statistic version 23.0.

h) Rigour of the research design

The rigour of the research design, methods and research instrument for Phase 3 is motivated in Table 3.21.

Table 3.21: Rigour of research design: Phase 3

Element of design		Rigour
Sampling method and sample	• Sample included only youths who had visited the clinic before.	• Respondents' perception was insightful.
	• Sample size of 102.	• Sufficient for item and reliability analysis.
Instrument for data collection	• The IA YFHS-WHO+ questionnaire was used in this phase.	• To allow for validation for further refinement and validation of the adapted questionnaire.
Data collection	• Sufficient time was provided for completion of the questionnaires.	• To improve the accuracy of responses.
	• The researcher or research assistant was available during data collection for clarification of items to the youth respondents.	• To improve the accuracy of responses.
Data analysis	• The method for item and reliability analysis is standard and well-motivated with literature sources.	• Analysis followed a rigorous design.

3.4 ETHICAL CONSIDERATIONS

This study protocol was approved by the Faculty of Health Sciences Research Ethics Committee of the University of Pretoria as well as the Tshwane/Metsweding Regional Research Ethics Committee. The letter of approval from the Faculty of Health Sciences Ethics Committee of the University of Pretoria is attached as Annexure 13. The letter of approval from the Tshwane/Metsweding Regional Research Ethics Committee is attached as Annexure 14. Permission from the participating PHC clinics was a prerequisite for approval from the Tshwane/Metsweding Regional Research Ethics Committee. The ethical and legal considerations for this study were founded on the principles of the *Belmont Report*: beneficence, respect for human dignity and justice. The principles are discussed as reviewed in Polit and Beck (2012:152-156).

Beneficence

The risks for harm imposed by the study was no more than the risk involved with daily life or a routine medical or psychological examination since the study was non-experimental and questions were not sensitive in nature. Items were impersonal and measured perception by

referring to youth attending the clinic in general. The researcher assistant was trained and the experts were orientated to perform the pre-study expert evaluations. Data collection was stopped whenever a respondent indicated he or she wanted to withdraw, had to leave for his or her appointment or if a respondent became distressed by the content of the items. The researcher-respondent relationship was protected and free from exploitation since the researcher/assistant explained that she or he had no connections to the primary healthcare service involved. The respondents' responses in no way affected her or his ability to attend this primary healthcare service. Information provided by respondents was kept confidential and its use was not harmful to them in any way.

Respect for human dignity

Participation in the study was voluntary and the respondents had the opportunity to refuse participation or withdraw from the study at any time. All respondents provided written consent after full disclosure of the purpose and nature of the study, the risks and benefits involved, and the procedure that was to be followed. The respondents were provided with an information leaflet (refer to Annexures 5, 7, 12). The researcher honoured agreements as stated in the information leaflet and the respondents were allowed to ask questions for clarification at any time.

Justice

Respondents were treated with respect regarding social, cultural and religious beliefs and were not judged or discriminated against. The respondents' personal information was kept in strict confidence. In particular, the healthcare providers in the primary care service did not have access to the questionnaire. The individual interviews were not recorded and permission from the respondents was obtained to audio record the group interviews.

3.4 CONCLUSION

The third chapter of this study discussed the methodology to adapt an existing measure of the youth-friendliness of healthcare services (the existing YFHS-WHO+ questionnaire) to suit the context of the youth (aged 18 to 24) attending public PHC services in the Tshwane District. This existing questionnaire consisted of 97 items and had evidence of face and content validity. Validity of a measure is context-specific and further adaptation was required before it could be used for research purposes in the context of the Tshwane District. The study involved three

phases to adapt the existing questionnaire and to determine the validity of the adapted questionnaire. The three phases are as follows:

Phase 1: Expert evaluation of the youth-friendliness of clinics. Four clinics were identified that represented clinics with the most extreme rating of youth-friendliness. The mean of the expert scores per clinic was regarded as the norm of youth-friendliness against which the youth scores of the clinic could be compared for hypothesis testing.

Phase 2: Initial adaptation that involved a pre-test. The pre-test entailed discussion of the questionnaire in six groups comprising 2 to 7 youths each. Sections of the questionnaire were discussed during each group discussion until at least two groups agreed on a new formulation, inclusion or exclusion of an item. The YFHS-WHO+ questionnaire was adapted to consist of 101 items. This IA YFHS-WHO+ questionnaire was then administered to a development sample of 102 youths.

Phase 3: The final adaptation involved evaluation of the responses to the IA YFHS-WHO+ questionnaire. The final adaptation involved two steps: a quantitative analysis of responses and a combined item and reliability analysis. One item was removed that was not answered by more than 20% of respondents. The item and reliability analysis resulted in a FA YFHS-WHO+ questionnaire with 57 items and the hypothesis to construct validity was supported.

CHAPTER 4

DISCUSSION OF FINDINGS

4.1 INTRODUCTION

In this chapter the findings for the adaptation and validation of the existing YFHS-WHO+ questionnaire are presented. In the previous chapter the research methodology was presented and discussed in detail. Data analysis was carried out by using the IBM SPSS statistic program version 23.0.

4.2 PHASE 1

4.2.1 Introduction

Phase 1 presents the finding of the three experts' evaluation of the 10 selected fixed public PHC clinics. The demographic characteristics of the key informants interviewed during evaluations are also presented. This phase concludes with a presentation of the mean expert scores of the clinics within the two extreme groups that were used in a later phase to test the hypothesis.

4.2.2 Study findings

4.2.2.1 *Demographic characteristics of the key informants*

The size of the key informant sample across the four clinics (number of respondents) as well as the mean age, gender distribution, and population group distribution are presented per key informant category in Table 4.1.

Table 4.1: Demographic characteristics of key informants

Key informant category	Number of respondents (n)	Characteristic
Healthcare provider (professional nurse)	(n=29)	Mean age: 43.68 years
		Gender: <ul style="list-style-type: none"> • Male: 0.00% • Female: 100.00%
		Population group: <ul style="list-style-type: none"> • Black African: 100.00%
Support staff	(n=29)	Mean age: 40.63 years
		Gender: <ul style="list-style-type: none"> • Male: 10.30% • Female: 89.70%
		Population group: <ul style="list-style-type: none"> • Black African : 100%
Youth patient	(n=74)	Mean age: 21.22 years
		Gender: <ul style="list-style-type: none"> • Male: 12.50% • Female: 87.50%
		Population group: <ul style="list-style-type: none"> • Black African: 94.28% • Coloured: 2.70% • Indian or Asian: 1.35% • White: 1.35%
Other patient	(n=29)	Mean age: 31.83 years
		Gender: <ul style="list-style-type: none"> • Male: 7.10% • Female: 92.90%
		Population group: <ul style="list-style-type: none"> • Black African: 93.10% • Coloured: 3.40% • White: 3.40%

The majority of key informants were female and Black African. In StatsSA (2012b:10) the majority of the Tshwane District population is indicated as Black African (75,9%) followed by White (20,2%), the Coloured population (2,0%) and then the Indian or Asian population (1,9%) (StatsSA 2012b:10).

The majority representation of females is understandable because the staff were mostly female. Nursing is a female dominated profession and most patients were female possibly because many PHC services are more female-orientated (antenatal care, family planning, immunisation and so forth) (Nteta et al 2010:6). A study on the health seeking behaviour of males in Gauteng found that males perceive public clinics to be a place for females for two reasons: by far the majority of patients in the waiting room are usually females and, secondly, the nurses or healthcare providers are mainly female (Leichliter et al 2011:84). Ot wombe et al (2015:7) argue

that disparity in utilisation of healthcare services by adolescents in South Africa is related to initiation of sexual activity even though several studies conducted in Africa found that more females seek healthcare than males.

There is approximately a 20-year difference between the mean age of the youth patients (21.22 years) and the mean age of the healthcare providers (43.68 years) as well as the support staff (40.63 years). The “Other patient” category represents more young than older people because the average age was 31.83 years. The majority of the key informants (n=103) were therefore below the age of 35; they therefore had a stronger voice in the norm of youth-friendliness established through the expert evaluations.

4.2.2.2 Expert evaluation scores

Each clinic was evaluated by three experts. The average of the three experts’ scores of each clinic represented the norm of youth-friendliness that was used to test the hypothesis. Table 4.2 presents the number of ‘Y’ and ‘N’ responses, the expert score and the mean expert score per clinic. Figure 4.1 illustrates the experts’ scores per clinic. The response per key informant category for each expert is attached as Annexure 15.

Table 4.2 Experts’ scores per clinic

Clinic	Response	Expert 1	Expert 2	Expert 3	Mean expert score
L	Y	101	82	85	
	N	6	11	6	
	Y+N	107	93	91	
	Expert score	101/107=94.39%	82/93 =88.17%	93.40%	
A	Y	87	99	63	
	N	6	12	5	
	Y+N	93	111	68	
	Expert score	87/93= 93.54%	99/111= 89.18%	63/68= 92.64%	
E	Y	80	94	67	
	N	8	16	15	
	Y+N	88	110	82	
	Expert score	80/88= 90.90%	94/110= 85.45%	67/82= 81.70%	
T	Y	67	66	78	
	N	4	16	16	
	Y+N	71	82	94	
	Expert score	67/71= 94.36%	66/16= 80.48%	78/94= 82.97%	
H	Y	98	100	76	
	N	15	12	26	
	Y+N	113	112	102	
	Expert score	98/113= 86.72%	100/112= 89.28%	76/102= 74.50%	

Clinic	Response	Expert 1	Expert 2	Expert 3	Mean expert score
R	Y	76	89	78	82.73%
	N	12	20	17	
	Y+N	90	109	95	
	Expert score	76/90= 84.44%	89/109= 81.65%	78/95= 82.10%	
P	Y	100	71	59	81.16%
	N	13	22	16	
	Y+N	113	93	75	
	Expert score	100/113= 88.49%	71/93= 76.34%	59/75= 78.66%	
K	Y	102	48	87	77.97%
	N	11	32	17	
	Y+N	113	80	104	
	Expert score	102/113= 90.26%	48/80= 60.00%	87/104= 83.65%	
B	Y	85	78	86	76.59%
	N	23	27	26	
	Y+N	108	105	112	
	Expert score	85/108= 78.70%	78/105= 74.28%	86/112= 76.78%	
S	Y	87	69	74	76.10%
	N	22	21	29	
	Y+N	109	90	103	
	Expert score	87/22= 79.81%	69/90= 76.66%	74/103= 71.84%	

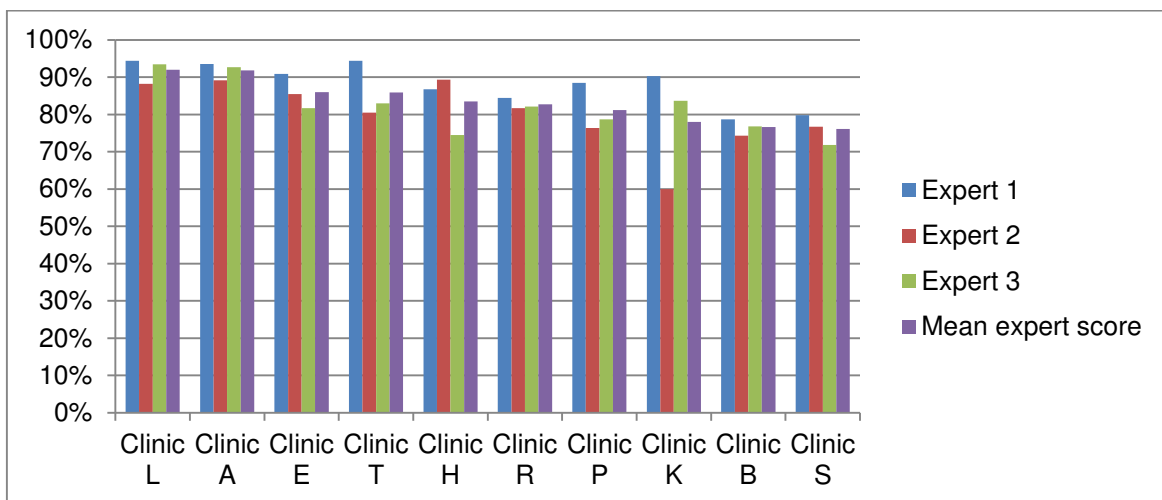


Figure 4.1: Experts' scores per clinic

The mean expert scores ranged from 91.99% (Clinic L) to 76.10% (Clinic S). The scores of the 10 clinics were proximate to each and all above 76.10% since the key informants tended to answer positive ('Yes') on the 'Yes' or 'No' dichotomous scale (Polit & Beck 2012:312; Streiner & Norman 2008:118). The staff might have responded more positively as they were evaluated on the quality of their work and patients might not have been content with the circumstances not having experienced better or worse circumstances. The proximity of the scores might also have been a failure of the instrument to distinguish between "more" and "less or not youth-friendly"

clinics or the clinics did not differ significantly regarding youth-friendliness since all were public PHC clinics experiencing similar burdens preventing implementation of YFHS.

Two extreme groups were, however, identified despite this proximity (refer to Table 4.5) and interrater reliability did exist between the expert evaluation scores. Interrater reliability refers to the strength of the relationship between the experts' scores and was determined to identify inconsistencies and potential problems with an expert's evaluations or score (Polit & Beck 2012:334; Streiner & Norman 2008:8). The interrater reliability was described in this study by an Intraclass Correlation Coefficient (ICC) (Streiner & Norman 2008:177). An ICC describes the relationship of the multiple evaluations (for example, Clinic L, Clinic A, Clinic B and Clinic S) of the same variable (youth-friendliness) between two or more observers (the experts) (Streiner & Norman 2008:177,181). An ICC of 1 represents perfect agreement between observers and 0 represents only random agreement (Hallgren 2012:11). The ICC over the three experts' evaluations was 0.514. An ICC of 0.40 - 0.59 is regarded as fair (Hallgren 2012:11).

The relationships (averaged correlation) between the experts' scores of a clinic (norms) were depicted on scatterplot graphs in Figure 4.2.1, Figure 4.2.2 and Figure 4.2.3. A strong correlation was supported when the 'dot' (averaged correlation) was close to the line of 'perfect correlation' (the 45° straight line that goes through zero) (Streiner & Norman 2008:183). Perfect correlation would be if two experts scored a clinic the same. When the correlation between two experts' scores was poor (for example, expert 1 scored high but expert 3 scored low), it was depicted as an outlier distant from the 'perfect correlation' line and signified inconsistency and a possible problem with the score. Systemic variance between experts (if expert 1 always scored higher than expert 2 and expert 3 and so forth) could also be observed from the graphs by looking at the position above or below the line of 'perfect correlation'. Each graph presents the observations of all 10 clinics.

Figure 4.2.1 depicts good correlations between the scores of expert 1 and expert 2 except for one outlier. This outlier presents the scores for Clinic K. Clinic K was scored 90.26% by expert 1 and 60.00% by expert 2. The youth key informants scored Clinic K low at 45.00% (18 'Y' responses divided by a total of 40 responses) (refer to Annexure 16). The correlations between the scores of expert 1 and expert 3 were less consistent although no outliers were depicted (Figure 4.2.2). Expert 1 generally scored higher than expert 2 and expert 3 because the 'dots' are mostly above the line (refer to Figure 4.2.1 and Figure 4.2.2). Figure 4.2.3 depicts good correlations between the scores of expert 2 and expert 3 except for Clinic K (visible on the

horizontal axis). Independent expert evaluations were therefore fairly reliable since experts found similar results except for Clinic K. Clinic K was not identified as a clinic in the extreme groups.

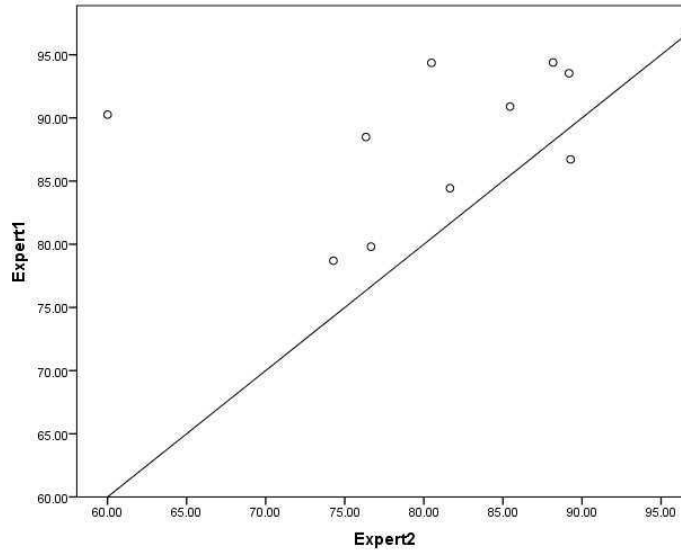


Figure 4.2.1: Averaged correlations between scores of expert 1 and expert 2

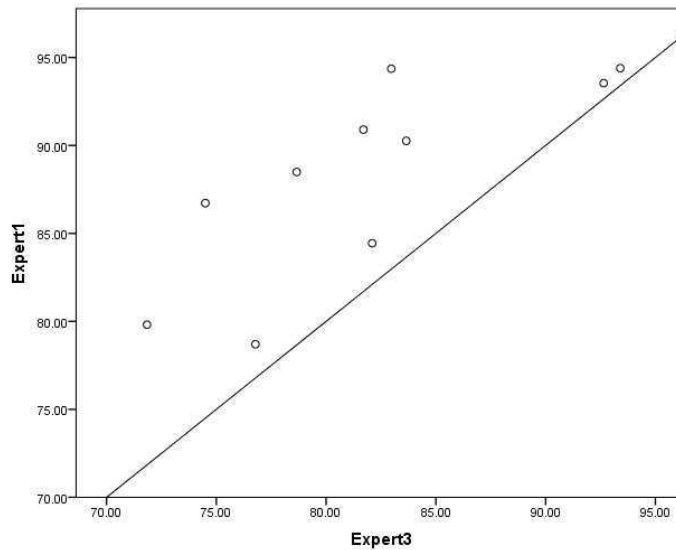


Figure 4.2.2: Averaged correlations between scores of expert 1 and expert 3

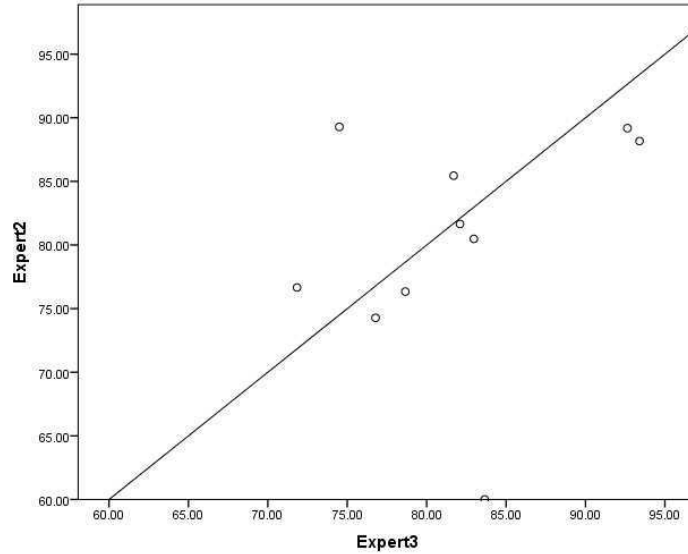


Figure 4.2.3: Averaged correlations between scores of expert 2 and expert 3

4.2.3 Analysis

The analysis aimed at identifying two groups of clinics with the most extreme scores of youth-friendliness (“most youth-friendly” and “less or not youth-friendly”). The distribution of the ten clinics’ norms (the mean expert score per clinic) was therefore investigated. The normality of the distribution was supported by the Shapiro-Wilk test with the Pr value of 0.42 less than the W value of 0.92 (refer to Table 4.3) (Field & Miles 2010:27). The mean and SD of the normal distribution were described to determine which clinics had the highest and lowest scores.

Table 4.4 presents the mean and SD of the distribution. Criteria for inclusion of clinics were clinics with mean expert scores (presented as standardised norms) lying outside one SD from the mean (therefore, clinics with mean experts scores more than 5.69% above or below 83.38%).

Table 4.5 presents the expert mean scores (norms) and the standardised norm of each clinic. Negative standardised norms lying outside one SD from the mean indicate clinics less representative of youth-friendly services (Clinic S: -1.27 and Clinic B: -1.19) and positive standardised norms lying one value from the mean indicate clinics more representative of youth-friendly services (Clinic L: 1.51 and Clinic A: 1.47).

Table 4.3: Shapiro-Wilk test for normality of distribution

Statistic		p Value	
W	0.92	Pr < W	0.42

Table 4.4: Mean and SD of 10 clinics

Mean	Standard Deviation
83.38%	5.69

Table 4.5: Expert mean scores (norms) and standardised norms of 10 clinics

Clinic	Mean expert score (norm)	Standardised norm/score
L	91.99%	1.51
A	91.79%	1.47
E	86.02%	0.46
T	85.94%	0.44
H	83.50%	0.02
R	82.73%	-0.11
P	81.16%	-0.38
K	77.97%	-0.94
B	76.59%	-1.19
S	76.10%	-1.27

4.2.4 Sub-conclusion

The analysis of the distribution indicated that Clinic L (1.51) and Clinic A (1.47) represented the extreme group with higher youth-friendly scores while Clinic B (-1.19) and Clinic S (-1.27) the extreme group with lower percentages of youth-friendliness. Two extreme groups were therefore identified to test the hypothesis.

4.3 PHASE 2

4.3.1 Introduction

Phase 2 presents the outcomes of the pre-test group discussions and face validation reviews for Initial Adaption (IA) of the YFHS-WHO+ questionnaire. The demographic characteristics of the pre-test youth respondents are also discussed. The phase concludes with the presentation of the amount and type of changes to the existing YFHS-WHO+ questionnaire for initial adaptation (IA). Statistical analysis was not involved in this phase.

4.3.2 Study findings

4.3.2.1 Demographic characteristics of the pre-test youth respondents

The IA aimed to adapt the items of the YFHS-WHO+ questionnaire to be clear and relevant and therefore correctly understood by the youth (18-24 years) attending public PHC clinics in the Tshwane District (referred to as the target population). Table 4.6 presents the demographic characteristics of the sample youth respondents.

Table 4.6: Demographic characteristics of pre-test youth respondents

Demographic characteristic	Number of respondents (n)	Response alternative	Percentage (%)
Age	(n=25)	18 years	4.00
		19 years	4.00
		20 years	16.00
		21 years	4.00
		22 years	32.00
		23 years	40.00
Gender	(n=25)	Female	84.00
		Male	16.00
Population group	(n=25)	Black African	96.00
		Coloured	4.00
		White	0.00
		Indian or Asian	0.00
First language	(n=23)	Sepedi	34.80
		English	17.40
		Setswana	13.00
		IsiXhosa	8.70
		Tshivenda	8.70
		IsiNdebele	8.70
		Xitsonga	4.30
		siSwati	4.30
		Afrikaans	0.00
		IsiZulu	0.00
		Sesotho	0.00
		Level of education	(n=25)
Some secondary schooling	16.00		
Grade 12	36.00		
Higher than grade 12 (example: diploma)	40.00		
Other	4.00		
Employment status	(n=25)	University/college	48.00
		Secondary school	16.00
		Employed	24.00
		Unemployed	16.00
Prior attendance of the clinic	(n=25)	Yes	84.00
		No	16.00

Demographic characteristic	Number of respondents (n)	Response alternative	Percentage (%)
Most recent visit to the clinic	(n=22)	Less than 3 months or 3 months ago	27.30
		More than 3 months ago	27.30
		Approximately 1 year ago	13.60
		Approximately 2 years ago	0.00
		More than 2 years ago	9.10
		Other	22.70

The majority of the youth respondents were 23 years of age (40%; n=10) and the mean age was 21.75 years. Representation of the younger youth (aged 18-21 years) was approximately one third of the total number of pre-test respondents.

The majority of respondents was female (84%; n=21). In this study the initial adaptation of the YFHS-WHO+ questionnaire was therefore mostly according to the perception of the female youth. The gender distribution of youth (age 20-24) in the Tshwane District is approximately equal (StatsSA2012b:10) but more females attend public PHC clinics. A discussion of this gender disparity is presented under section 4.2.2.1.

Sampling aimed to include respondents from different cultural groups (population groups) to represent the variety of the Tshwane District population. The White and Indian or Asian population groups were, however, not presented in the pre-test sample, but the Coloured population was represented by only 1 respondent (4%). The majority of respondents were Black African (96%; n=24). This reflects the population group distribution of Tshwane District (StatsSA 2012b:37) where the Black African population is in the majority.

The majority (34.8%; n=8) of the respondents spoke Sepedi as their first language. The first language represents the language that they are most familiar with (mother tongue or home language). According to the census of 2011, Sepedi is the language most commonly spoken in the Tshwane District followed by Afrikaans, Setswana, Xitsongo, English, isiZulu, isiNdebele, Sesotho, and a small percentage of other languages (StatsSA 2010/2011:n.p.). English was the first language of 4 respondents (17.4%). Afrikaans, isiZulu and Sesotho were not spoken by any of the respondents as their first language.

More respondents were employed than unemployed (36%; n=9). However, this item was not a true reflection since employment status is not mutually exclusive from school or university attendance. The item was therefore changed before administration of the questionnaire to respondents in Phase 3. The demographic item indicated that most respondents had secondary

schooling or higher (40%; n=10). One respondent (4%; n=1) did not receive any formal schooling and 4 respondents (16%) received some secondary schooling. These respondents could however use English in conversation as it was an inclusion criteria. The majority of respondents therefore had reading skills and could reason their understanding of the item. The majority of respondents attended the clinic within the year prior to the pre-test.

4.3.2.2 Initial questionnaire adaptation (items rephrased, removed or added)

The outcome of the pre-test group discussions is presented in the section that follows. The respondents of each group discussion reached consensus to keep an item as is, rephrase, include or exclude the item. Table 4.7 presents the items that were rephrased; Table 4.8 presents the items that were removed and Table 4.9 presents the items that were included (added). Changes to the response alternatives are presented in Table 4.10. The amount of group discussions until consensus was reached is indicated in Table 4.7 and Table 4.8. A code 1 was assigned when at least two groups came to a similar conclusion (consensus) and a code 2 was assigned when no two groups came to a similar conclusion up until after the last group discussion.

Experts for face validation did not comment on each item. Their review of some individual items is shown in Table 4.7 and general comments are provided under section 4.2.1.2.

Table 4.7: Items rephrased

Item*	Words / items rephrased	Amount of group discussions (GDs) before consensus	Comments	Face validation review
1	Rephrase “acne” to “skin problems (such as pimples)”. “Fatigue” to “tiredness”.	Code 1 was assigned after 4 GDs.	Respondents also debated the word “fever” but reached consensus to keep “fever” as is.	Comment: Add “vaginal or penile discharge” to the list of physical concerns.
5	Rephrased by adding “prevention of pregnancy” after “contraception”.	Remained code 2 until after the last GD.	Some respondents did not have the correct understanding. Some understood contraception as the prevention of HIV/Aids. They also suggested “family planning”.	

Item*	Words / items rephrased	Amount of GDs before consensus	Comments	Face validation review
9	Rephrase by adding “(dagga)” after “marijuana”. Added “nyaope”.	Remained code 2 until after the last GD.	Nyaope (combination of cannabis, heroin and cutting agents) is one of the most commonly abused drugs among the youth in Tshwane District (Moodley et al 2012:4).	Comment: Add examples of drugs such as “dagga”, “nyaope”.
11	Rephrased “concerns” to “problems”. Add “/college” after “university”.	Code 1 was assigned after 3 GDs.	Tertiary education in South Africa can be obtained from many institutions such as universities, colleges, schools etch.	
13	Rephrased “anxious” to “nervous”.	Code 1 was assigned after 4 GDs.		
14	Rephrased “being violent yourself” to “being a violent person”.	Code 1 was assigned after 4 GDs.		Comment: Rephrased to ‘ “being a victim of any kind of violence”.
16	Rephrased “association” to “group”.	Code 1 was assigned after 3 GDs.		
18	Rephrase by adding “/pamphlets” after “flyers”.	Code 1 was assigned after 3 GDs.		
19	Rephrase by adding “newspapers”.	Code 1 was assigned after 3 GDs.		
26	Rephrase “inconvenient” to “not suitable”.	Code 1 was assigned after 3 GDs.		
27	Rephrase “appointments” to “service”.	Code 1 was assigned after 3 GDs.	Consultations at public PHC clinics are not according to appointments but the first who arrive is helped first. There are queues.	
Items 28, 31, 32, 32, 35, 36	Reformulation similar to changes made for items 1-14.			
44	Rephrase “ethnic origin” to “cultural background”.	Code 1 was assigned after 4 GDs.		

Item*	Words / items rephrased	Amount of GDs before consensus	Comments	Face validation review
45	Rephrase "(from the countryside" to "(where they come from: rural or urban".	Code 1 was assigned after 4 GDs.	Countryside is not a familiar word in South Africa but rather rural – defined as an area with low population density with mostly agricultural activities.	
49	Rephrase by adding“(with or without children)” after “married”.	Code 1 was assigned after 3 GDs.		Comment: Rephrase “because of their marital status such as not married or unmarried”.
51	Rephrase “hearing impairment” to “hearing problem”. Add “blindness or physical disability”.	Remained code 2 until after the last GD.	Respondents debated the addition of examples such as “blindness, physical disability, slow learner, not able to speak” since many disabilities exist among the youth.	
54	Rephrase by removing “or delinquent”.	Code 1 was assigned after 2 GDs.	The word was regarded too difficult.	
55	Rephrased “prostitution activities” to “sex workers”.	Changed by researcher as per reviewing of literature.	The term “prostitution” has a negative connection and may incorrectly lead respondents to answer in the negative (that they are being discriminated against) (Petersen et al 2010:1)	
57	Rephrased “school director” to “school principal”.	Code 1 was assigned after 3 GDs.		
64	Rephrased by adding “(privacy)” after “confidentiality”.	Code 2 assigned after 2 GDs.		
65	Rephrased “how confident” to “how sure”.	Code 1 was assigned after 2 GDs.		
66	The same as item 65			
67	Rephrased by adding “without the presence of a parent, friend or other person?”	Code 1 was assigned after 3 GDs.		

Item*	Words / items rephrased	Amount of GDs before consensus	Comments	Face validation review
69	Rephrased by removing “in the examination/treatment/consultation room”.	Code 1 was assigned after 2 GDs.		
78	Rephrased “an appointment at this facility: how quickly could you get an appointment?” to “to use this clinic, how quickly were you attended to?”	Remained code 2 until after last GD.		
82	Rephrased by adding “(due to an emergency)” after “urgently”.	Code 1 was assigned after 4 GDs		
85	Rephrased by adding “/satisfying” after “appealing”.	Code 1 was assigned after 3GDs.		
93	Rephrased “proposed” to “gave”.	Remained code 2 until after last GD.		
94	Rephrased “pros and cons” to “advantages and disadvantages”.	Code 1 was assigned after 2 GDs.		
Total	27 items were rephrased as a result of the pre-test group discussions			

*Item numbers refer to the items in the existing YFHS-WHO+ questionnaire attached as Annexure 6.2

Twenty-seven items were rephrased as result of the pre-test group discussions with item 55 rephrased by the researcher. Items with the same changes as previous items (items 28, 31, 32, 33, 35 36 and 66) were not included in this total amount of 27 items. Consensus (code 1) was reached for most items after 3 group discussions. Consensus was not reached by the group discussions until after the last group discussion for 5 items (items 5, 9, 51, 78 and 93). The word “facility” was changed to “clinic” for all items and the word “concern” was changed to “problem” where it suited the item better. The expert for face validation provided comments on 4 items (items 1, 9, 14 and 49).

Table 4.8 Items removed

Item*	Item phrase	Number of GDs before consensus
24	“Were you or your parents asked to pay for the services you received in this facility?”	Code 1 after 2 GDs.
25	“If you could not pay did you receive the services you needed?”	Code 1 after 2 GDs.
83	“Ability to get through to the facility on the phone.”	Code 1 after 4 GDs.
84	Removed since it relates to previous item 83	
Total	4 items	

*Item numbers refer to the items in the existing YFHS-WHO+ questionnaire attached as Annexure 6.2

Four items were regarded irrelevant and removed. All services are free at public PHC clinics (Van Rensburg & Engelbrecht 2012:127-128). Consultations are not according to appointments but patients visit the clinic when they prefer or have been asked to do so. Patients therefore do not phone the clinic for appointments. Consensus for removal of the items was reached after 2 and 4 group discussions respectively. Experts did not comment on any of these items.

Table 4.9: Items added

Item*	Items added
Duplicated items 60, 61 and 63.	Items 60, 61, 63 were duplicated to separately measure the perception regarding doctors and nurses. Three items were thus added. Response option “I did not visit the doctor” was added because a visit to the doctor does not happen with every consultation Note that items 89 - 98 were not separated but remained doctor/nurse since these items measure the quality of information and not the youth’s perception (trust and comfort) regarding the person (doctor or nurse).
Duplicated item 65.	Duplicated to separately measure the perception regarding doctors and nurses. One item added.
Items 80 and 81 were repeated three times to include waiting times in different queues.	Two items were added for waiting time to open a file and two were added for waiting time to receive medication at the pharmacy.
Total	8

*Item numbers refer to the items in the existing YFHS-WHO+ questionnaire attached as Annexure 6.2

Eight items were added to comprehensively measure the perception of youth in the context of the Tshwane District. The provision of services at public PHC clinics in South Africa is nurse-driven (Moosa et al 2014:2). Patients only visit the doctor stationed at the clinic when they require more specialised care than that which nurses provide. The clinics in this study each had

one permanent doctor but the service package prescribes only visiting doctors (Engelbrecht & Van Rensburg 2012:504). Items were therefore duplicated to separately measure perception of services provided by nurses and doctors. In the future, PHC in South Africa will still be provided mostly by nurses within a team including healthcare workers and doctors as envisaged by the PHC re-engineering approach (Howe, Mash & Hugo 2013:899). The pre-test respondents were asked to comment on the separation of the items for nurses and doctors. Consensus was reached after 2 group discussions to keep items separate for perception of the care provided by doctors or by nurses.

Items have also been added to allow for the different structural setups in fixed public PHC clinics in the Tshwane District. At some clinics there are separate queues for each of the following services: registration, consultation and the pharmacy. At other clinics the queue for reception and consultation is combined and medications are dispensed in the consulting rooms.

Table 4.10: Changes to response alternatives

Item	Change	Rationale
All relevant items	Removed all the “Don’t know” response alternatives on the Likert-scale.	Neutral (“Don’t know”) response options are often used when respondents do not have a strong opinion. If removed, the respondents have to indicate their perception. It was also recommended by Dr DM Haller to remove the “Don’t know” response options as they found it to be difficult to interpret with the first validation study of the YFHS-WHO+ questionnaire.
Items 40 – 59	Clarified the Likert-scale options by adding: Definitely “did not receive proper care” / “Definitely received proper care”	Respondents had to refer back to the introductory sentence to make sense of each item (Introductory sentence: “...reasons for which young people might not have received proper care.”).
Items 56 –60	Created own subscale.	Items 56 –60 did not belong to the previous scale. These items are not reasons for which youth might not receive proper care, but reasons why they might not want to visit the clinic. The validation study by Dr DM Haller also created a separate subscale for these items (Haller et al 2012:427).
Items 60 –62 Items 79, 81, 83, 84	Included a “Very poor” response option and removed the “Very good” response option. The scale was therefore: “Very poor”, “Poor”, “Fair”, “Good” and “Excellent” instead of: “Poor”, “Fair”, “Good”, “Very good” and “Excellent”.	The original scale leaned towards the positive as there were 3 positive response options (“Good”, “Very good” and “Excellent”); one neutral response option (“Fair”); and one negative response option (“Poor”). The changed scale had equal negative and positive response options.

Item	Change	Rationale
Item 80 (and added items)	The response options were changed to suit the waiting time for registration, consultation and the pharmacy.	Changes to the waiting times as experienced by the respondents. Consensus after 4 group discussions.
Items 79, 81, 83, 84	The scale was inverted to start with the negative response option similar to the introductory sentence.	Consensus after 2 group discussions.

*Item numbers refer to the items in the existing YFHS-WHO+ questionnaire attached as Annexure 6.2

4.3.2.3 Face validation reviews

One expert gave feedback on a few separate items (refer to Table 4.7). Both experts gave general feedback.

a) Expert 1 feedback:

“Great that you have included important aspect within youth community such as: sexual reproductive health and rights, mental health, substance abuse, healthy lifestyle. I think HIV/STI question should be highlighted”.

b) Expert 2 feedback:

“I have a problem with the questionnaire length: often times when people see very long questionnaire their spirit dampens and they are lazy to respond to it, if they do by the time they reach the middle of the questionnaire they do no longer appreciate what they do. They also lose the thread of what they said and end up contraindicating themselves. Otherwise content is valuable. Issue of other languages if you will be targeting African ethnic groups might be needed.”

The experts' comments were not used to adapt an item but only to support the value of items for the context at face value. Both experts supported the questionnaire content at face value. The comment of expert 1 for item 9 supported the decision to add the example of “nyaope”. Expert 2 supported the aim of the final adaptation to reduce the length of the questionnaire. During the data collection in Phase 3 some respondents were also asked to start responding from the middle of the questionnaire to the last items to prevent a mindless trend of responses related to exhaustion.

4.3.3 Sub-conclusions

The outcome of the second phase of the study was the initial adapted (IA) YFHS-WHO+ questionnaire with 101 items. Four items were removed and 8 items added to the existing 97

items (refer to Figure 4.3). A further 27 items were rephrased. Several items were rephrased with minor changes to the words, for example, “fatigue” was changed to “tiredness”; “anxious” was changed to “nervous”; and “how confident” to “how sure” since these words are better understood or known by the respondents in their daily lives. Context specific changes were also made such as adding “nyaope” as an example of a drug and adding items to separately investigate the perception of care provided by doctors and nurses. Items were removed such as regarding payment or appointments since they were irrelevant to the context.

The experts supported the value of the questionnaire items at face value but indicated that the length was problematic. The length was addressed in the final adaptation.

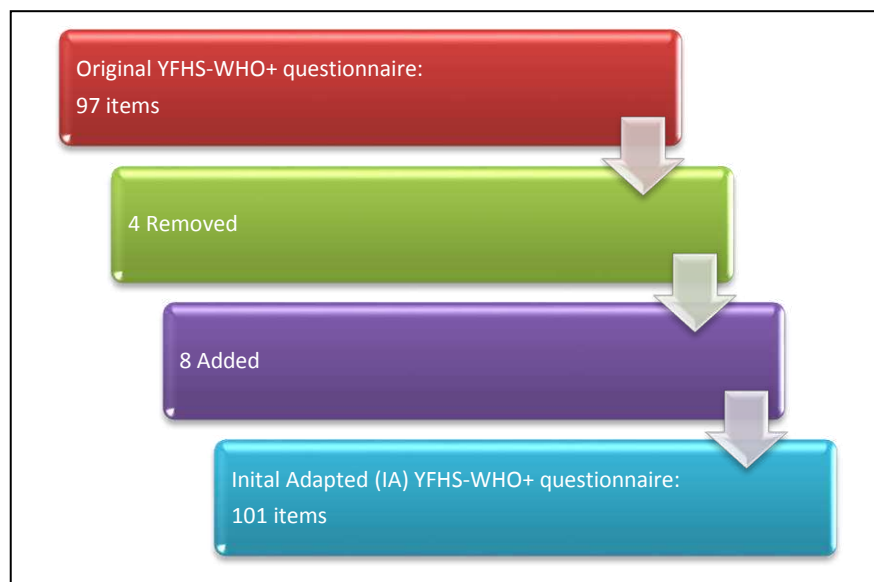


Figure 4.3: Questionnaire length following initial adaptation

The sample of 25 youth respondents were representative of the target population in terms of gender and population group distribution and first language since the majority were female, Black African and spoke Sepedi as first language. All respondents were able to converse in English because it was an inclusion criterion. Most respondents received some secondary or higher education and were therefore able to read and reason their understanding of an item. Respondents had recent experience of services provided to them. However, the pre-test sample lacked input from younger youths (aged 18 and 19 years), input from male youths and from the White and Indian or Asian population. The IA YFHS-WHO+ questionnaire was now ready for administration to a large developmental sample for final adaptation in Phase 3.

4.4 PHASE 3

4.4.1 Introduction

In Phase 3 the statistical analysis of the responses to the IA YFHS-WHO+ questionnaire for final adaptation was done. Section A of the IA YFHS-WHO+ questionnaire consisted of the items that determined the demographic characteristics of the respondents and section B of the items that measured youth-friendliness. The analysis for each section is discussed separately. Section B involved two steps. Discussion of this phase concludes with the findings of the hypothesis test for construct validation of the Final Adapted (FA) YFHS-WHO+ questionnaire. The structure of the discussion is illustrated in Figure 4.4.

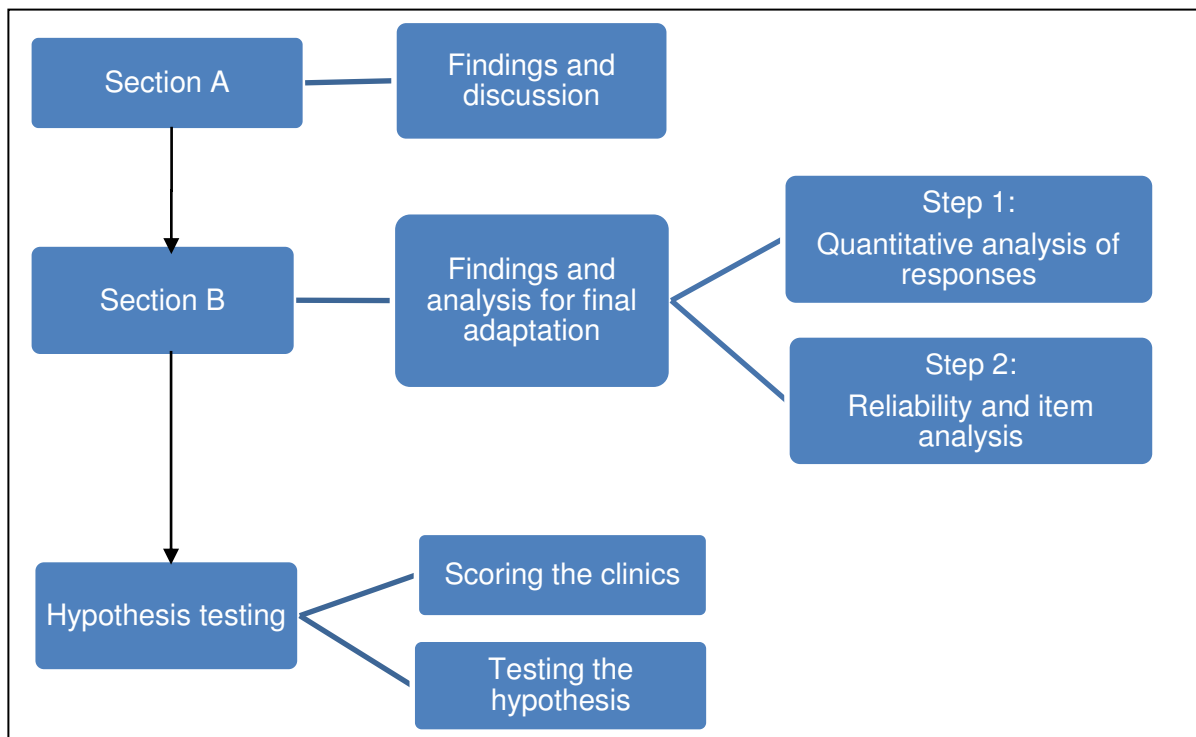


Figure 4.4: Structure of discussion: Phase 3

4.4.2 Section A: Demographic characteristics of the youth respondents for final adaptation

Describing the demographic characteristics of the developmental sample of the 102 youths was important to draw conclusions regarding its representativeness of the target population but also to compare with the pre-test sample. Those who responded to the questionnaire for final adaptation had to have a similar understanding as those with whom it was pre-tested (Streiner &

Norman 2008:128). Tables 4.11 to 4.14 present the demographic characteristics of the developmental sample for final adaptation. Frequencies were determined for each demographic characteristic and presented as a percentage.

Table 4.11: Age, gender and population group distribution of developmental sample

Demographic characteristic	Number of respondents (n)	Response alternative	Percentage (%)
Age	(n=102)	18 years	11.80
		19 years	16.70
		20 years	14.70
		21 years	10.80
		22 years	19.60
		23 years	26.40
Gender	(n=102)	Female	85.30
		Male	14.70
Population group	(n=102)	Black African	91.20
		Coloured	2.90
		White	5.90
		Indian or Asian	0.00

The response rate for these 3 items was 100% (n=102). Similar to the pre-test respondents, the majority was 23 years of age (22.5%; n=23). Respondents were therefore mostly older out-of-school youths. The mean age of the respondents was 20.9 years. Similar to the sample for the pre-test, significantly more female (85.3%; n=87) than male youths (14.7%; n=15) were represented since significantly more females attended the clinic despite the fact that the gender distribution of youth in Tshwane District is approximately equal (StatsSA 2012b:7).

The majority of the sample was Black African (91.2%; n=93). Representation of the White population (5.9%; n=6) and Coloured (2.9%; n=3) was limited while the Indian or Asian population was not represented. Although there was limited representation of these population groups, the sample reflected the population group distribution of Tshwane District was the Black African which represented the majority (75.9%) (StatsSA 2012b:10). The sample's demographic characteristics of age, gender and population group were similar to that of the pre-test sample.

Table 4.12: Employment status, source of income and highest level of education of developmental sample

Demographic characteristic	Number of respondents (n)	Response alternative	Percentage (%)
Employment status	(n=101)	Employed	21.80
		Unemployed	78.20
Source of income	(n=100)	From parents	46.20
		Self	22.70
		Social grant	12.60
		Other	10.90
		From relatives	5.00
		From friends	2.50
Highest level of education	(n=102)	No formal school education	2.00
		Primary school education	2.90
		Secondary school education	62.70
		Tertiary education (college/ university)	32.40

The response rates of the three items presented in Table 4.12 were above 98%. The majority of respondents indicated they were unemployed (78.2%; n=79) and they were predominantly dependent on income from their parents (46%; n=55). The sample's unemployment rate was significantly greater than that of young people (aged 15-34) in Tshwane District in 2014 (36.1%) (NYP 2015:3). This can be ascribed to the fact that the majority of respondents were female. Female youth are more likely to be unemployed (NYP 2015:3; Robinson & Seiber 2008:121). Unemployment is associated with early childbirth making the mother the main caregiver of the child; she therefore only enters the labour market at an older age (Makiwane & Kwizera 2009:232). Late entries are also related to a lack of the required skills and education and, consequently, a scarcity of employment opportunities (Mlatsheni 2012:31-33; Verick 2012:374-375).

On the other hand, the majority (62.7%; n=64) of respondents had some or completed secondary education. A third (32.4%; n=33) were busy with or had completed tertiary education and 2% (n=2) had received no formal schooling. All except 2 respondents were therefore able to read, write and most could reason about the meaning they attributed to an item. A higher percentage (95.1%; n=97) of the developmental sample had some secondary school or higher education compared to that of the Tshwane District where half of the population in the district has some secondary school or higher level of education (StatsSA 2012b:52). The questionnaire was initially adapted during the pre-test with youths of whom all except two respondent had some secondary schooling or higher. These 2 respondents could however read English and use it in conversation.

Table 4.13: First languages of developmental sample

Demographic characteristic	Number of respondents (n)	Response alternative	Percentage (%)
First language	(n=97)	Sepedi	20.60
		Setswana	15.50
		Sesotho	13.40
		English	10.30
		IsiZulu	9.30
		Afrikaans	8.20
		Xitsonga	8.20
		IsiNdebele	4.10
		IsiXhosa	4.10
		Other	3.10
		siSwati	2.10
		Tshivenda	1.00

The response rate to the item presented in Table 4.13 was 95%. Most respondents indicated that Sepedi was their first language (20.6%; n=20). This statistic compares to the statistic of the Tshwane District population (StatsSA 2010/2011:n.p.). Sepedi was also the first language of most pre-test respondents.

All respondents were able to converse in English but it was the fourth most common first language of the developmental sample (10.3%; n=10) and most often it was used when used when talking to friends. The youth often borrow English words while conversing in their first language.

Table 4.14 presents the youth respondents' reasons for and frequency of clinic visits. The clinic refers to the clinic attended by the respondent at the time of data collection. The response rate to this item was above 96%, except for the item regarding visits to other clinics that was responded to by only 79.4% (n=81) respondents. Most respondents visited the clinic at least once in three months (79.4%; n=81) and 71.6% (n=73) of the respondents had visited the clinic over the three months before the data collection. The respondents' memory of events and perception of the youth-friendliness of the clinic was therefore recent. Other clinics were also visited by 64.2% (n=52) of respondents which allowed them to compare the clinic they normally visit with the circumstances in the other clinics.

Table 4.14: Utilisation of the clinic by developmental sample

Demographic characteristic	Number of respondents (n)	Response alternative	Percentage (%)
Frequency of clinic visits	(n=102)	More than once a month	21.60
		Once a month	29.40
		Once in two to three months	28.40
		Once in 6 months	8.80
		Once a year	8.80
		Less than once a year	1.00
		Other	2.00
Most recent visit to the clinic	(n=102)	Less than 3 months or 3 months ago	71.60
		More than 3 months but less than 1 year ago	17.60
		Approximately 1 year ago	4.90
		More than a year ago	5.90
Services used at the clinic	(n=98)	Treatment when I am ill	29.10
		Treatment of my children when they are ill	11.80
		Immunisation of my children	15.50
		For care when I am pregnant	10.90
		To collect condoms	4.50
		To use other family planning services	15.50
		To get information on how to live healthy	10.50
		Other	2.30
Visits to other clinic/s	(n=81)	Yes	65.40
		No	34.60

More respondents (29.1%; n=64) indicated they visited the clinic for curative reasons (when they were ill) with fewer indicating they visited the clinic for preventative reasons (family planning [15.5%; n=34]; obtaining information on how to live healthy [11.8%; n=26] and to collect condoms [4.5%; n=10]). Respondents also often visited the clinic for curative (11.8%; n=26) and preventative care (15.5%; n=34) for their children; 85.3% of respondents were female and mothers thus the primary caregivers. Obstetric care was also a common reason for visiting the clinic (10.9%; n=24). For this item respondents could select all the responses applicable to them and one visit could be for several reasons. International literature also indicate that youth mostly visit clinics for curative reasons (Booth et al 2008:699; Haller et al 2007:775).

4.4.3 Section B: Final adaptation

4.4.3.1 Step 1: Quantitative analysis of responses

Single frequencies were determined for responses to the 102 questionnaires. The items for which more than 20% did not respond are discussed in this subsection. These items and the percentage of missing values are presented in Table 4.15.

Table 4.15: Items to which >20% did not respond

Item	Percentage of missing values (%)
B57	52.90
B92	61.80

Item B57 was an item that respondents could select if, according to them, the preceding three items did not determine all the reasons why the youth might not have wanted to visit the clinic. The item phrase of item B57 read “Other” and allowed space to explain their response. The item was removed since more than 20% did not respond to the option “Other”. The written responses were, however, valuable to identify items that could be added to the questionnaire in future studies. The themes identified from these written responses are presented in Table 4.16.

Table 4.16: Themes identified from responses to item B57

Number of respondents (n)	Theme
(n=7)	Negative attitudes of healthcare providers
(n=4)	Fear that family/friends may know
(n=1)	Fear of being told that she is pregnant

Negative attitudes of healthcare providers are known to be a significant barrier to accessing PHC services worldwide (Tylee et al 2007:1566). Studies in South Africa revealed that young people are reluctant to visit PHC services due to fear of rudeness from the healthcare providers (Alli, Maharaj & Vawda 2013:151; Nteta et al 2010:7; Coovadia et al 2009:829). Respondents explained that youths might not want to visit the clinic for fear of being shouted at, treated harshly or embarrassed by the healthcare provider. Youths are also reluctant to attend PHC due to the fear of being chastised, stigmatised or punished for sexual involvement (Tylee et al 2007:1566; Bearinger et al 2007:1226). The respondents explained that the youth might not want to visit the clinic because they were afraid their friends or family could or would recognise them at the clinic. In South Africa, the stigma of HIV infection and sexual promiscuity is associated with being recognised at a PHC clinic (Musheke et al 2013:6).

Item B92 allowed respondents to write a suggestion for improving the services to young people at the clinic. Only 38.2% responded to the item. The themes identified from the responses are presented in Table 4.17.

Table 4.17: Themes identified from responses to item B92

Code assigned	Number of respondents	Theme
B92a:	(n=23)	<i>“Nurses’ attitudes”</i> : any response related to improvement regarding nurses’ attitudes/ nurses who are shouting/ nurses who should listen more or give more attention.
B92b	(n=11)	<i>“Health education”</i> : improve provision of health education.
B92c	(n=10)	<i>“Do not discriminate”</i> : any response regarding improvement related to discrimination.

Although the response rate was poor (61.8% missing values), the item was essential to involve the youth’s opinion of how they would improve service delivery. The item holds true to the characteristic of youth-friendliness: “Adolescents are actively involved in designing, assessing and providing health services”. Item B57 was therefore removed and item B92 was kept.

4.4.3.2 Step 2: Item and reliability analyses

Item and reliability analyses were necessary to produce a reliable adapted version of the YFHS-WHO+ questionnaire. Item and reliability analyses were applied to the questionnaire responses per subscale. Listwise deletion was applied to each subscale to exclude questionnaires with one or more missing values since mean values can then not be determined accurately. Items specific to perception regarding doctors had a response alternative “0” to indicate that they did not visit a doctor. These “0” values were also excluded for item and reliability analyses since they bear no weight and would have deceptively reduced the mean values. Listwise deletion is specific to the SPSS statistical program that was used for the data analysis.

Subscale 1: Access A

Subscale 1 involved 14 items (item B1 to B14) and addressed the youth’s perception of accessibility to the full range of services. Item and reliability analyses were applied to 82 questionnaires since 20 questionnaires were excluded through listwise deletion.

Tables presenting the item mean values and SD, inter-item correlation matrix, the corrected item-total correlation and Cronbach’s alpha for subscale 1 are attached as Annexure 16. The Cronbach’s alpha for the 14 items was 0.902 and acceptable. The high Cronbach’s alpha could indicate redundancy. Table 4.18 presents a summary of the item and reliability analyses findings with subsequent decision making for adaptation. Contextual or pragmatic reasons were also considered.

Two items (B6 and B10) were redundant and therefore removed. Item B10 (“Problem with your parents or family”) had a similar mean value as B14 (“Problems related to violence”). The meaning could be related since problems with family often include violence such as intimate partner violence. Violence is a more pronounced factor that affect the health of young South Africans (Panday et al 2013:114; Seedat et al 2009:1011) and item B14 was therefore kept. Item B10 was also less specific since problems with family could be multidimensional.

Table 4.18: Summary of item and reliability analyses findings and decision making for adaptation of subscale 1: Access A

Items with similar means and related meaning	Extreme mean: Small SD	Endorsement frequency of item response alternative	Inter-item correlation	Corrected item-total correlation	Cronbach's alpha	Contextual / pragmatic reasons
<p>Same mean for B8; B9</p> <p><u>Mean differ with ≤ 0.05:</u> B7(2.67); B8(2.63); B9(2.63).</p> <p>Decision: Related meaning, combine these 3 items.</p> <p>B1(3.45); B5(3.49). Decision: Keep both, not related and essential to measure youth-friendliness.</p> <p>B10(2.56); B14(2.57). Decision: Related meaning. Remove B10.</p> <p>B6(2.62); B13(2.65); Decision: Related meaning. Remove B6.</p>	<p>Mean is 2.5.</p> <p>Items with high means: B1: 3.45 B4: 3.35 B5: 3.49</p> <p>No item has a SD ≤ 0.5 Decision: Keep B1, B4 & B5 items since all items are essential to measure youth-friendliness.</p>	<p>None had an extreme endorsement frequency. Decision: No item removed for an extreme endorsement frequency.</p>	<p>Poor inter-item correlations for item B1 with B6, B8, B10 & B11. Decision: B1 kept since it is essential to measure youth-friendliness. Items B6, B8 & B10 were removed and item B11 was kept.</p> <p>B2 with B7: Decision: Combined B7, B8 & B9.</p> <p>B2 with B10: Decision: B10 removed.</p> <p>B4 with B11: Decision: Keep B4 & B11 since both are essential to measure youth-friendliness.</p> <p>Poor inter-item correlation for items B5 with B8, B9, B10, B11 & B13. Decision: B5 kept since it is essential to measure youth-friendliness.</p> <p>B6 with B12: Decision: B6 removed.</p> <p>B7 with B14: Decision: B7 combined with B8 & B9</p>	<p>All > 0.3 Decision: No item removed due to poor item-total correlation.</p>	<p>Cronbach's alpha is ≥ 0.7 and does not increase with removal of any item. Decision: No item removed due to its effect on Cronbach's alpha.</p>	<p>B6: might create confusion Decision: Remove B6.</p>

Item B6 was removed since it had a similar mean value to that of item B13. Item B6 (“Concerns in relation to your friends or your boy-/girlfriend”) could confuse the respondent since it could refer to whether the respondent was having a problem with a friend or that the friend had a health problem. Having a problem with a friend could result in sadness, depressed or nervous feelings or suicidal thoughts. The meaning of items B6 and B13 (“If you felt sad, depressed or nervous, or if you had suicidal thought”) could therefore be related. Items B7, B8 and B9 were combined since they all addressed substance abuse behaviour and the mean value of item B8 and B9 was the same and differ with ≤ 0.05 with the mean of item B7. The combined item read: “Problems related to alcohol, cigarette or drug (such as dagga, nyaope) use”.

According to the inter-item correlation, items B1, B5 and B11 most often had poor correlations with other items. Deleting these items would, however, not have improved Cronbach’s alpha of the subscale and these items were therefore kept. Item B1 (“If you had one of the following complaints would you get help in this clinic: Physical complaint for example, stomach ache, cough, sore throat, skin problems, fever, tiredness, painful or irregular periods.”) is essential to measure accessibility, appropriateness and effectiveness of a range of health services to address physical complaints and item B5 (“Questions about contraception”) is essential to measure accessibility, appropriateness and effectiveness of reproductive health services. These services are also provided at all public PHC clinics as part of the standard basket of care. High mean values and endorsement frequencies of positive response alternatives for items B1 to B5 indicated that youths were familiar with the services and in general had a more positive perception regarding its provision. It can be concluded that subscale 1: Access A was therefore well understood by the respondents. The subscale after the first round of adaptation consisted of 10 items. The repeated Cronbach’s alpha for the 10 items was: 0.863 for 89 questionnaires. This is acceptable and the subscale did not go through a second round of item and reliability analysis.

Subscale 2: Access B:

Subscale 2 involved 9 items (B15 to B23) and addressed accessibility in terms of how the youth learned that they could get help at the specific clinic. It therefore assessed the advertisement of services towards the youth. Item and reliability analyses were applied to 84 questionnaires since 18 questionnaires were removed through listwise deletion. Tables presenting the item mean values, SD, inter-item correlation matrix, the corrected item-total correlation and Cronbach’s

alpha for subscale 2 are attached as Annexure 17. Cronbach's alpha for the subscale of 9 items was 0.775 and acceptable.

Table 4.19 presents a summary of the item and reliability analyses findings with consequent decision making for adaptation. Items B15 ("through clinic staff"), B18 ("through flyers, pamphlets"), B21 ("through friends"), and B22 ("through school") had similar mean values indicating that the items were answered in the same trend. These items were also most applicable to the context as means of advertisement. Poor inter-item correlations, however, existed between most items. The dichotomous nominal scale could also have confused the respondents as they had to answer either 'Yes' or 'No' at each item. Several left the item without a response; this could have been assumed to be a 'No' response.

The subscale was removed not only due to its potential to be confusing or due to the poor inter-item correlations, but also since advertisement yielded little reference to the youths' perception of the youth-friendliness of the clinic. Youths often attend the clinic nearest to them due to financial limitations, for example, not having money for transport (Nteta et al 2010:6) and not the clinic that appears most attractive (through advertisement). Considering the description by the WHO of the characteristics of YFHS, clinics that advertise a broad range of services are supposedly more youth-friendly. In this regard, the following statement was made by the WHO in 2012: "Adolescents are well informed about the range of reproductive health services available and how to obtain them."(WHO 2012:31). The subscale, however, determined the manner of advertisement and not whether the respondent perceived the clinic to effectively inform adolescents of the broad range of services. The subscale was therefore removed. This subscale could be removed since it was one of three subscales (Access A and Access C) to determine accessibility to the clinics.

Table 4.19: Summary of item and reliability analyses findings and decision making for adaptation of subscale 2: Access B

Items with similar means and related meaning	Extreme mean: Low SD	Endorsement frequency of item response alternative	Inter-item correlation	Item-total correlation	Cronbach's alpha	Context/pragmatic reasons
Same mean for B15; B21 <u>Mean differ with ≤ 0.05:</u> B18(1.54); B22(1.55), B15(1.51); B21(1.51) <u>Decision:</u> Remove subscale.	Mean is 1.5. B16(1.81) B17(1.77) <u>Decision:</u> Remove subscale.	None to be removed for extreme endorsement frequency. <u>Decision:</u> Remove subscale.	Poor inter-item correlation for several items. <u>Decision:</u> Remove subscale.	All > 0.3 <u>Decision:</u> Remove subscale.	Cronbach's alpha is ≥ 0.7 and does not increase with removal of any item. <u>Decision:</u> Remove subscale.	Dichotomous scale may cause confusion. <u>Decision:</u> Remove subscale.

Subscale 3: Access C

Subscale 3 involved 6 items (B25, B81, B83, B85, B87, B88) and 4 introductory items (Items B80, B82, B84, B86). These items addressed accessibility in terms of clinic hours and waiting times. Item B88 (“If you need to see a doctor/nurse urgently do you get to be seen on that same day in this clinic?”) was removed before item and reliability analysis since it was dichotomous nominal in nature (yes/no response alternative) that is different from the other items with a 5-point Likert scale. Redundancy of item B88 was confirmed by the high endorsement frequency of item B80 that most were seen on the same day (even if not an emergency). Item and reliability analysis were applied to 91 questionnaires since 11 questionnaires were removed through listwise deletion. Tables presenting the item mean values, SD, inter-item correlation matrix, the corrected item-total correlation and Cronbach’s alpha for subscale 3 are attached as Annexure 18. Cronbach’s alpha for the subscale of 5 items was acceptable at 0.825. Table 4.20 presents a summary of the item and reliability analysis findings with consequent decision making for adaptation.

Table 4.20: Summary of item and reliability analyses findings and decision making for adaptation of subscale 3: Access C

Items with similar means and related meaning	Extreme mean Low SD	Endorsement frequency of item response alternative	Inter-item correlation	Corrected Item-Total correlation	Cronbach's alpha	Context/ pragmatic reasons
<p><u>Mean differ with ≤ 0.07:</u> B83(3.15); B85(3.08) differ with 0.07 and the meaning is related. <u>Decision:</u> Related meaning. Remove B83 also for pragmatic reasons</p>	<p>Mean is 3</p> <p>No item has a SD ≤ 0.5 <u>Decision:</u> No item removed related to extreme mean or low SD</p>	<p>B80 had a high endorsement of 89.2% for alternative 1</p> <p><u>Decision:</u> remove B80 and B81</p>	<p>No items had poor item correlation <u>Decision:</u> No items removed for poor inter-item correlations</p>	<p>All > 0.3 <u>Decision:</u> No item removed due to poor item-total correlation.</p>	<p>Cronbach's alpha is ≥ 0.7 and does not increase with removal of any item. <u>Decision:</u> No item removed due to its effect on Cronbach's alpha.</p>	<p>Queuing system differs at clinics. Some have a combined reception and consultation queue and some have them separate. Some clinics do not have a queue for a pharmacy since dispensing occur during consultation. <u>Decision:</u> remove B83 since B85 is always applicable. B87 were not similar to B83 and B85 and were kept.</p>

Item B25 was removed despite the acceptable internal consistency with other item in the subscale. Item B25 (“How do you rate the hours this clinic is open for service”) was similar to item B24 (“Did you ever postpone getting help for a health problem at this clinic because the clinic’s working hours were not suitable?”). Item B24 was kept in the questionnaire as an individual item. Item B24 was therefore kept and item B25 removed. Item B80 had a high endorsement of alternative 1 (“same day”). This item therefore holds little information since it can predict with 89% accuracy that respondents have been helped on the same day and also related to item B24. Items B25 and B80 and B81 were therefore removed.

Item B83 (with introductory sentence B82) determined the perception regarding waiting time to be registered/file opened and items 85 and B84 regarding waiting time for a consultation. Some clinics have separate queues for registration and consultation and some have a combined queue. The means of these two items differed with 0.07 but the meaning was related. Item B83 was therefore removed since consultation can only occur after registration and the waiting time for consultation (B85) therefore includes the waiting time for registration (B83).

The items that remained in the subscale were items B85 and B87 (with introductory sentences B84 and B86). Item B87 remained in the subscale since all the other items were removed and item B87 did not have a meaning similar to items B83 and B85. Dispensing during consultation would improve the youth-friendliness of the clinic. The repeated Cronbach’s alpha for the 2 items was 0.638 on 93 questionnaires and acceptable since Cronbach’s alpha was lower with less items (Streiner & Norman 2008:90).

Subscale 4: Parental support

Subscale 4 involved 6 items (items B26 to B31). The items were similar to those in subscale 1. These items addressed the youths’ perception of how keen parents or family members were to refer them to the clinic. It therefore referred to the support from close relatives, which have indeed been indicated by recent studies as essential to cope with the financial and emotional impact of HIV/AIDS (Wouters et al 2009:357). Clinics are more youth-friendly when they make the community aware of the youths’ needs and the services to address the needs. This subscale therefore referred to the WHO characteristic of YFHS: “Community members understand the benefits that young people will gain by obtaining the health services they need and support their provision.” (WHO 2012:31).

Item and reliability analyses were applied to 85 questionnaires since 17 questionnaires were removed through listwise deletion. Tables presenting the item mean values, SD, inter-item correlation matrix, the corrected item-total correlation and Cronbach's alpha for subscale 4 are attached as Annexure 19. Cronbach's alpha for the subscale of 6 items was 0.835 on 85 questionnaires indicating good internal consistency. Table 4.21 presents a summary of the item and reliability analyses findings with consequent decision making for adaptation. The findings of the item and reliability analyses indicate that item B26 did not fit well in the subscale. Item B26 referred to physical complaints (such as fever and sore throat) and was not measured by any other item in the subscale. Item B26 was therefore not removed since the gain in Cronbach's alpha would have been minimal. Items B26 and B27 ("Concerns related to sexual health") had high endorsement frequencies of the positive response alternatives. This was similar to the high endorsement of positive response alternatives of items subscale 1, items B1 to B5. This similarity indicated that respondents answered subscales 1 and 4 consistently. Despite high endorsement of positive responses (indicating parental support), disclosure of sexual and reproductive problems remain restricted in the South African context suggesting that stigmatisation and discrimination still exist (Shisana et al 2014:119; Petersen et al 2010:970). No item was removed even though the mean value of items B26 and B27 as well as that of B30 and B31 were similar; Cronbach's alpha thus remained 0.835.

Table 4.21: Summary of item and reliability analyses findings and decision making for adaptation of subscale 4: Parental support

Items with similar means and related meaning	Extreme mean: Low SD	Endorsement frequency of item response alternative	Inter-item correlation	Item-total correlation	Cronbach's alpha	Context/pragmatic reasons
<p><u>Mean differ with ≤ 0.05:</u></p> <p>B26(3.31); B27(3.30) <u>Decision:</u> Keep B26 and B27. Related meaning but both essential to measure youth-friendliness.</p> <p>.</p> <p>B30(2.62); B31(2.58) <u>Decision:</u> Keep B30 and B31. Related meaning but both essential to measure youth-friendliness.</p>	<p>Mean is 2.5.</p> <p>No item has a $SD \leq 0.5$</p> <p>Items B26(3.31) and B27(3.30) has high mean values. <u>Decision:</u> Keep both items.</p>	<p>B26 and B27 had higher endorsement frequency (as reflected in higher mean values). <u>Decision:</u> Keep both items.</p>	<p>Item B26 had a poor correlation with items B29, B30 and B31 since item B26 was responded to more positively. <u>Decision:</u> B26 was, however, kept since essential to measure youth-friendliness</p>	<p>Item B26 was the only item with item-total correlation ≤ 0.3 <u>Decision:</u> Keep B26 despite poor correlation.</p>	<p>Cronbach's alpha would have improved to 0.84 if item B26 was removed. <u>Decision:</u> Keep B26 despite its effect on Cronbach's alpha.</p>	<p><u>Decision:</u> Keep all items since they are essential to measure youth-friendliness.</p>

Subscale 5: Community support

Subscale 5 involved items B32 to B37 and addressed the youths' perception of how keen adults in the community were to refer them to the clinic. These adults can include school teachers, neighbours, and so forth. The item phrases of subscale 4 and 5 were the same and the means of six items differ with <0.05 (B26 and B32; B29 and B35; B30 and B36). Although support from close relatives is most essential to cope with health problems, the responses did not indicate a difference in perception of support from close relatives or the community. Subscale 5 was therefore removed. The means of subscale 4 and subscale 5 items are presented in Table 4.22. The means for each item in subscale 5 was for 86 questionnaires. Further item and reliability analyses are not attached as an annexure.

Table 4.22: Mean of items in subscale 4 and subscale 5

Subscale 4 (n=85)		Subscale 5 (n=86)	
B26: If your parents or another significant adult in your family knew you had one of the following complaints would they encourage you to get help for it in this clinic: physical complaint, for example, stomach ache, cough, sore throat, skin problems, fever.	3.31	B32: If another adult in your community knew you had one of the following complaints would they encourage you to get help for it in this clinic: physical complaint, for example, stomach ache, cough, sore throat, skin problems, fever.	3.29
B27: Concerns related to sexual health.	3.30	B33: Concerns related to sexual health.	3.21
B28: Problems related to alcohol, cigarette or drug use.	2.80	B34: Problems related to alcohol, cigarette or drug use.	2.64
B29: Problems related to work, school or university/ college.	2.29	B35: Problems related to work, school or university/ college.	2.30
B30: If you felt sad, depressed or nervous, or if you had suicidal thoughts.	2.62	B36: If you felt sad, depressed or nervous, or if you had suicidal thoughts.	2.59
B31: Problems related to violence.	2.58	B37: Problems related to violence.	2.51

Subscale 6: Equity A

Subscale 6 involved 16 items (B38 to B53) and addressed equality of services by referring to reasons for which youth patients might not have received proper care. Item and reliability analyses were applied to 86 questionnaires since 16 questionnaires were removed through listwise deletion. Tables presenting the item mean values, SD, inter-item correlation matrix, the corrected item-total correlation and Cronbach's alpha for subscale 6 are attached as Annexure 20. Cronbach's alpha for the subscale of 16 items was an excellent 0.963. The high Cronbach's alpha suggests redundancy of several items (Polit & Beck 2012:367; Streiner & Norman 2008:91) and could indicate the proximity effect whereby the response to one item affected the

response to the next items and thereby artificially inflating the Cronbach's alpha (Polit & Beck 2012:361). Table 4.23 presents a summary of the item and reliability analyses findings with consequent decision making for adaptation.

The high mean values of the 16 items in subscale 6 indicated limited variation in item responses (all mean values ranged between 3.0 and 3.5). The items were therefore answered more positively although not one item alternative had an endorsement frequency of above 80%. Limited variation indicates that the items do not discriminate well (Polit & Beck 2012:362). The items were either not read properly (possibly related to the long list of 16 items) and responded to with the same alternative or it could have been confusing to the respondents. Several items were redundant as also suggested by the high Cronbach's alpha, but most did not have related meanings. Redundancy was therefore not a clear indication for removal of items.

Table 4.23: Summary of item and reliability analyses findings and decision making for adaptation of subscale 6: Equity A

Items with similar means and related meaning	Extreme mean: Low SD	Endorsement frequency of item response alternative	Inter-item correlation	Item-total correlation	Cronbach's alpha	Context/pragmatic reasons
<p>Same mean: B41, B43(3.38) Decision: Not related, but B41 removed.</p> <p>Mean differ with ≤ 0.05: B38(3.12); B52(3.15) Decision: Not related, keep both.</p> <p>B39(3.24); B40(3.28) Decision: Not related, keep both.</p> <p>B40(3.28); B51(3.26); B53(3.29) Decision: Not related, keep all.</p> <p>B41(3.38); B43(3.38); B45(3.37); B46(3.35); B47(.36) Decision: Not all related. Remove B41, B45, B46 and B47</p> <p>B41 & B43(3.38); B44(3.40); B48(3.42); Decision: Not all related. Remove B41, B44 and B45</p> <p>B42(3.33); B 46(3.35) Decision: Could be related, remove B46.</p> <p>B42(3.33); B53(3.29) Decision: Could be related. Keep both.</p> <p>B51(3.26); B53(3.29). Decision: Related but keep both.</p>	<p>Mean is 2.5</p> <p>The mean value of all 16 items ranged from 3.0-3.5</p> <p>No item has a SD ≤ 0.5</p> <p>Decision: No item removed due to an extreme mean.</p>	<p>None with extreme endorsement frequencies Decision: No item removed due to an extreme endorsement frequency.</p>	<p>High inter-correlations except for items B47 and B51 (0.26) Decision: Remove B47.</p>	<p>All > 0.3 Decision: No item removed due to poor item-total correlation.</p>	<p>If B38 removed- Cronbach remains the same</p> <p>If B51 removed- Cronbach improves.01 but it is relevant question for the context</p> <p>Decision: Keep B38 and B51</p>	<p>Decision: The following items were kept since they are most relevant to the context and allows for variation: B38(3.12) B42(3.33) B43(3.38) (modified) B48(3.42) B49(3.50) B50(3.43) B51(3.26) B52(3.15) B53(3.29)</p>

The content of items was considered to keep the items that best suit the context. The motivation for subscale adaptation is set out below.

- Item B39 (“because they are too old”) was removed since it did not make sense. Youths can only be old when compared to children. Healthcare professionals at PHC clinics deliver services to all ages and not to children only. Item B38 (“because they are too young”) is applicable since youths still perceive healthcare providers’ negative attitudes towards the youths’ sexual and reproductive health problems to be a barrier to equal care (Alli et al 2013:151). Healthcare providers are judgmental when they perceive the youth as too young to have sexual and reproductive health problems.
- Items B40 (“because they are a boy”) and B 41 (“because they are a girl”) were removed. The majority (85.3%) of respondents were female and this item was not a true reflection of males’ perceptions. A study by Leichter et al (2011:83), however, found that males experience a judgemental attitude from female nurses. This is therefore a valuable item but was removed for the purpose of reducing the length of the questionnaire.
- Item B43 (“because of their social background, where they come from, rural or urban, too rich or too poor...”) was modified to include only: “because they are too rich or too poor”. The study was conducted in an urban or suburban context.
- Item B44 (“religion”) was removed since it was related to B42 (“cultural background”).
- Item B45 (“the way they dress or the way they look”) and item B46 (“live on the street”) were removed since they are related to item B43 (“...too rich or too poor...”) with mean values that differ with ≤ 0.05 .
- Item B47 (“because they are not married, with or without children”) was removed since formal marriages are relatively nonexistent among young adults (not only in the study context but also in the South African context) (StatsSA 2010:55).
- Item B48 (“because they are gay/lesbian/bisexual”) refers to sexual orientation that is a significant cause of discrimination and violence in South Africa (Anguita 2012:489).
- Item B49 (“because they have a disability, for example, hearing problem, blindness, physical disability”) was applicable to the context and was thus kept (NYP 2015:27). Youths with a disability have special needs and require specialised healthcare. They are discriminated against if they do not receive this (therefore, the proper and appropriate care).
- Items B50 (“because they have a mental illness”). The stigmatisation of people (thus also youths) with a mental illness still prevents them from accessing health services. It was therefore an applicable item in the study context (Kakuma et al 2010:117).

- Item B51 (“because they are drug users”) was kept since drug use is a significant problem among the youth in the study context. It is associated with violence and mental illness (Mohapi 2014:267-268; Moodley et al 2012:4). Violent people are vulnerable for not receiving proper healthcare since the healthcare provider may fear injury. Item B52 (“because they are violent”) was also kept.
- Items B53 (“because they are sex workers”) was also kept.

The first round of item and reliability analyses therefore resulted in 9 items. The repeated Cronbach’s alpha was 0.935 on 90 questionnaires and acceptable. Although the Cronbach’s alpha is still high indicating redundancy (Streiner & Norman 2008:91), a second round of item and reliability analyses was not performed since literature on the context was considered only for inclusion and exclusion of items.

Subscale 7: Equity B

Subscale 7 addressed equitability of services by referring to the reasons why youth patients might not have wanted to visit the clinic. The subscale therefore addressed another aspect of equitability – not only the perception of being discriminated against while visiting the clinic but also fear of attending the clinic. These 4 items were separated from the previous subscale during the pre-test since the introductory sentence differ from the previous subscale and the response alternatives were changed to include ‘Yes’ and ‘No’. Subscale 7 involved 3 items, namely B54 to B56 (item 57 was removed following the quantitative analysis of the responses). Item and reliability analyses were applied to 92 questionnaires since 10 questionnaires were removed through listwise deletion. Tables presenting the item mean values, SD, inter-item correlation matrix, the corrected item-total correlation and Cronbach’s alpha for subscale 7 are attached as Annexure 21. Cronbach’s alpha for the subscale of 16 items was 0.682 and not within acceptable limits. Table 4.24 presents a summary of the item and reliability analyses findings.

The SD of the items was low due to the dichotomous nature of the item (response alternatives ‘Yes’ or ‘No’). Item B56 (“they fear the police will know of the visit”) was removed since it was less applicable to the context as also indicated by the high endorsement of the ‘No’ response alternative. Item B56 did not allow for covariance with other items due to high endorsement frequency of alternative ‘No’. Other contextual relevant barriers in access to public PHC clinics that could be added as items in future use of the questionnaire are discussed in section 4.4.3.1.

Table 4.24: Summary of item and reliability analyses findings for adaptation of subscale 7: Equity B

Items with similar means and related meaning	Extreme mean: Low SD	Endorsement frequency of item response alternative	Inter-item correlation	Item-total correlation	Cronbach's alpha	Context/ pragmatic reasons
None <u>Decision:</u> No item removed due to redundancy.	Mean is 1.5 Item B56 had a high mean of 1.95 SD ≤ 0.5 for all items <u>Decision:</u> Remove B56.	B56: 85.3% endorsement frequency of alternative 2 ('No') <u>Decision:</u> Remove B56.	All >0.275 <u>Decision:</u> No item removed due to a poor inter-correlation.	All >0.3 <u>Decision:</u> No item removed due to a poor item-total correlation.	B56- if removed Cronbach improve by .043 <u>Decision:</u> Remove B56.	B56 is less applicable to the context <u>Decision:</u> Remove B56.

Two items remained after the first round of item and reliability analyses. Cronbach's alpha tend to be lower if there are less items in the subscale and the repeated Cronbach's alpha of 0.725 on 92 questionnaires is therefore good (Streiner & Norman 2008:90). Subscale 7 did not require a second round of item and reliability analyses.

Subscale 8: Respect

Subscale 8 involved 7 items (B58 to B64) and addressed the youths' perception of how they felt they were treated by either a nurse or a doctor with exception of item B64. Item B64 determined the perception of how they felt they were treated by the receptionist. Receptionists refer to those who are responsible for administrative tasks such as providing the healthcare provider with the patient's file, managing the patient queues, and providing general information. Item and reliability analyses were applied to 70 questionnaires since 32 questionnaires were excluded through listwise deletion. Tables presenting the item mean values, SD, inter-item correlation matrix, the corrected item-total correlation and Cronbach's alpha for subscale 8 are attached as Annexure 22. Cronbach's alpha for the subscale of 7 items was excellent at 0.910. The high Cronbach's alpha could, however, indicate redundancy of similar items. Table 4.25 presents a summary of the item and reliability analyses findings. Items in subscale 8 reflected a good internal consistency but some items had similar means (differ with ≤ 0.05). Item B60 was removed since it had a similar mean and related meaning to B58 (within the same set of items pertaining to doctors).

Table 4.25: Summary of item and reliability analyses findings for adaptation of subscale 8: Respect

Items with similar means and related meaning	Extreme mean: Low SD	Endorsement frequency of item response alternative	Inter-item correlation	Item-total correlation	Cronbach's alpha	Context/pragmatic reasons
<p><u>Mean differ with ≤ 0.05:</u></p> <p>B58(3.77) and B60(3.73).</p> <p>Decision: Related, remove B60.</p> <p>B62(3.39), B63(3.36), B64(3.34)</p> <p>Decision: Related. Remove B63 but keep B64.</p>	<p>Mean is 2.5</p> <p>B59 high mean(3.83)</p> <p>All SD >0.5</p> <p>Decision: Keep B59.</p>	<p>Decision: No item was removed for an extreme endorsement frequency.</p> <p>Items regarding perception of doctors were responded to more positively than for nurses and receptionist.</p>	<p>B64 (receptionist) had a poor inter-item correlation with item B58 (doctor).</p> <p>Decision: B64 and B58 were kept.</p>	<p>All > 0.3</p> <p>Decision: No item was removed due to poor item-total correlation.</p>	<p>Cronbach's alpha will improve with 0.21 if B64 was removed.</p> <p>Decision: Keep B64.</p>	<p>Decision: Keep item B64 since it is essential to measure youth-friendliness.</p>

A decision was made to remove items to maintain the pattern within each set of items for nurses and doctors. Item B63 was therefore also removed and it had a similar mean value to item B62. The means of the items related to nurses and doctors (for example, B58 and B61; B59 and B6; B60 and B63) differed with > 0.05 and therefore indicated that the items should remain separate.

Item B64 was kept even though the data indicated that removing the item would improve Cronbach's alpha. Item B64 is essential to measure the YFHS characteristic: "Support staff treats all adolescent clients with equal care and respect, regardless of status" since it measures the youths' perception of the receptionist's attitude; receptionists in public PHC settings are often perceived as rude and a barrier to access (Mathews et al 2009:189). The role of the receptionist is significantly different from the role of nurses even though the mean values of B64 and B63 were similar. The first round of item and reliability analyses resulted in 5 items (B58, B59, B61, B62 and B64). The repeated Cronbach's alpha was 0.874 on 71 questionnaires. Cronbach's alpha reflected good internal consistency and a second round of item and reliability analyses was not required.

Subscale 9: Privacy

Subscale 9 involved 7 items (B65 to B71) and addressed the youths' perception of how private their registration and consultation occurred and how confidential their information was kept at the clinic. The items remained separate for measurement of the youth's perception regarding doctors, nurses and the receptionist (items B66 to B68). Item B65 ("Thinking about your visits to this clinic: were you provided with information about confidentiality (privacy) while you were in the clinic?") was removed prior to item analysis since it did not fit well in the subscale because it was dichotomous nominal in nature ('yes' or 'no' responses alternatives) while the other items were on a Likert scale. This item was also redundant since confidentiality was more specifically addressed by items B66 to B71. Item B69 ("Did the doctor/nurse suggest he/she spends some time speaking to you on your own, without the presence of a parent, friend or other person?") was also excluded prior to item and reliability analyses since most respondents ($n=59$; 57.8%) indicated that they visited the clinic alone.

Item and reliability analyses were applied separately for item B66 to B68 (with a 5 point Likert scale) and for items B70 to B71 (with a 4 point Likert scale). Item and reliability analyses applied to B66 to B68 were on 95 questionnaires since 7 questionnaires were excluded through listwise

deletion. Cronbach's alpha for the subscale of 3 items was 0.843 and acceptable. Item and reliability analysis applied to B70 and B71 were on 101 questionnaires since one questionnaire was excluded through listwise deletion. Cronbach's alpha for the subscale of 2 items was poor at 0.479 also since a low Cronbach alpha can be expected low for 2 items (Streiner & Norman 2008:90). Tables presenting the item mean values, SD, inter-item correlation matrix, the corrected item-total correlation and Cronbach's alpha for both items B66 to B68 and B70 to B71 are attached as Annexure 23. Table 4.26 presents a summary of the item and reliability analyses findings.

Item B67 (“...kept confidential by the nurses...”) and B68 (“...kept confidential by the receptionists...”) had similar mean values but were kept separate the same as for subscale 8. Item B70 (“You feel the registration at the reception is done in a way that no one else could overhear what you are talking about”) and B71 (“You feel the consultation is done in a way that no one else see the examination or overhear what you are talking about”) were kept despite the low Cronbach's alpha since these items address an essential characteristic of YFHS: “Point of service delivery ensures privacy” (WHO 2012:31). The desk for registration is a separate point of service delivery within the structural setup of each clinic and usually within the proximity of the waiting area. Lack of confidentiality is a prominent reason for youths to be reluctant to seek health care (Tylee et al 2007:1566) and especially so if the conversation between the youth and the receptionist can be overheard by the patients waiting in close vicinity.

Table 4.26: Summary of item and reliability analyses findings for adaptation of subscale 9: Privacy

Items with similar means and related meaning	Extreme mean Low SD	Endorsement frequency of item response alternative	Inter-item correlation	Item-total correlation	Cronbach's alpha	Context/pragmatic reasons
<p><u>Means differ with ≤ 0.05:</u> B67(3.39) and B68(3.35)</p> <p><u>Decision:</u> Keep items separate to separately measure perception regarding nurses and receptionists.</p>	<p>Different means related to different scales: B66-68 (5-point Likert) mean 3</p> <p>B70-71 (4-point Likert) mean 2.5</p> <p><u>Decision:</u> No item removed related to an extreme mean.</p>	<p><u>Decision:</u> No item removed due to an extreme endorsement frequency.</p>	<p>All > 0.275</p> <p><u>Decision:</u> None removed related to poor inter-item correlation.</p>	<p>All >0.3</p> <p><u>Decision:</u> No item was removed due to poor item-total correlation.</p>	<p>Cronbach's alpha was not determined for B70 and B71 since only 2 items</p> <p><u>Decision:</u> Keep both B70 and B71 since essential to measure youth-friendliness.</p>	<p>Keep items measuring perception of nurses, receptionist and doctors separate to keep the same pattern as in subscale 8.</p>

Subscale 10: No-judgement

Subscale 10 involved 8 items (B72 to 79) and addressed the youths' perception of the judgemental attitude towards them during consultation. Item B72 to B75 measured perception regarding doctors' attitudes and item B76 to B79 the attitudes of nurses. Item and reliability analysis were applied to 71 questionnaires since 31 questionnaires were excluded through listwise deletion. The number of questionnaires excluded was high since items B72 to B75 had a response alternative of "0" ("they did not visit a doctors"). Tables presenting the item mean values, SD, inter-item correlation matrix, the corrected item-total correlation and Cronbach's alpha for subscale 10 are attached as Annexure 24. Cronbach's alpha for the subscale of 8 items was excellent at 0.919. The high Cronbach's alpha indicated redundancy. Table 4.27 presents a summary of the item and reliability analyses findings.

Item B72 ("the doctor gave you his/her full attention") and B75 ("the doctor seemed interested in what you had to say") had a similar mean value and related meaning to item B74 ("the doctor respected your opinion..."). Item B75 was therefore removed but item B72 kept since the healthcare provider's attention during a consultation is regarded as essential to respect (Coker et al 2010:137; Tylee et al 2007:1566). Items B77 ("the nurse respected your opinion....") and B79 ("the nurse seemed interested in what you had to say") also have similar mean values and related meanings. Item B79 was therefore removed. The means of the items related to nurses and doctors differed with > 0.05 except for items B75 and B76. The item sets should therefore remain separate and items were removed to maintain the same items within each set of items for nurses and doctors. The remaining items were therefore item B72, B73 and B74 for the set of items regarding the perception of doctors and B76, B77 and B78 were regarding the perception of nurses. The repeated Cronbach's alpha for the 6 items was .884 on 72 questionnaires and acceptable.

Table 4.27: Summary of item and reliability analyses findings for adaptation of subscale 10: No judgement

Items with similar means and related meaning	Extreme mean Low SD	Endorsement frequency of item response alternative	Inter-item correlation	Item-total correlation	Cronbach's alpha	Context/pragmatic reasons
<p><u>Mean differ with ≤ 0.05:</u> B72(3.15), B74(3.15); B75(3.10) <u>Decision:</u> Related. Keep B74 and B73. Remove B75.</p> <p>B76(3.06) and B75(3.10) <u>Decision:</u> Remove B75</p> <p>B77(2.89); B79(2.87) <u>Decision:</u> Remove B79</p>	<p>Mean is 2.5 All SD > 0.5 <u>Decision:</u> No item removed for an extreme mean or low SD.</p>	<p><u>Decision:</u> No item removed for an extreme endorsement frequency.</p> <p>Responses were more positive for youths' perception of doctors compared to nurses.</p>	<p>All >0.275 <u>Decision:</u> No item removed for poor inter-item correlation.</p>	<p>All items >0.3 <u>Decision:</u> No item removed for poor item-total correlation.</p>	<p>Cronbach's alpha is excellent and will not improve with removal of any item. <u>Decision:</u> No item removed for its effect on Cronbach's alpha.</p>	

Subscale 11: Quality

Subscale 11 involved 9 items (B93 to B101) which addressed the youths' perception of the quality of services delivered by the nurses and doctors. Item and reliability analyses were applied to 90 questionnaires since 12 questionnaires were excluded through listwise deletion. Tables presenting the item mean values, SD, inter-item correlation matrix, the corrected item-total correlation and Cronbach's alpha for subscale 11 are attached as Annexure 25. Cronbach's alpha for the subscale of 9 items was good at 0.872. The high Cronbach's alpha indicated redundancy of items. Table 4.28 presents a summary of the item and reliability analyses findings for subscale 11.

Table 4.28: Summary of item and reliability analyses findings for adaptation of subscale 11: Quality

Items with similar means and related meaning	Extreme mean: Low SD	Endorsement frequency of item response alternative	Inter-item correlation	Item-total correlation	Cronbach's alpha	Context / pragmatic reasons
Mean differ with ≤ 0.05 : B95(3.09); B96(3.11); B97(3.10); B100(3.12) <u>Decision:</u> Related, remove.	Mean is 2.5 All SD >0.5 <u>Decision:</u> No item removed due to an extreme mean or low SD.	<u>Decision:</u> No item removed for an extreme endorsement frequency.	Item B99 has a poor inter-item correlations with B93, B94, B95 <u>Decision:</u> Keep B99 despite poor inter-item correlations.	All > 0.3 <u>Decision:</u> No item removed for poor item-total correlation	Cronbach's alpha will improve with 0.11 if item B99 removed <u>Decision:</u> Keep B99.	Item B99 is essential to measure youth-friendliness. <u>Decision:</u> Keep B99.

Item B99 (“The doctor/ nurse asked you what treatment you preferred”) was responded to more negatively than the other items in the subscale. Response options were mostly negative to item B99 since the doctor or nurse seldomly asked their patients which treatment they preferred. The item was therefore not familiar to the youth attending public PHC clinics; hence, a low mean value and poor internal consistency. A decision was, however, made to keep the item since it addresses an aspect of the WHO characteristics of YFHS: “Adolescents are actively involved in designing, assessing and providing health services” (WHO 2012:31). Item B99 was kept to give the youth as recipients of healthcare an opportunity to make their needs more visible and improve the services’ effectiveness (Sawyer et al 2012:1638).

Item B95 (“The doctor/nurse explained to you what tests he/she was doing when examining you”); B96 (“The doctor/nurse explained to you the results of the tests or check-ups he/she has done”); B97 (“The doctor/nurse explained to you the treatment he/she gave and why he/she gave it”) and B100 (“You understood the tests and/or treatments the doctor/nurse gave”) were removed since they had similar mean values and related meaning. Item B94 (“The doctor/nurse explained things in a way you could understand”) best represented items B95, B96, B97 and B100. The first round of item and reliability analyses of subscale 11 resulted in 5 items (B94, B98, B99, B100 and B101). The repeated Cronbach’s alpha was 0.749. The internal consistency of the remaining 5 items was therefore acceptable and a second round of item and reliability analyses was not required.

4.4.3.3 Sub-conclusion of final adaptation

Item and reliability analyses resulted in 57 items within 9 subscales. Individual items (B24, B89, B90, B91 and B92) were included in the 57 items and did not undergo item and reliability analyses since they did not belong to a subscale. Table 4.29 presents the items in the Final Adapted (FA) YFHS-WHO+ questionnaire. The FA YFHS-WHO+ questionnaire is attached as Annexure 26.



Table 4.29: Items in FA YFHS-WHO+ questionnaire

New subscale name	Items kept from the IA YFHS-WHO+ questionnaire	New item number in the FA YFHS-WHO+ questionnaire
1: Access A	B1 B2 B3 B4 B5 B9 B11 B12 B13 B14	B1 B2 B3 B4 B5 B6 B7 B8 B9 B10
2: Access B	B84 (introductory sentence) B85 B86 (introductory sentence) B87	B45 (introductory sentence) B46 B47 (introductory sentence) B48
3: Access: (Parental/community support)	B26 B27 B28 B29 B30 B31	B12 B13 B14 B15 B16 B17
4: Equity A	B38 B42 B43 B48 B49 B50 B51 B52 B53	B18 B19 B20 B21 B22 B23 B24 B25 B26
5:Equity B	B54 B55	B27 B28
6: Respect (Acceptability)	B58 B59 B61 B62 B64	B29 B30 B31 B32 B33
7: Privacy	B66 B67 B68 B70 B71	B34 B35 B36 B37 B38
8: No judgement	B72 B73 B74 B76 B77 B78	B39 B40 B41 B42 B43 B44
9: Quality	B93 B94 B98 B99 B101	B53 B54 B55 B56 B57
Individual item	B24 B89 B90 B91 B92	B11 B49 B50 B51 B52

4.4.4 Hypothesis testing

4.4.4.1 Scoring the clinics

Responses to the FA YFHS-WHO+ questionnaire were used to score Clinic A, Clinic L, Clinic S and Clinic B. Items 'Introductory sentences' (items B45 and B47) and item B57 in the FA YFHS-WHO+ questionnaire were not included in the score. A total score was determined per questionnaire. This score was weighted to allow for a true representation of each response to the total score since the Likert-scales of items did not consistently have the same number of response alternatives. A mean youth score was then calculated per clinic by averaging across the weighted total scores of the questionnaires. Table 4.30 also shows the number of questionnaires included from each clinic: Clinic A (23 questionnaires); Clinic L (25 questionnaires); Clinic B (26 questionnaires) and Clinic S (28 questionnaires).

Table 4.30: Descriptive statistics of the weighted mean youth scores per clinic

Clinic	Number of questionnaires (n)	Mean youth score	Standard deviation
Clinic A	23	74.40	14.87
Clinic L	25	70.61	12.81
Clinic S	28	68.72	13.04
Clinic B	26	59.67	12.22

Clinic A scored the highest (mean: 74.40) followed by Clinic L (mean: 70.61). Clinic A and Clinic L therefore represent "more youth-friendly" clinics. Clinic S (mean: 68.72) and Clinic B (mean: 59.67) scored the lowest and therefore represent "less or not youth-friendly" clinics.

The mean youth score per clinic was a good representation of the data since the standard deviation (SD) was small (Field & Miles 2010:38). Standard deviation refers to the "range of the distribution of values around the mean" which means if the SD is 15, then 68% of the scores lies within 15 above and 15 below the mean value (Botma et al 2010:155-156). A low SD indicates limited variation and accurate representation while a high SD indicates that the scores are more spread from the mean, and the mean is a poor fit to the data. The SDs of the 4 distributions ranged between 12.22 to 14.87 and was low relative to the mean youth scores.

4.4.4.2 Testing the hypothesis

The hypothesis to construct validity was tested in two ways.

Firstly, the ranking of the mean experts scores (norm of youth-friendliness) and weighted mean youth scores per clinic were compared as presented in Table 4.31. A rank of 1

represents the “most youth-friendly” (highest score) and a rank of 4 the “less or not youth-friendly” (lowest score).

Table 4.31: Ranking of the mean experts score and mean youth score per clinic

Clinic	Rank: mean experts score	Mean experts score	Rank: youth score	Mean youth score per clinic
Clinic L	1	91.99	2	70.61
Clinic A	2	91.79	1	74.40
Clinic B	3	76.59	4	59.67
Clinic S	4	76.10	3	68.72

Although the ranking did not correspond on the same level (the same clinic ranked first, second, third, fourth by the experts and the youth), both the experts and the youth scored Clinics A and L the “most youth-friendly” clinics with Clinics B and S the “less or not youth-friendly” clinics. Two extreme groups therefore existed and the method of construct validation by extreme groups was used (LoBiondo-Wood & Haber 2010:293; Streiner & Norman 2008:261).

Comparison between the ranks of the mean experts score and the mean youth score of the group of the “most youth-friendly” clinics (Clinic A and Clinic L) and the “least/not youth-friendly” clinics (Clinic B and Clinic S) support the hypothesis that primary healthcare services (clinics) with a higher score of youth-friendliness (when scored by experts) have a higher score of youth-friendliness when scored by young people (aged 18-24) than the primary healthcare services (clinics) with a lower experts score of youth-friendliness.

The second test involved the statistical *t*-test to determine whether the difference between the means of the two groups was significant. This second test was performed to provide empirical evidence of the Final Adapted (FA) YFHS-WHO+ questionnaire ability to distinguish between two populations with differing numbers of the underlying attributes to provide further support of construct validation through extreme groups. The independent *t*-test tested the significance of the difference between the combined mean youth scores of the two highest ranking clinics (Clinic L and Clinic A) and the combined mean youth scores of the two lowest ranking clinics (Clinic B and Clinic S).

The null hypothesis (H_0) proposes that no difference existed between the combined mean youths’ score of the highest ranking clinics (μ_1) and the combined mean youths’ score of the lowest ranking clinics (μ_2). Hypothesis 1 is the alternative which proposes that a difference did exist (see Figure 4.4).

$H_0: \mu_1 = \mu_2$

$H_1: \mu_1 \neq \mu_2$

Figure 4.5: Illustration of the hypothesis for the independent t-test

The descriptive statistics of the weighted mean youth score (referred to as Weighted_OverallP) of the two groups of clinics are provided in Table 4.32.

Table 4.32: Descriptive statistics of the combined weighted youth scores for the highest ranking and the lowest ranking clinics

Clinics combined	Number of questionnaires (n)	Statistic		Std. Error
Highest ranking: Clinics A and L	(n=48)	Mean	72.42	1.99
		Median	72.63	
		Std. Deviation	13.81	
		Minimum	35.70	
		Maximum	100.00	
		Range	64.30	
Lowest ranking: Clinics B and S	(n=54)	Mean	64.36	1.81
		Median	65.45	
		Std. Deviation	13.33	
		Minimum	42.28	
		Maximum	95.03	
		Range	52.75	

The mean for the highest ranking clinics (Clinic A and Clinic L) was 72.42 (n=48) and for the lowest ranking clinics (Clinic B and Clinic S) it was 64.36 (n=54).

The descriptive statistics are further illustrated in Figure 4.5. The shaded box represents the middle 50% of scores with the median representing the thick horizontal line in the middle of the box. The two whiskers extending from the box represent the highest and lowest scores (Field & Miles 2010:97). The whiskers indicate the skewness of the distribution. The distributions of the highest and lowest ranking clinic are negatively skewed. Two outliers (low scores below 1.5 x the -25% percentile) existed in the group of highest ranking clinics.

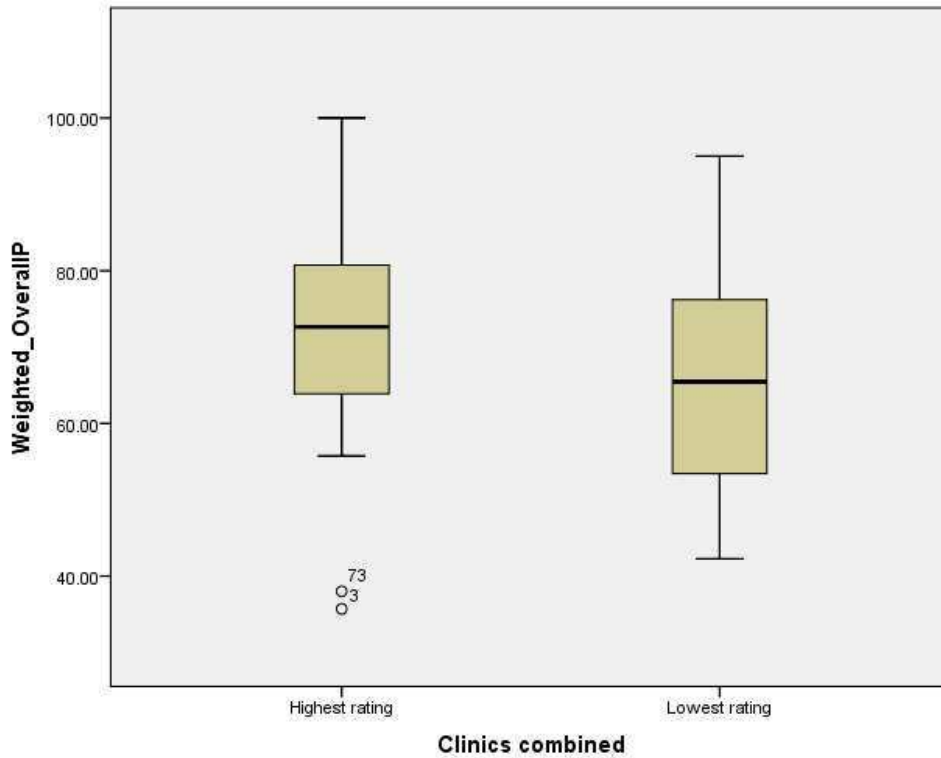


Fig 4.6: Box-and-whisker plot of distribution of weighted mean youth scores for highest and lowest ranking clinics

The independent *t*-test could be performed since the assumptions were supported (Field & Miles 2010:273):

- The distribution was normal as supported by the Shapiro-Wilk test with a *p* value of 0.526 and 0.101 therefore $p > 0.05$ (see Table 4.33) (Field & Miles 2010:127).
- The variances of the two groups were roughly equal as supported by the Levene's test with a $p = 0.63$ and therefore equality of variances ($p > 0.05$) (see Table 4.34) (Field & Miles 2010:131).
- Scores were independent since different youths responded to the questionnaire at the different clinics.

Table 4.33: Shapiro-Wilk test of normality

	Clinics combined	<i>p</i> value
Weighted_OverallIP	Highest ranking	0.52
	Lowest ranking	0.10

The results of the independent *t*-test are presented in Table 4.34.

Table 4.34: Independent *t*-test

		Equal variances assumed	
Levene's test for equality of variances	F	0.22	
	<i>P</i> value	0.63	
<i>t</i> -test for equality of means	<i>T</i>	2.99	
	Df	100.00	
	<i>p</i> value (2-tailed)	0.003	
	Mean difference	8.06	
	Std. Error difference	2.69	
	95% confidence interval of the difference	Lower	2.72
		Upper	13.40

The highest ranking clinics had a greater mean (mean: 72.42; SE=1.99) than the lower ranking clinics (mean: 64.36; SE=1.81). This difference was significant, $t(100) = 2.99$, $p = 0.003$. The 95% confidence interval was (2.72;13.40). Considering the p value < 0.05 , the H_0 was rejected and H_1 accepted. A significant difference therefore exists between the “more youth-friendly” and “less/ not youth-friendly” clinics.

It can therefore be concluded that the FA YFHS-WHO+ questionnaire was able to distinguish between clinics that were “more youth-friendly” and “less or not youth-friendly”. The validity of the FA YFHS-WHO+ questionnaire is therefore supported.

4.5 CONCLUSION

The findings for adaptation and validation of the YFHS-WHO+ questionnaire were discussed systematically in this chapter. In Phase 1 a norm for youth-friendliness through expert evaluation was established. Two extreme groups of “more youth-friendly” and “less or not youth-friendly” clinics were identified for hypothesis testing in Phase 3. The initial adaptation (IA) of the original existing YFHS-WHO+ questionnaire was discussed in Phase 2. The original YFHS-WHO+ questionnaire comprising 97 items was increased to 101 items through pre-test group discussions with youth patients attending public PHC clinics in the Tshwane District. In Phase 3 the final adaptation and reduction of the IA YFHS-WHO+ questionnaire length was discussed. The FA questionnaire involved statistical analyses. The youth scores of the clinics with the FA YFHS-WHO+ questionnaire also resulted in two extreme groups. The hypothesis was supported through ranking of the mean expert scores and the mean youth scores of these two extreme groups. The *t*-test supported the hypothesis indicating that the FA YFHS-WHO+ questionnaire can effectively distinguish between clinics which are “more youth-friendly” and “less or not youth-friendly”.

CHAPTER 5

CONCLUSIONS, LIMITATIONS AND SUGGESTIONS FOR FUTURE STUDIES

5.1 INTRODUCTION

In this last chapter the research findings are summarised, accomplishments of the research objectives concluded, limitations indicated and suggestions for future research studies are made. The aim of the study was to adapt an existing English version of the YFHS-WHO+ questionnaire to validly and reliably measure the youth-friendliness of public PHC services in the Tshwane District of South Africa. The existing YFHS-WHO+ questionnaire, originally received from Dr DM Haller and her international team of experts, was adapted to the context of the study while good psychometric properties were maintained through statistical measures. The adaptation was followed by a test for the validity of the Final Adapted (FA) YFHS-WHO+ questionnaire. The validity was supported since it was able to significantly distinguish between two groups of clinics: one group of “more youth-friendly” clinics and a group of “less or not youth-friendly” clinics.

5.2 SUMMARY OF ADAPTATION OF THE YFHS-WHO+ QUESTIONNAIRE

5.2.1 Initial Adaptation (IA)

The Initial Adaptation (IA) involved a review of the existing YFHS-WHO+ questionnaire with the aim to improve the clarity and relevancy of each item to the study population (Polit & Beck 2012:357; Streiner & Norman 2008:129). Youths attending 4 different public PHC clinics in the Tshwane District reviewed the items within 6 group discussions (referred to as a pre-test). Two experts in YFHS and PHC clinics also reviewed the items for its face validity in support of suggestions made by the youth. Cognitive methods of rephrasing and probing were used during the group discussions with the youths who made suggestions to rephrase, remove or add items. Twenty-seven items were rephrased, four items were excluded and eight items added as a result of similarity of suggestions (consensus) by two or more youth discussion groups. A total of 39 changes were therefore made to the items of the YFHS-WHO+ questionnaire. Several changes were also made to the Likert-scale response alternatives to improve accuracy of measurement.

The most common suggestions the youths made regarding the rephrasing of items was to replace what they perceived as 'difficult' words with 'simpler' words or then words more understandable in youth nomenclature (for example, "acne" changed to "skin problems"; "concerns" changed to "problems"; "inconvenient" to "not suitable"). Items were also rephrased by adding an explanation (such as "dagga" added in brackets after the word "marijuana"; "prevention of pregnancy" added in brackets after the word "contraception" and so forth). Also, words were replaced with other items that better suited the context (such as 'facility' changed to 'clinic'; "from the countryside" changed to "where they come from: rural or urban"; the drug "nyaope" was added to items referring to drug abuse; "...how quickly could you get an appointment?" changed to "...to use this clinic, how quickly were you attended to?"). The four items that were removed were not relevant to the context and the eight items that were added ensured comprehensive measurement within the context of the structural and functional setup of public PHC clinics in the Tshwane District.

Only 4 items of the existing YFHS-WHO+ questionnaire were not suitable for the study context. This indicated that the youth in the study context also experienced most of the universally existing barriers in utilizing friendly healthcare services. Twenty-seven items were, however, rephrased to improve clarification. Several changes were made to the questionnaire which indicates that the cognitive methods were effective (Streiner & Norman 2008:128). The existing English version of the YFHS-WHO+ questionnaire (with 97 items in 10 subscales) in this IA phase of the study consisted of 101 items in 11 subscales.

5.2.2 Final Adaptation (FA)

Only the most informative and reliable items for measuring youth-friendliness were included in the FA YFHS-WHO+ questionnaire. The aim of the final adaptation was therefore to reduce the length of the questionnaire while optimising its psychometric properties (Streiner & Norman 2008:108; Polit & Beck 2012:360, 362) and it involved two steps.

The first step was a quantitative analysis of the responses to an item to identify items that were not successful to obtain a response. An item was excluded if more than 20% of youths did not respond to it. A quantitative analysis of responses resulted in removal of one item (item B57 in the IA YFHS-WHO+ questionnaire) that was also not essential to measure the youth-friendliness of PHC services. Item B92 in the IA YFHS-WHO+ questionnaire was also unable to obtain sufficient responses but was kept since it is essential to the WHO YFHS characteristic: "Adolescents are actively involved in designing, assessing and providing health services". Only two items were not able to obtain sufficient responses. This indicates that all the other items had a good response rate of at least 80%.

The second step to final adaptation involved item and reliability analyses that allowed for removal of redundant items (Viswanathan 2005:19), items that did not fit well in a subscale (Polit & Beck 2012:362,367), and items that did not allow for sufficient variance (Polit & Beck 2012:362; Viswanathan 2005:77). Most of the removed items were for the reason of redundancy (had similar means and related meaning to one or more items within the subscale). Only some of the items were removed because they did not fit well within the subscale (poor internal consistency) and one item was removed since it did not allow for sufficient variation (high endorsement frequency of the response alternative). Two subscales (subscale 2: Access B and subscale 5: Community support) was removed. Subscale 2 did not obtain accurate responses and was less applicable to the characteristics of YFHS. Subscale 5 was similar to subscale 4 and therefore redundant.

One round of item and reliability analyses was conducted and the gain in Cronbach's alpha was optimised with consideration of all the diagnostics of item and reliability and of the contextual relevance of the items (Viswanathan 2005:18,26,77). The IA YFHS-WHO+ questionnaire was thus reduced to an FA YFHS-WHO+ questionnaire with 57 items in 9 subscales. Cronbach's alpha ranged between 0.725 - 0.935 for 7 subscales. Subscale 3 had a Cronbach's alpha of 0.638 after final adaptation and subscale 9 (items B70 and B71) had a Cronbach's alpha of 0.479. The lower Cronbach's alpha of 0.638 and 0.479 were acceptable since both these Cronbach's alpha was determined for two items each and Streiner and Norman (2008: 90) argue that a subscale with fewer items will have a lower Cronbach's alpha. The FA YFHS-WHO+ questionnaire therefore consisted of 9 subscales with items that belonged together to measure the same underlying attribute and therefore claim good internal consistency reliability. The FA YFHS-WHO+ questionnaire is attached as Annexure 26.

5.3 ACCOMPLISHMENT OF RESEARCH OBJECTIVES

The study had three research objectives that were accomplished through three phases.

The first objective (to adapt the existing YFHS-WHO+ questionnaire to suit the context of the public PHC clinics in Tshwane District) was accomplished through the second phase (initial adaptation [IA]) and third phase (final adaptation [FA]) as summarised in section 5.2.

The second objective (to determine the construct validity of the adapted YFHS-WHO+ questionnaire) was accomplished through hypothesis testing with contrasting groups. The two contrasting groups were the "more youth-friendly" and the group of "less or not youth-

friendly” clinics. The hypothesis, namely primary healthcare services specifically aimed towards young people (reflected in a higher score of youth-friendliness when scored by experts) had a higher score of youth-friendliness when scored by young people (aged 18 to 24) than primary healthcare services that do not have this aim (reflected in a lower score of youth-friendliness when scored by experts), was tested with a non-statistical comparison of the ranks of the experts and youth scores and a statistical *t*-test to determine the significance of the difference between the scores of the two contrasting groups. The experts’ scores were collected in Phase 1 and the youths’ scores in Phase 3. During Phase 1 the experts identified the two contrasting groups of which the scores of Clinic A and Clinic L indicated they were more youth-friendly than Clinic B and Clinic S. The findings of Phase 3 indicate that the youth scored Clinic A and Clinic L higher than Clinic B and Clinic S. The comparison of the ranks therefore supported the hypothesis. The statistical *t*-test provided empirical evidence in support of the hypothesis since the youths’ scores of the two contrasting groups differed significantly. The FA YFHS-WHO+ questionnaire therefore claims construct validity in that it measured what it intended to measure (Polit & Beck 2012:339) since it was able to distinguish between the two contrasting groups (“more youth-friendly” and “less or not youth-friendly”) (LoBiondo-Wood & Haber 2010:293; Streiner & Norman 2008:261).

The third objective (to determine the reliability of the IA YFHS-WHO+ questionnaire) was accomplished through reliability analysis in Phase 3. The internal consistency reliability was optimised with Cronbach’s alpha that ranged between 0.725 - 0.935, except for two subscales which had a Cronbach’s alpha of 0.63 and 0.479 respectively but it was regarded acceptable.

5.4 LIMITATIONS

Limitations of this study indicate the restriction to the application of the research findings.

The study context was limited to public PHC clinics in the Tshwane District. The public PHC clinics were suitable for this study since it was recognised as the most sustainable way to reach the majority of South Africa’s youths (Ashton et al 2009:12). Different barriers to youth-friendly health services could exist in other South African public and private healthcare settings attended by the youth.

The Tshwane District is a metropolitan municipality with a diverse population. English is spoken more often in a metropolitan context than in rural areas and the FA YFHS-WHO+ questionnaire remained English to accommodate the diversity of the metropolitan youth

population. The FA YFHS-WHO+ questionnaire is therefore limited to youths who are able to read and understand English. Although Sepedi was the first language of most respondents, all could converse in English as it was an inclusion criterion.

The majority of respondents were of the Black African population. Although there was a lack of representation of the White and Indian or Asian populations and limited representation of the Coloured population in the pre-test sample for the IA, the White and Coloured populations were represented in the sample for the FA YFHS-WHO+ questionnaire. Generalisation to the Indian or Asian population therefore remains limited.

The study population included those aged 18 to 24 years even though youth is defined by the United Nations (UN) and WHO as young people aged 15 to 24 years (Sawyer et al 2012:1632). However, the legal age for consent to participate in research in South Africa is 18 years and above (Strode et al 2010:247). A need therefore still exists to adapt and validate the YFHS-WHO+ questionnaire with youths aged 15 to 18 years. Young people are especially vulnerable to sexual and reproductive health problems since many engage in sex from such a young age (Shisana et al 2014:xxx).

More than 80% of the samples for each phase of the study were female. Adaptation of the YFHS-WHO+ questionnaire was subsequently mostly according to the perception of the female youth population. Male youths experience unique needs such as the need for sexual health and drug counselling (Otwombe et al 2015:8) and unique barriers to access healthcare services such as clinics not open after hours and perceived stigmatisation by female nurses (Leichliter et al 2011:83). The YFHS-WHO+ questionnaire measures YFHS according to the WHO's five qualities of YFHS relevant to both genders, but studies with specific focus on the perception of male youths may need to adapt the YFHS-WHO+ questionnaire with more male respondents.

5.5 SUGGESTIONS FOR FUTURE RESEARCH STUDIES

The youth population of South Africa is diverse with regard to culture, language, ethnicity and socioeconomic circumstances. Inequities in access to healthcare continue to exist especially among the poor, Black African population and in populations residing in rural areas (Harris et al 2011:S102,S118). Improvements of the youth-friendliness of public PHC clinics are reported limited in rural areas (Geary et al 2014:5). The use of the YFHS-WHO+ questionnaire will therefore be of value to measure the perception of the youth to improve these services. Validity of a questionnaire is, however, specific to the population and is

context-related since the items should be clearly understood by those it is intended for to ensure accurate measurement (Streiner & Norman 2008:251). Translation, adaptation and validation of the YFHS-WHO+ questionnaire would therefore be necessary to be suitable for other populations or contexts in South Africa. Future cross-cultural studies will also allow for comparison of the results across the different studies both nationally and internationally (Gjersing et al 2010:1).

Similar to the existing YFHS-WHO+ questionnaire developed for the use in Herzegovina and Bosnia (Meynard et al 2009:23), the FA YFHS-WHO+ questionnaire can be used for research purposes and to evaluate the progress of quality improvement programmes according to the youth as recipients. Improvements will then be more effective since it is focussed on the demands of the recipient. The FA YFHS-WHO+ questionnaire avail a quantitative measure that allow youth to identify problematic areas that can be further explored through qualitative methods.

The FA YFHS-WHO+ questionnaire that claims good psychometric properties can be also be used to validate another measure of youth-friendliness (through convergent validation) in the South African context.

5.6 CONCLUSION

In this study the YFHS-WHO+ questionnaire was adapted to measure the youth-friendliness of public PHC clinics in the Tshwane District. The length of the existing YFHS-WHO+ questionnaire was reduced from 97 to 57 items and the internal consistency reliability optimised. The final adaptation was successful since the FA YFHS-WHO+ questionnaire was able to distinguish between two groups of clinics with differing levels of the youth-friendliness (one group was “more youth-friendly” and the other “less or not youth-friendly”). In support of the hypothesis, the clinics that were scored “more youth-friendly” by the experts were also scored “more youth-friendly” by the youth. Conversely, the clinics that were scored “less or not youth-friendly” by the experts were also scored “less or not youth-friendly” by the youth. The PHC clinics that were scored as “more youth-friendly” were also more aimed towards the youth than those that were not. The FA YFHS-WHO+ questionnaire therefore claim to validly and reliably measure the youth-friendliness of public PHC services in the Tshwane District according to the perception of youths aged 18 to 24. Refer to Annexure 26 for the FA YFHS-WHO+ questionnaire.

This FA YFHS-WHO+ questionnaire is a unique quantitative measure of youth-friendliness against all five the WHO qualities of YFHS and can be used for research purposes. The FA

YFHS-WHO+ questionnaire for use in Tshwane District, South Africa strengthens the voice of the youth as recipients of services at public PHC clinics. Measure validation is, however, not confined to one study since validation is an ongoing process of gathering evidence in support of or against the validity of the measure (Kelly et al 2005:1616; Viswanathan 2005:77). Future studies in South Africa could expand the dimensions, include different contexts, and adapt the FA YFHS-WHO+ questionnaire accordingly.

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Annexure 1: Ten NAFCI standards and 41 corresponding criteria

NAFCI standards and corresponding criteria (Dickson, Ashton & Smith 2007:86-87)

Standard	Criterion
Standard 1. Management systems are in place to support the effective provision of adolescent-friendly health services.	Data are collected to determine the adolescent health needs in the community
	The clinic has a service plan that addresses the need for adolescent health services and a process to implement the plan
	Staff receive support and supervision on an on-going basis
	The clinic has a regular process for improving the quality of adolescent services
	The clinic has a system to assure adolescent and community participation in the planning and provision of care
	The clinic has an adequate client record system
Standard 2. The clinic has policies and processes that specifically support the rights of adolescents.	Clinic staff knows the sexual and reproductive health rights of adolescents
	The clinic pro-actively promotes the sexual and reproductive health rights and responsibilities of adolescents
	Clinic staff provides services taking into account the rights of adolescents
	Providers and staff maintain confidentiality of adolescent clients
Standard 3. Clinic services appropriate to the needs of adolescents are available and accessible.	The scheduling, location and scope of adolescent services provided by the clinic are clearly visible and communicated to the community
	The clinic actively promotes adolescent health services within the community
	Services are provided within time frames convenient for adolescents in the community
	All staff including reception, clerical and housekeeping staff, are able to assist youth to access care in an informed, non-judgmental manner
	Syndromic management of STIs is provided
	A high quality voluntary counselling and testing service is provided
	An HIV programme is provided
	Contraceptive information, counselling and methods are provided
	Services are provided for pregnancy
	Information, counselling and appropriate referral for violence/abuse and mental health problems are provided
Standard 4. The clinic has a physical environment conducive to the provision of adolescent-friendly health services	Consultations with clients occur in a place that assures privacy
	The clinic is clean and comfortable for adolescents
	Appropriate infection control procedures are practiced
Standard 5. The clinic has the drugs, supplies and equipment to provide the essential service package for adolescent-friendly health services.	Necessary drugs and contraceptives are regularly available for essential service package case Management
	Supplies are available for essential service package case management
	Working equipment is available for the provision of the essential service package

Standard 6. Information, education and other communication consistent with the essential service package are provided.	The clinic has accurate, easily understandable information and education materials appropriate for adolescents
	Health-care workers provide information and education activities at the clinic and in the community
	Adolescents are involved in the provision of IEC activities at the clinic and in the community
Standard 7. Systems are in place to train staff to provide adolescent-friendly services.	The clinic has a training plan to meet the needs of its staff to provide the essential service package, using the standard case management guidelines
	The staff is trained in providing the essential service package, using the standard case management guidelines
	Staff are trained and developed to assist and serve youth in a non-judgmental manner
Standard 8. Adolescents receive an accurate psychosocial and physical assessment.	Health-care providers take an appropriate history
	Health-care providers perform appropriate physical examination and investigations according the case management guidelines/protocols
	Assessments are undertaken with consideration being given to the comfort, dignity and modesty of the adolescent
	Health-care providers ensure that no opportunity is missed to comprehensively assess adolescents' health needs and risks
Standard 9. Adolescents receive individualised care based on standard service delivery guidelines.	Case management guidelines for the essential service package are available and used
	Adolescents are encouraged to express their concerns, ask questions and discuss treatment options
	Health-care providers use effective counselling skills based on the essential service package
Standard 10. The clinic provides continuity of care for adolescents.	Adolescents are given clear and understandable follow-up information
	An adequate referral system for adolescent health care exists

**Annexure 2: Expert information document, agreement and
consent: Phase 1**

EXPERT'S INFORMATION LEAFLET, AGREEMENT & INFORMED CONSENT FORM FOR A NON-INTERVENTION STUDY

TITLE OF STUDY: Validation of a measure of youth-friendly primary healthcare services in Tshwane District
Phase 1: Expert evaluation

Principle investigator: Christelle Boersema

Institution: University of Pretoria

DAYTIME AND AFTER HOURS TELEPHONE NUMBER(S):

Daytime numbers: 012 354 1332

Afterhours: 082 302 8812

DATE AND TIME OF FIRST INFORMED CONSENT DISCUSSION:

17	02	2014	:
Dd	Mm	Yy	Time

Dear Mr. / Mrs..... A. Xaba.....

1) INTRODUCTION

You are invited to volunteer for a research study. This information leaflet is to help you to decide if you would like to participate. Before you agree to take part in this study you should fully understand what is involved. If you have any questions, which are not fully explained in this leaflet, do not hesitate to ask the investigator. You should not agree to take part unless you are completely happy about all the procedures involved.

2) THE NATURE AND PURPOSE OF THIS STUDY

The study titled: Validation of a measure of youth-friendly primary healthcare services in Tshwane District, is the Master study of Christelle Boersema at the University of Pretoria. The study is supervised by Professor NC Van Wyk.

The measure refers to a questionnaire (the Youth-Friendly Health Services-World Health Organization+questionnaire) that has been developed through an international collaboration for the use in a study of youth-friendly primary care medicine in Herzegovina and Bosnia. The current study aims to adapt and validate this YFHS-WHO+ questionnaire to the context of public primary health care clinics in Tshwane District.

3) EXPLANATION OF THE PROCEDURE TO BE FOLLOWED

The first phase of this study involves an expert evaluation of the youth-friendliness of primary healthcare clinics. Ten clinics have been selected for evaluation. From these ten, clinics that best represent a wide range of youth-friendliness will be selected through statistical methods. You are invited to participate as an expert to evaluate the youth-friendliness of these clinics.

4) RISK AND DISCOMFORT INVOLVED

You will be paid according to remuneration guidelines of the University of Pretoria at R 100 an hour during data collection. Transport costs per visits made by yourself are remunerated with R100.

5) HAS THE STUDY RECEIVED ETHICAL APPROVAL?

This Protocol was submitted to the Faculty of Health Sciences Research Ethics Committee, University of Pretoria and Tshwane/ Metsweding Regional Research Ethics Committee. Written approval has been granted by these committees. The study has been structured in accordance with the Belmont Report which deals with the recommendations guiding ethical research involving human beings. A copy of the Belmont Report may be obtained from the investigator should you wish to review it.

6) I understand that if I do not want to participate in this study, I will not be discriminated against in any way.

7) I may at any time withdraw from this study.

8) CONFIDENTIALITY

All records obtained whilst in this study will be regarded as confidential. Results will be published or presented in such a fashion that your participation will remain unidentifiable.

9) AGREEMENT AND CONSENT TO PARTICIPATE IN THIS STUDY.

I have read or had read to me in a language that I understand the above information before signing this consent form. The content and meaning of this information have been explained to me. I have been given opportunity to ask questions and am satisfied that they have been answered satisfactorily.

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The youth-friendly characteristics should be determined by observation of interactions between

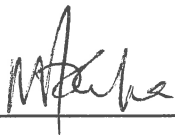
the youth and health professionals as well as conversation with the youth patients (aged 18-24) and other patients attending the clinic; health care providers, the health facility manager and support staff.

The estimated time for an evaluation is between 2 to 4 hours. Expert evaluation should occur during February and March 2014. Training to prepare you for the evaluation is scheduled in advance.

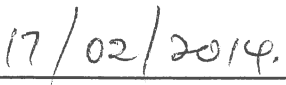
Agreement:

I hereby agree to the conditions above.

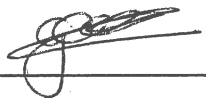
I hereby also agree that I accept to be transported by GC Boersema at my own risk.



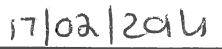
Signature: expert



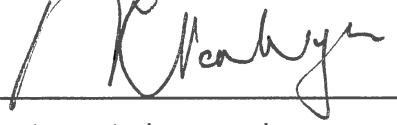
Date



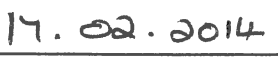
Signature: principle investigator



Date



Signature: study supervisor



Date

EXPERT'S INFORMATION LEAFLET, AGREEMENT & INFORMED CONSENT FORM FOR A NON-INTERVENTION STUDY

TITLE OF STUDY: Validation of a measure of youth-friendly primary healthcare services in Tshwane District
Phase 1: Expert evaluation

Principle investigator: Christelle Boersema

Institution: University of Pretoria

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Daytime numbers: 012 354 1332

Afterhours: 082 302 8812

DATE AND TIME OF FIRST INFORMED CONSENT DISCUSSION:

06	02	2014	:
Dd	Mm	Yy	Time

Dear Mr. / Mrs..... J Mahunzi.....

1) INTRODUCTION

You are invited to volunteer for a research study. This information leaflet is to help you to decide if you would like to participate. Before you agree to take part in this study you should fully understand what is involved. If you have any questions, which are not fully explained in this leaflet, do not hesitate to ask the investigator. You should not agree to take part unless you are completely happy about all the procedures involved.

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24) and other patients attending the clinic; health care providers, the health facility manager and support staff.

The estimated time for an evaluation is between 2 to 4 hours. Expert evaluation should occur during February and March 2014. Training to prepare you for the evaluation is scheduled in advance.

Agreement:

I hereby agree to the conditions above:



Signature: expert

06/02/2014

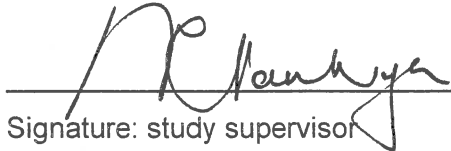
Date



Signature: principle investigator

06/02/2014

Date



Signature: study supervisor

06/02/2014

Date

EXPERT'S INFORMATION LEAFLET, AGREEMENT & INFORMED CONSENT FORM FOR A NON-INTERVENTION STUDY

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Afterhours: 082 302 8812

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17	02	2014	:
Dd	Mm	Yy	Time

Dear Mr. / Mrs..... M Skosana

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Agreement:

I hereby agree to the conditions above.

I hereby also agree that I accept to be transported by GC Boersema at my own risk.

Signature: expert

Date

Signature: principle investigator

Date

Signature: study supervisor

Date

Annexure 3: Expert evaluation instrument to identify more youth-friendly and less youth-friendly PHC services

Expert evaluation instrument to identify more youth-friendly and less youth-friendly PHC services

Instructions to complete the questionnaire:

Indicate the presence of an item per characteristic with a **Y**

Indicate the absence of an item per characteristic with an **N**

Indicate uncertainty/ 'don't know with a **D**

CHARACTERISTICS	YP	OP	HP	M	SS	GO	Total
1. EQUITABLE: All young people, not just some groups are able to obtain the health services that are available.							
1.1 Policies and procedures are in place that does not restrict the provision of services to young people.							
<i>Respondent 1</i>							
<i>Respondent 2</i>							
<i>Respondent 3</i>							
1.2 Healthcare providers treat all their youth patients with equal care and respect, regardless of status.							
<i>Respondent 1</i>							
<i>Respondent 2</i>							
<i>Respondent 3</i>							



CHARACTERISTICS	YP	OP	HP	M	SS	GO	Total
1.3 Support staff treat all youth patients with equal care and respect, regardless of status.							
<i>Respondent 1</i>							
<i>Respondent 2</i>							
<i>Respondent 3</i>							
2. ACCESSIBLE: young people are able to obtain the health services that are available.							
2.1 Policies and procedures are in place that ensures that health services are either free or affordable to young people.							
<i>Respondent 1</i>							
<i>Respondent 2</i>							
<i>Respondent 3</i>							
2.2 Point of service delivery has convenient working hours for young people to attend.							
<i>Respondent 1</i>							
<i>Respondent 2</i>							
<i>Respondent 3</i>							
2.3 Young people are well-informed about the range of health services available and how to obtain them.							
<i>Respondent 1</i>							
<i>Respondent 2</i>							
<i>Respondent 3</i>							
2.4 Community members understand the benefits that young people will gain by obtaining the health services they need, and support their provision.							
<i>Respondent 1</i>							
<i>Respondent 2</i>							
<i>Respondent 3</i>							



CHARACTERISTICS	YP	OP	HP	M	SS	GO	Total
2.5 Some health services and health-related commodities are provided to young people in the community by selected community members, outreach workers, and youth themselves							
<i>Respondent 1</i>							
<i>Respondent 2</i>							
<i>Respondent 3</i>							
3. ACCEPTABLE: young people are willing to obtain the health services that are available to them.							
3.1 Policies and procedures are in place that guarantees client confidentiality.							
<i>Respondent 1</i>							
<i>Respondent 2</i>							
<i>Respondent 3</i>							
3.2 Point of service delivery ensures privacy.							
<i>Respondent 1</i>							
<i>Respondent 2</i>							
<i>Respondent 3</i>							
3.3 Healthcare providers are non-judgmental, considerate, and easy to relate to.							
<i>Respondent 1</i>							
<i>Respondent 2</i>							
<i>Respondent 3</i>							
3.4 Point of service delivery ensures consultations occur in a short waiting time, with or without an appointment, and (where necessary) swift referral.							
<i>Respondent 1</i>							
<i>Respondent 2</i>							
<i>Respondent 3</i>							



CHARACTERISTICS	YP	OP	HP	M	SS	GO	Total
3.5 Point of service delivery has an appealing and clean environment.							
<i>Respondent 1</i>							
<i>Respondent 2</i>							
<i>Respondent 3</i>							
3.6 Point of service delivery provides information and education through a variety of channels.							
<i>Respondent 1</i>							
<i>Respondent 2</i>							
<i>Respondent 3</i>							
3.7 Young people are actively involved in the assessment and provision of health services.							
<i>Respondent 1</i>							
<i>Respondent 2</i>							
<i>Respondent 3</i>							
4. APPROPRIATE: The right health services (the ones they need) are provided to them.							
4.1 The required package of health care is provided to reflect and fulfil the individual needs of all youth either at the point of service delivery or through referral linkages.							
<i>Respondent 1</i>							
<i>Respondent 2</i>							
<i>Respondent 3</i>							
5. EFFECTIVE: The right health services are provided in the right way, and make a positive contribution to their health.							
5.1 Healthcare providers have the required competencies to work with the youth and to provide them the required health services.							
<i>Respondent 1</i>							
<i>Respondent 2</i>							
<i>Respondent 3</i>							



CHARACTERISTICS	YP	OP	HP	M	SS	GO	Total
5.2 Healthcare providers use evidenced-based protocols and guidelines to provide health services.							
<i>Respondent 1</i>							
<i>Respondent 2</i>							
<i>Respondent 3</i>							
5.3 Healthcare providers are able to dedicate sufficient time to deal effectively with their youth patients.							
<i>Respondent 1</i>							
<i>Respondent 2</i>							
<i>Respondent 3</i>							
<i>Respondent 1</i>							
<i>Respondent 2</i>							
<i>Respondent 3</i>							
Total(Y)							
Total (N)							
FINAL TOTAL							
Y/possible answers (all Y+N)							

Key: YP =youth patient (age 18-24); OP= other patient; HP = healthcare provider; M = facility manager; SS = support staff (primary support staff usually the receptionist/ clerk); GO= guide for observation

World Health Organisation (WHO). 2009, *Quality assessment guidebook: a guide to assessing health services for adolescent clients*, World Health Organisation Publications, Geneva.

Annexure 4.1: Guide to expert evaluation: Facility manager



Guide to expert evaluation: Facility manager

REMEMBER: emphasize to the facility manager that:

- Youth refers to young people aged 18 up to 24 years.

Biographic information:

Please mark the appropriate option(s) with a cross (x) or write the number in the space provided.

Respondent number

V0

Age: _____ years

V1

Gender:

1. Male

2. Female

V2

Population group:

1. African Black

2. Coloured

3. Indian or Asian

4. White

5. Other, specify _____

V3

Interview guide:

Circle the appropriate option and comment in the comment box if marked with an * or if applicable.

EQUITABLE:		
1.1 Policies and procedures are in place that does not restrict the provision of services to the youth.	Yes No Don't Know	Comment *:
<p><u>Definition:</u> No policies or procedures restricts the provision of health services to the youth on the basis of age, sex, social status, cultural background, ethnic origin, disability or any other difference.</p>		
<p><u>Question:</u> Does this clinic have policies and procedures in place that allows provision of health services to all youth without discrimination?</p>		
ACCESSIBLE:		
2.1 Policies and procedures are in place that ensures that health services are either free or affordable to the youth.	Yes No Don't Know	Comment *:
<p><u>Definition:</u> All youth are able to receive health services free of charge or are able to afford any charges that might be in place.</p>		
<p><u>Question:</u> Are there policies and procedures in place that ensures that health services at this clinic are either free or affordable to the youth?</p>		



<p>2.2. The point of health service delivery has convenient hours of operation.</p>	<p>Yes</p> <p>No</p> <p>Don't Know</p>	<p>Comment*:</p>
<p><u>Definition:</u> Health services are available to all youth during convenient times of the day.</p>		
<p><u>Question:</u> Do you think that the health services at this clinic are available to all youth during convenient times of the day?</p>		
<p>2.3 The youth are well-informed about the range of available reproductive health services and how to obtain them.</p>	<p>Yes</p> <p>No</p> <p>Don't Know</p>	<p>Comment * :</p>
<p><u>Definition:</u> The youth are aware of what health services are being provided, where they are provided and how to obtain them.</p>		
<p><u>Question:2.3.1</u></p> <p>Do you think that the youth are well- informed about the <u>range</u> of reproductive health services available at this clinic?</p>	<p>Yes</p> <p>No</p> <p>Don't Know</p>	
<p><u>Question: 2.3.2</u></p> <p>Do you think that the youth are well- informed of <u>where and how</u> to obtain reproductive health services at this clinic?</p>	<p>Yes</p> <p>No</p> <p>Don't Know</p>	



<p>2.5. Some health services and health-related commodities are provided to the youth in the community by selected community members, outreach workers and young people themselves.</p>	<p>Yes</p> <p>No</p> <p>Don't Know</p>	<p>Comment * :</p>
<p><u>Definition:</u> Efforts are under way to provide health services close to where the youth are. Depending on the situation, outreach workers, selected community members (e.g. sports coaches) and young people themselves may be involved in this.</p>		
<p><u>Question: 2.5.1.</u></p> <p>Are efforts under way to provide health services close to where the youth are?</p>	<p>Yes</p> <p>No</p> <p>Don't Know</p>	
<p><u>Question: 2.5.2.</u></p> <p>Are outreach workers, selected community members or youth themselves involved in any of these efforts?</p>	<p>Yes</p> <p>No</p> <p>Don't Know</p>	



ACCEPTABLE:		
3.1. Policies and procedures are in place that guarantees patient confidentiality.	Yes No Don't Know	Comment *:
<p><u>Definition:</u> Policies and procedures are in place that maintains youth patient's confidentiality at all times (except where staff are obliged by legal requirements to report incidents such as sexual assaults, road traffic accidents or gunshot wounds, to the relevant authorities). Policies and procedures address:</p> <ul style="list-style-type: none"> – registration – information on the identity of the youth patient and the presenting issue are gathered in confidence; – consultation – confidentiality is maintained throughout the visit of the youth patient to the point of health service delivery (i.e. before, during and after a consultation); – record-keeping – case-records are kept in a secure place, accessible only to authorized personnel; – disclosure of information – staff do not disclose any information given to or received from a youth patient to third parties such as family members, school teachers or employers, without the patient's consent. 		
<p><u>Question: 3.1.1.</u> Are policies and procedures in place to guarantee confidential registration of a youth patient (obtaining their identity and presenting problem)?</p>	Yes No Don't Know	
<p><u>Question: 3.1.2.</u> Are policies and procedures in place to guarantee confidential consultation with the youth?</p>	Yes No Don't Know	
<p><u>Question: 3.1.3.</u> Are case-records kept in a secure place, accessible only to authorized personnel?</p>	Yes No Don't Know	
<p><u>Question: 3.1.4.</u> Is information that a youth patient disclosed to staff, kept confidential and therefore not shared with family members, school teachers or employers without the patient's consent?</p>	Yes No Don't Know	



<p>3.2. The point of health service delivery ensures privacy.</p>	<p>Yes No Don't Know</p>	<p>Comment:</p>
<p><u>Definition:</u> The point of health service delivery is located in a place that ensures the privacy of youth patients. It has a layout that is designed to ensure privacy throughout a youth patient's visit. This includes the point of entry, the reception area, the waiting area, the examination area and the patient-record storage area.</p>		
<p><u>Question: 3.2.1.</u> Do you think the clinic is located in a place that ensures the privacy of youth patients?</p>		<p>Yes No Don't Know</p>
<p><u>Question: 3.2.2.</u> Do you think this clinic's layout is designed to ensure privacy throughout a youth patient's visit? (This includes the point of entry, the reception area, the waiting area, the examination area and the patient-record storage area.)</p>		<p>Yes No Don't Know</p>
<p>3.4. The point of health service delivery ensures consultations occur in a short waiting time, with or without an appointment, and (where necessary) swift referral.</p>	<p>Yes No Don't Know</p>	<p>Comment *:</p>
<p><u>Definition:</u> The youth are able to consult with healthcare providers at short notice, whether or not they have a formal appointment. If their medical condition is such that they need to be referred elsewhere, the referral appointment also takes place within a short time frame.</p>		
<p><u>Question: 3.4.1.</u> Do youth patients wait long for a consultation with a nurse?</p>		<p>Yes No Don't Know</p>
<p><u>Question: 3.4.2.</u> Do youth patients have to wait long for a referral consultation?</p>		<p>Yes No Don't Know</p>



<p>3.6. The point of health service delivery provides information and education through a variety of channels.</p>	<p>Yes No Don't Know</p>	<p>Comment *:</p>
<p><u>Definition:</u> Information that is relevant to the health of the youth is available in different formats (e.g. posters, booklets and leaflets). Materials are presented in a familiar language, easy to understand and eye-catching.</p>		
<p><u>Question: 3.6.1.</u> Is information that is relevant to the health of the youth available in <u>different formats</u> at this clinic?</p>		<p>Yes No Don't Know</p>
<p><u>Question: 3.6.2.</u> Is this information presented in a <u>familiar language and easy to understand</u>?</p>		<p>Yes No Don't Know</p>
<p><u>Question: 3.6.3</u> Do you think that this information is <u>eye-catching</u>?</p>		<p>Yes No Don't Know</p>
<p>3.7. The youth are actively involved in designing, assessing and providing health services.</p>	<p>Yes No Don't Know</p>	<p>Comment *:</p>
<p><u>Definition:</u> The youth are given the opportunity to share their experiences in obtaining health services and to express their needs and preferences. They are involved in certain appropriate aspects of health-service provision.</p>		
<p><u>Question: 3.7.1.</u> Are the youth given the opportunity to share their experiences in obtaining health services and to express their needs and preferences?</p>		<p>Yes No Don't Know</p>
<p><u>Question: 3.7.2.</u> Are the youth involved in providing certain appropriate aspects of health services at this clinic?</p>		<p>Yes No Don't Know</p>



APPROPRIATE:		
4.1. The required package of health care is provided to fulfil the needs of all youth either at the point of health service delivery or through referral linkages.	Yes	Comment *:
	No	
	Don't Know	
<u>Definition:</u> The health needs and problems of the youth are addressed by the health services provided at the point of health service delivery or through referral linkages. The services provided meet the special needs of marginalized groups of youth and those of the majority.		
<u>Question: 4.1.1.</u> Do you think that the health services at this clinic or through referral linkage, addresses the health needs and problems of youth?		Yes No Don't Know
<u>Question: 4.1.2.</u> Do you think that the health services at this clinic or through referral linkage, addresses the health needs of marginalized youth? (such as the disabled youth)		Yes No Don't Know

EFFECTIVE:		
5.1 Healthcare providers have the required competencies to work with the youth and to provide them with the required health services.	Yes	Comment *:
	No	
	Don't Know	
<u>Definition:</u> Healthcare providers have the required knowledge and skills to work with the youth and to provide them with the required health services.		
<u>Question:</u> Does nurses at this clinic have the required knowledge and skills to work with youth and to provide them with the required health services?		



<p>5.2. Healthcare providers use evidence-based protocols and guidelines to provide health services.</p>	<p>Yes</p> <p>No</p> <p>Don't Know</p>	<p>Comment *:</p>
<p><u>Definition:</u> Health service provision is based on protocols and guidelines that are technically sound and of proven usefulness. Ideally, they should be adapted to the requirements of the local situation and approved by the relevant authorities.</p>		
<p><u>Question: 5.2.1</u> Are the health services provided at this clinic based on protocols and guidelines that are technically sound and proven useful?</p>	<p>Yes</p> <p>No</p> <p>Don't Know</p>	
<p><u>Question: 5.2.2</u> Are the protocols and guidelines adapted to the local situation?</p>	<p>Yes</p> <p>No</p> <p>Don't Know</p>	
<p><u>Question: 5.2.3</u> Are the protocols and guidelines approved by the relevant authorities?</p>	<p>Yes</p> <p>No</p> <p>Don't Know</p>	
<p>5.3. Healthcare providers are able to dedicate sufficient time to work effectively with their youth patients.</p>	<p>Yes</p> <p>No</p> <p>Don't Know</p>	<p>Comment:</p>
<p><u>Definition:</u> Healthcare providers are able to dedicate sufficient time to work effectively with their youth patients.</p>		
<p><u>Question:</u> Do you think that nurses at this clinic dedicate sufficient time to work effectively with youth patients?</p>		



5.4. The point of health service delivery has the required equipment, supplies, and basic services necessary to deliver the required health services.	Yes No Don't Know	Comment *:
<u>Definition:</u> Each point of health service delivery has the necessary equipment, supplies, including medicines, and basic services (e.g. water and sanitation) needed to deliver the health services.		
<u>Question:</u> Does this clinic have the necessary equipment, supplies, medicines, and basic services (e.g. water and sanitation) needed to deliver the required health services?		

Annexure 4.2: Guide to expert evaluation: Healthcare provider



Guide to expert evaluation: Healthcare Provider

REMEMBER: emphasize to the facility manager that:

- Youth refers to young people aged 18 up to 24 years.

Biographic information:

Please mark the appropriate option(s) with a cross (x) or write the number in the space provided.

Respondent number

V0

Age: _____ years

V1

Gender:

1. Male
2. Female

V2

Population group:

1. African Black
2. Coloured
3. Indian or Asian
4. White
5. Other, specify _____

V3



Interview guide:

Circle the appropriate option and comment in the comment box if marked with an * or if applicable.

EQUITABLE:		
1.1 Policies and procedures are in place that does not restrict the provision of services to the youth.	Yes No Don't Know	Comment *:
<p><u>Definition:</u> No policies or procedures restricts the provision of health services to the youth on the basis of age, sex, social status, cultural background, ethnic origin, disability or any other difference.</p>		
<p><u>Question:</u> Does this clinic have policies and procedures in place that allows provision of health services to all youth without discrimination?</p>		
1.2. Healthcare providers treat all their youth patients with equal care and respect, regardless of status.	Yes No Don't Know	Comment:
<p><u>Definition:</u> Healthcare providers administer the same level of care and consideration to all youth patients regardless of age, sex, social status, cultural background, ethnic origin, disability or any other reason.</p>		
<p><u>Question:</u> Do you think that nurses at this clinic give the same amount of care and consideration to all youth patients without discrimination?</p>		



ACCESSIBLE:		
2.2. The point of health service delivery has convenient hours of operation.	Yes No Don't Know	Comment*:
<u>Definition:</u> Health services are available to all youth during convenient times of the day.		
<u>Question:</u> Do you think that the health services at this clinic are available to all youth during convenient times of the day?		
2.3. The youth are well-informed about the range of available reproductive health services and how to obtain them.	Yes No Don't Know	Comment * :
<u>Definition:</u> The youth are aware of what health services are being provided, where they are provided and how to obtain them.		
<u>Question:2.3.1</u> Do you think that the youth are well- informed about the <u>range</u> of reproductive health services available at this clinic?	Yes No Don't Know	
<u>Question: 2.3.2</u> Do you think that the youth are well- informed of <u>where and how</u> to obtain reproductive health services at this clinic?	Yes No Don't Know	



<p>2.4. Community members understand the benefits that the youth will gain by obtaining the health services they need, and support their provision.</p>	<p>Yes No Don't Know</p>	<p>Comment *:</p>
<p><u>Definition:</u> Community members (including parents) are well-informed about how the provision of health services could help the youth. They support the provision of these services as well as their use by the youth.</p>		
<p><u>Question: 2.4.1.</u> Do you think that community members (including parents) understand the benefits that the youth will gain by obtaining health services at this clinic?</p>		<p>Yes No Don't Know</p>
<p><u>Question: 2.4.2.</u> Do you think that community members (including parents) support youth to obtain the health services at this clinic?</p>		<p>Yes No Don't Know</p>
<p>2.5. Some health services and health-related commodities are provided to the youth in the community by selected community members, outreach workers and young people themselves.</p>	<p>Yes No Don't Know</p>	<p>Comment *:</p>
<p><u>Definition:</u> Efforts are under way to provide health services close to where the youth are. Depending on the situation, outreach workers, selected community members (e.g. sports coaches) and young people themselves may be involved in this.</p>		
<p><u>Question: 2.5.1.</u> Are efforts under way to provide health services close to where the youth are?</p>		<p>Yes No Don't Know</p>
<p><u>Question: 2.5.2.</u> Are outreach workers, selected community members or youth themselves involved in any of these efforts?</p>		<p>Yes No Don't Know</p>



ACCEPTABLE:		
3.1. Policies and procedures are in place that guarantees patient confidentiality.	Yes No Don't Know	Comment *:
<p><u>Definition:</u> Policies and procedures are in place that maintains youth patient's confidentiality at all times (except where staff are obliged by legal requirements to report incidents such as sexual assaults, road traffic accidents or gunshot wounds, to the relevant authorities). Policies and procedures address:</p> <ul style="list-style-type: none"> – registration – information on the identity of the youth patient and the presenting issue are gathered in confidence; – consultation – confidentiality is maintained throughout the visit of the youth patient to the point of health service delivery (i.e. before, during and after a consultation); – record-keeping – case-records are kept in a secure place, accessible only to authorized personnel; – disclosure of information – staff do not disclose any information given to or received from a youth patient to third parties such as family members, school teachers or employers, without the patient's consent. 		
<u>Question: 3.1.1.</u> Are policies and procedures in place to guarantee confidential registration of a youth patient (obtaining their identity and presenting problem)?	Yes No Don't Know	
<u>Question: 3.1.2.</u> Are policies and procedures in place to guarantee confidential consultation with the youth?	Yes No Don't Know	
<u>Question: 3.1.3.</u> Are case-records kept in a secure place, accessible only to authorized personnel?	Yes No Don't Know	
<u>Question: 3.1.4.</u> Is information that a youth patient disclosed to staff, kept confidential and therefore not shared with family members, school teachers or employers without the patient's consent?	Yes No Don't Know	



<p>3.2. The point of health service delivery ensures privacy.</p>	<p>Yes No Don't Know</p>	<p>Comment:</p>
<p><u>Definition:</u> The point of health service delivery is located in a place that ensures the privacy of youth patients. It has a layout that is designed to ensure privacy throughout a youth patient's visit. This includes the point of entry, the reception area, the waiting area, the examination area and the patient-record storage area.</p>		
<p><u>Question: 3.2.1.</u> Do you think the clinic is located in a place that ensures the privacy of youth patients?</p>		<p>Yes No Don't Know</p>
<p><u>Question: 3.2.2.</u> Do you think this clinic's layout is designed to ensure privacy throughout a youth patient's visit? (This includes the point of entry, the reception area, the waiting area, the examination area and the patient-record storage area.)</p>		<p>Yes No Don't Know</p>
<p>3.4. The point of health service delivery ensures consultations occur in a short waiting time, with or without an appointment, and (where necessary) swift referral.</p>	<p>Yes No Don't Know</p>	<p>Comment *:</p>
<p><u>Definition:</u> The youth are able to consult with healthcare providers at short notice, whether or not they have a formal appointment. If their medical condition is such that they need to be referred elsewhere, the referral appointment also takes place within a short time frame.</p>		
<p><u>Question: 3.4.1.</u> Do youth patients have to wait long for a consultation with a nurse?</p>		<p>Yes No Don't Know</p>
<p><u>Question: 3.4.2.</u> Do youth patients have to wait long for a referral consultation?</p>		<p>Yes No Don't Know</p>



<p>3.6. The point of health service delivery provides information and education through a variety of channels.</p>	<p>Yes No Don't Know</p>	<p>Comment *:</p>
<p><u>Definition:</u> Information that is relevant to the health of the youth is available in different formats (e.g. posters, booklets and leaflets). Materials are presented in a familiar language, easy to understand and eye-catching.</p>		
<p><u>Question: 3.6.1.</u> Is information that is relevant to the health of the youth available in <u>different formats</u> at this clinic?</p>		<p>Yes No Don't Know</p>
<p><u>Question: 3.6.2.</u> Is this information presented in a <u>familiar language and easy to understand</u>?</p>		<p>Yes No Don't Know</p>
<p><u>Question: 3.6.3</u> Do you think that this information is <u>eye-catching</u>?</p>		<p>Yes No Don't Know</p>
<p>3.7. The youth are actively involved in designing, assessing and providing health services.</p>	<p>Yes No Don't Know</p>	<p>Comment *:</p>
<p><u>Definition:</u> The youth are given the opportunity to share their experiences in obtaining health services and to express their needs and preferences. They are involved in certain appropriate aspects of health-service provision.</p>		
<p><u>Question: 3.7.1.</u> Are the youth given the opportunity to share their experiences in obtaining health services and to express their needs and preferences?</p>		<p>Yes No Don't Know</p>
<p><u>Question: 3.7.2.</u> Are the youth involved in providing certain appropriate aspects of health services at this clinic?</p>		<p>Yes No Don't Know</p>



APPROPRIATE:		
4.1 The required package of health care is provided to fulfil the needs of all youth either at the point of health service delivery or through referral linkages.	Yes No Don't Know	Comment *:
<u>Definition:</u> The health needs and problems of the youth are addressed by the health services provided at the point of health service delivery or through referral linkages. The services provided meet the special needs of marginalized groups of youth and those of the majority.		
<u>Question: 4.1.1.</u> Do you think that the health services at this clinic or through referral linkage, addresses the health needs and problems of youth?	Yes No Don't Know	
<u>Question: 4.1.2.</u> Do you think that the health services at this clinic or through referral linkage, addresses the health needs of marginalized youth? (such as the disabled youth)	Yes No Don't Know	

EFFECTIVE:		
5.1 Healthcare providers have the required competencies to work with the youth and to provide them with the required health services.	Yes No Don't Know	Comment *:
<u>Definition:</u> Healthcare providers have the required knowledge and skills to work with the youth and to provide them with the required health services.		
<u>Question:</u> Does nurses at this clinic have the required knowledge and skills to work with youth and to provide them with the required health services?		



<p>5.2. Healthcare providers use evidence-based protocols and guidelines to provide health services.</p>	<p>Yes No Don't Know</p>	<p>Comment *:</p>
<p><u>Definition:</u> Health service provision is based on protocols and guidelines that are technically sound and of proven usefulness. Ideally, they should be adapted to the requirements of the local situation and approved by the relevant authorities.</p>		
<p><u>Question: 5.2.1</u> Are the health services provided at this clinic based on protocols and guidelines that are technically sound and proven useful?</p>	<p>Yes No Don't Know</p>	
<p><u>Question: 5.2.2</u> Are the protocols and guidelines adapted to the local situation?</p>	<p>Yes No Don't Know</p>	
<p><u>Question: 5.2.3</u> Are the protocols and guidelines approved by the relevant authorities?</p>	<p>Yes No Don't Know</p>	
<p>5.3. Healthcare providers are able to dedicate sufficient time to work effectively with their youth patients.</p>	<p>Yes No Don't Know</p>	<p>Comment:</p>
<p><u>Definition:</u> Health-care providers are able to dedicate sufficient time to work effectively with their youth patients.</p>		
<p><u>Question:</u> Do you think that nurses at this clinic dedicate sufficient time to work effectively with youth patients?</p>		



5.4. The point of health service delivery has the required equipment, supplies, and basic services necessary to deliver the required health services.	Yes No Don't Know	Comment *:
<u>Definition:</u> Each point of health service delivery has the necessary equipment, supplies, including medicines, and basic services (e.g. water and sanitation) needed to deliver the health services.		
<u>Question:</u> Does this clinic have the necessary equipment, supplies, medicines, and basic services (e.g. water and sanitation) needed to deliver the required health services?		

Annexure 4.3: Guide to expert evaluation: Support staff



Guide to expert evaluation: Support staff

Clerk, receptionist, cleaner, security guard

REMEMBER: emphasize to the key informant that:

- Youth refers to young people aged 18 up to 24 years.

Biographic information:

Please mark the appropriate option(s) with a cross (x) or write the number in the space provided.

Respondent number V0

Age: _____ years V1

Gender:

1. Male
2. Female V2

Population group:

1. African Black
2. Coloured
3. Indian or Asian
4. White
5. Other, specify _____ V3

Interview guide:

Circle the appropriate option and comment in the comment box if marked with an * or if applicable.

EQUITABLE:		
1.3. Support staff treats all youth patients with equal care and respect, regardless of status.	Yes No Don't Know	Comment:
<p><u>Definition:</u> Support staff administers the same level of care and consideration to all youth patients people regardless of age, sex, social status, cultural background, ethnic origin, disability or any other reason.</p>		
<p><u>Question:</u> Do you think that support staff at this clinic, gives the same amount of care and consideration to all youth patients without discrimination?</p>		

ACCESSIBLE:		
2.1. Policies and procedures are in place that ensures that health services are either free or affordable to the youth.	Yes No Don't Know	Comment *:
<p><u>Definition:</u> All youth are able to receive health services free of charge or are able to afford any charges that might be in place.</p>		
<p><u>Question:</u> Are there policies and procedures in place that ensures that health services at this clinic are either free or affordable to the youth?</p>		



2.2. The point of health service delivery has convenient hours of operation.	Yes	Comment*:
	No	
	Don't Know	
<u>Definition:</u> Health services are available to all youth during convenient times of the day.		
<u>Question:</u> Do you think that the health services at this clinic are available to all youth during convenient times of the day?		

2.3 The youth are well-informed about the range of available reproductive health services and how to obtain them.	Yes	Comment*:
	No	
	Don't Know	
<u>Definition:</u> The youth are aware of what health services are being provided, where they are provided and how to obtain them.		
<u>Question: 2.3.1</u> Do you think that the youth are well- informed about the <u>range</u> of reproductive health services available at this clinic?		Yes
		No
		Don't Know
<u>Question: 2.3.2</u> Do you think that the youth are well- informed of <u>where and how</u> to obtain reproductive health services at this clinic?		Yes
		No
		Don't Know



ACCEPTABLE:		
3.1. Policies and procedures are in place that guarantees patient confidentiality.	Yes No Don't Know	Comment *:
<p><u>Definition:</u> Policies and procedures are in place that maintains youth patient's confidentiality at all times (except where staff are obliged by legal requirements to report incidents such as sexual assaults, road traffic accidents or gunshot wounds, to the relevant authorities). Policies and procedures address:</p> <ul style="list-style-type: none"> – registration – information on the identity of the youth patient and the presenting issue are gathered in confidence; – consultation – confidentiality is maintained throughout the visit of the youth patient to the point of health service delivery (i.e. before, during and after a consultation); – record-keeping – case-records are kept in a secure place, accessible only to authorized personnel; – disclosure of information – staff do not disclose any information given to or received from a youth patient to third parties such as family members, school teachers or employers, without the patient's consent. 		
<u>Question: 3.1.1.</u> Are policies and procedures in place to guarantee confidential registration of a youth patient (obtaining their identity and presenting problem)?	Yes No Don't Know	
<u>Question: 3.1.3.</u> Are case-records kept in a secure place, accessible only to authorized personnel?	Yes No Don't Know	
<u>Question: 3.1.4.</u> Is information that a youth patient disclosed to staff, kept confidential and therefore not shared with family members, school teachers or employers without the patient's consent?	Yes No Don't Know	



<p>3.3. Healthcare providers are non-judgmental, considerate, and easy to relate to.</p>	<p>Yes</p> <p>No</p> <p>Don't Know</p>	<p>Comment *:</p>
<p><u>Definition:</u> Healthcare providers do not criticize their youth patients even if they do not approve of the patients' words and actions. They are considerate to their patients and reach out to them in a friendly manner.</p>		
<p><u>Question:</u> Do you think that the nurses at this clinic are non-judgmental, considerate, and easy to relate to?</p>		
<p>3.4. The point of health service delivery ensures consultations occur in a short waiting time, with or without an appointment, and (where necessary) swift referral.</p>	<p>Yes</p> <p>No</p> <p>Don't Know</p>	<p>Comment *:</p>
<p><u>Definition:</u> The youth are able to consult with healthcare providers at short notice, whether or not they have a formal appointment. If their medical condition is such that they need to be referred elsewhere, the referral appointment also takes place within a short time frame.</p>		
<p><u>Question: 3.4.1.</u> Do youth patients wait long for a consultation with a nurse?</p>		<p>Yes</p> <p>No</p> <p>Don't Know</p>
<p><u>Question: 3.4.2.</u> Do youth patients have to wait long for a referral consultation?</p>		<p>Yes</p> <p>No</p> <p>Don't Know</p>

Annexure 4.4: Guide to expert evaluation: Youth patient

Guide to expert evaluation: youth (aged 18 up to 24 years)

REMEMBER: emphasize to the youth key informants:

- Youth refers to young people aged 18 up to 24 years.
- The questions are only applicable to the clinic they are currently visiting.

Biographic information

Please mark the appropriate option(s) with a cross (x) or write the number in the space provided.

Respondent number V0

Age: _____ years V1

Gender:

1. Male
2. Female V2

Population group:

1. African Black
2. Coloured
3. Indian or Asian
4. White
5. Other, specify _____ V3

Interview guide:

Circle the appropriate option and comment in the comment box if marked with an * or if applicable.

EQUITABLE:		
1.1. Policies and procedures are in place that does not restrict the provision of services to the youth.	Yes No Don't Know	Comment:
<p><u>Definition:</u> No policies or procedures restricts the provision of health services to the youth on the basis of age, sex, social status, cultural background, ethnic origin, disability or any other difference.</p>		
<p><u>Question:</u> Do you think that this clinic's policies and procedures allow provision of health services to all youth without discrimination?</p>		
1.2. Healthcare providers treat all their youth patients with equal care and respect, regardless of status.	Yes No Don't Know	Comment:
<p><u>Definition:</u> Healthcare providers administer the same level of care and consideration to all youth patients regardless of age, sex, social status, cultural background, ethnic origin, disability or any other reason.</p>		
<p><u>Question:</u> Do you think that nurses at this clinic give the same amount of care and consideration to all youth patients without discrimination?</p>		



1.3. Support staff treats all youth patients with equal care and respect, regardless of status.	Yes	Comment:
	No	
	Don't Know	
<u>Definition:</u> Support staff administers the same level of care and consideration to all youth patients people regardless of age, sex, social status, cultural background, ethnic origin, disability or any other reason.		
<u>Question:</u> Do you think that support staff (such as the receptionist, clerk, cleaner or security guard) at this clinic, gives the same amount of care and consideration to all youth patients without discrimination?		

ACCESSIBLE:		
2.1. Policies and procedures are in place that ensures that health services are either free or affordable to the youth.	Yes	Comment:
	No	
	Don't Know	
<u>Definition:</u> All youth are able to receive health services free of charge or are able to afford any charges that might be in place.		
<u>Question:</u> Do you think that all youth visiting this clinic, receive health services free of charge or can they afford the charges?		
2.2. The point of health service delivery has convenient hours of operation.	Yes	Comment*:
	No	
	Don't Know	
<u>Definition:</u> Health services are available to all youth during convenient times of the day.		
<u>Question:</u> Do you think that the health services at this clinic are available to all youth during convenient times of the day?		



<p>2.3. The youth are well-informed about the range of available reproductive health services and how to obtain them.</p>	<p>Yes No Don't Know</p>	<p>Comment*:</p>
<p><u>Definition:</u> The youth are aware of what health services are being provided, where they are provided and how to obtain them.</p>		
<p><u>Question: 2.3.1</u> Do you think that the youth are well- informed about the <u>range</u> of reproductive health services available at this clinic?</p>		<p>Yes No Don't Know</p>
<p><u>Question: 2.3.2</u> Do you think that the youth are well- informed of <u>where and how</u> to obtain reproductive health services at this clinic?</p>		<p>Yes No Don't Know</p>
<p>2.4. Community members understand the benefits that the youth will gain by obtaining the health services they need, and support their provision.</p>	<p>Yes No Don't Know</p>	<p>Comment*:</p>
<p><u>Definition:</u> Community members (including parents) are well-informed about how the provision of health services could help the youth. They support the provision of these services as well as their use by the youth.</p>		
<p><u>Question: 2.4.1.</u> Do you think that community members (including parents) understand the benefits that the youth will gain by obtaining health services at this clinic?</p>		<p>Yes No Don't Know</p>
<p><u>Question: 2.4.2.</u> Do you think that community members (including parents) support youth to obtain the health services at this clinic?</p>		<p>Yes No Don't Know</p>



2.5. Some health services and health-related commodities are provided to the youth in the community by selected community members, outreach workers and young people themselves.	Yes No Don't Know	Comment * :
<u>Definition:</u> Efforts are under way to provide health services close to where the youth are. Depending on the situation, outreach workers, selected community members (e.g. sports coaches) and young people themselves may be involved in this.		
<u>Question: 2.5.1.</u> Do you think that this clinic is making effort to provide health services close to where the youth are?	Yes No Don't Know	
<u>Question: 2.5.2.</u> Do you think that outreach workers, selected community members or youth themselves may be involved in any of these efforts to provide health services close to where the youth are?	Yes No Don't Know	



ACCEPTABLE:		
3.1. Policies and procedures are in place that guarantees patient confidentiality.	Yes No Don't Know	Comment *:
<p><u>Definition:</u> Policies and procedures are in place that maintains youth patient's confidentiality at all times (except where staff are obliged by legal requirements to report incidents such as sexual assaults, road traffic accidents or gunshot wounds, to the relevant authorities). Policies and procedures address:</p> <ul style="list-style-type: none"> – registration – information on the identity of the youth patient and the presenting issue are gathered in confidence; – consultation – confidentiality is maintained throughout the visit of the youth patient to the point of health service delivery (i.e. before, during and after a consultation); – record-keeping – case-records are kept in a secure place, accessible only to authorized personnel; – disclosure of information – staff do not disclose any information given to or received from a youth patient to third parties such as family members, school teachers or employers, without the patient's consent. 		
<u>Question: 3.1.1.</u> Do you think that policies and procedures are in place to guarantee confidential registration (obtaining your identity and presenting problem)?	Yes No Don't Know	
<u>Question: 3.1.2.</u> Do you think that policies and procedures are in place to guarantee confidential consultation (before, during and after consultation with a sister)?	Yes No Don't Know	
<u>Question: 3.1.3.</u> Do you think that case-records are kept in a secure place, accessible only to authorized personnel?	Yes No Don't Know	
<u>Question: 3.1.4.</u> Do you think that information that a youth patient gave to staff, are kept confidential and therefore not shared with family members, school teachers or employers without their permission?	Yes No Don't Know	



<p>3.2. The point of health service delivery ensures privacy.</p>	<p>Yes No Don't Know</p>	<p>Comment:</p>
<p><u>Definition:</u> The point of health service delivery is located in a place that ensures the privacy of youth patients. It has a layout that is designed to ensure privacy throughout a youth patient's visit. This includes the point of entry, the reception area, the waiting area, the examination area and the patient-record storage area.</p>		
<p><u>Question: 3.2.1.</u> Do you think the clinic is located in a place that ensures the privacy of youth patients?</p>		<p>Yes No Don't Know</p>
<p><u>Question: 3.2.2.</u> Do you think this clinic's layout is designed to ensure privacy throughout a youth patient's visit? (This includes the point of entry, the reception area, the waiting area, the examination area and the patient-record storage area.)</p>		<p>Yes No Don't Know</p>
<p>3.3. Healthcare providers are non-judgmental, considerate, and easy to relate to.</p>	<p>Yes No Don't Know</p>	<p>Comment *:</p>
<p><u>Definition:</u> Healthcare providers do not criticize their youth patients even if they do not approve of the patients' words and actions. They are considerate to their patients and reach out to them in a friendly manner.</p>		
<p><u>Question:</u> Do you think that the nurses at this clinic are non-judgmental, considerate, and easy to relate to?</p>		



<p>3.4. The point of health service delivery ensures consultations occur in a short waiting time, with or without an appointment, and (where necessary) swift referral.</p>	<p>Yes No Don't Know</p>	<p>Comment *:</p>
<p><u>Definition:</u> The youth are able to consult with healthcare providers at short notice, whether or not they have a formal appointment. If their medical condition is such that they need to be referred elsewhere, the referral appointment also takes place within a short time frame.</p>		
<p><u>Question: 3.4.1.</u> Do you have to wait long for a consultation with a nurse at this clinic?</p>		<p>Yes No Don't Know</p>
<p><u>Question: 3.4.2.</u> Do you think that you would have to wait long for a consultation when you have been referred for the consultation?</p>		<p>Yes No Don't Know</p>
<p>3.5. The point of health service delivery has an appealing and clean environment.</p>	<p>Yes No Don't Know</p>	<p>Comment:</p>
<p><u>Definition:</u> A point of health service delivery that is welcoming, attractive and clean.</p>		
<p><u>Question :</u>Do you regard this clinic as clean and having a welcoming atmosphere?</p>		



<p>3.6. The point of health service delivery provides information and education through a variety of channels.</p>	<p>Yes No Don't Know</p>	<p>Comment *:</p>
<p><u>Definition:</u> Information that is relevant to the health of the youth is available in different formats (e.g. posters, booklets and leaflets). Materials are presented in a familiar language, easy to understand and eye-catching.</p>		
<p><u>Question: 3.6.1.</u> Do you think information that is relevant to the health of the youth is available in <u>different formats</u> at this clinic?</p>		<p>Yes No Don't Know</p>
<p><u>Question: 3.6.2.</u> Do you think that this information is presented in a <u>familiar language and easy to understand</u>?</p>		<p>Yes No Don't Know</p>
<p><u>Question: 3.6.3</u> Do you think that this information is <u>eye-catching</u>?</p>		<p>Yes No Don't Know</p>
<p>3.7. The youth are actively involved in designing, assessing and providing health services.</p>	<p>Yes No Don't Know</p>	<p>Comment *:</p>
<p><u>Definition:</u> The youth are given the opportunity to share their experiences in obtaining health services and to express their needs and preferences. They are involved in certain appropriate aspects of health-service provision.</p>		
<p><u>Question: 3.7.1.</u> Do you think youth are given the opportunity to share their experiences with regard to the clinic's health services and to express their needs and preferences?</p>		<p>Yes No Don't Know</p>
<p><u>Question: 3.7.2.</u> Do you think the youth are involved in providing certain aspects of health services at this clinic?</p>		<p>Yes No Don't Know</p>



APPROPRIATE:		
4.1. The required package of health care is provided to fulfil the needs of all youth either at the point of health service delivery or through referral linkages.	Yes	Comment *:
	No	
	Don't Know	
<p><u>Definition:</u> The health needs and problems of the youth are addressed by the health services provided at the point of health service delivery or through referral linkages. The services provided meet the special needs of marginalized groups of youth and those of the majority.</p>		
<p><u>Question: 4.1.1.</u> Do you think that the health services at this clinic or at the place where youth are referred to, addresses the health needs and problems of youth?</p>	Yes	
	No	
	Don't Know	
<p><u>Question: 4.1.2.</u> Do you think that the health services at this clinic or at the place where youth are referred to, addresses the health needs of marginalized youth? (such as the disabled youth)</p>	Yes	
	No	
	Don't Know	

EFFECTIVE:		
5.1 Healthcare providers have the required competencies to work with the youth and to provide them with the required health services.	Yes	Comment *:
	No	
	Don't Know	
<p><u>Definition:</u> Healthcare providers have the required knowledge and skills to work with the youth and to provide them with the required health services.</p>		
<p><u>Question:</u> Do you think that nurses at this clinic have the required knowledge and skills to work with youth and to provide them with the required health services?</p>		



<p>5.2. Healthcare providers use evidence-based protocols and guidelines to provide health services.</p>	<p>Yes</p> <p>No</p> <p>Don't Know</p>	<p>Comment *:</p>
<p><u>Definition:</u> Health service provision is based on protocols and guidelines that are technically sound and of proven usefulness. Ideally, they should be adapted to the requirements of the local situation and approved by the relevant authorities.</p>		
<p><u>Question:</u> Do you think that the health services provided at this clinic are based on protocols and guidelines that are technically sound and useful?</p>		
<p>5.3. Healthcare providers are able to dedicate sufficient time to work effectively with their youth patients.</p>	<p>Yes</p> <p>No</p> <p>Don't Know</p>	<p>Comment:</p>
<p><u>Definition:</u> Healthcare providers are able to dedicate sufficient time to work effectively with their youth patients.</p>		
<p><u>Question:</u> Do you think that nurses at this clinic dedicate sufficient time to work with youth patients?</p>		
<p>5.4. The point of health service delivery has the required equipment, supplies, and basic services necessary to deliver the required health services.</p>	<p>Yes</p> <p>No</p> <p>Don't Know</p>	<p>Comment *:</p>
<p><u>Definition.</u> Each point of health service delivery has the necessary equipment, supplies, including medicines, and basic services (e.g. water and sanitation) needed to deliver the health services.</p>		
<p><u>Question:</u> Do you think that this clinic has the necessary equipment, supplies, medicines, and basics services (e.g. water and sanitation) needed to deliver the health services?</p>		

Annexure 4.5: Guide to expert evaluation: Other patient



Guide to expert evaluation: other patient (older than 24 years)

REMEMBER: emphasize to the key informants:

- Youth refers to young people aged 18 up to 24 years.
- The questions are only applicable to the clinic they are currently visiting.

Biographic information:

Please mark the appropriate option(s) with a cross (x) or write the number in the space provided.

Respondent number V0

Age: _____ years V1

Gender:

1. Male
2. Female V2

Population group:

1. African Black
2. Coloured
3. Indian or Asian
4. White
5. Other, specify _____ V3

Interview guide:

Circle the appropriate option and comment in the comment box if marked with an * or if applicable.

EQUITABLE:		
1.2. Healthcare providers treat all their youth patients with equal care and respect, regardless of status.	Yes No Don't Know	Comment:
<p><u>Definition:</u> Healthcare providers administer the same level of care and consideration to all youth patients regardless of age, sex, social status, cultural background, ethnic origin, disability or any other reason.</p>		
<p><u>Question:</u> Do you think that nurses at this clinic give the same amount of care and consideration to all youth patients without discrimination?</p>		
1.3. Support staff treats all youth patients with equal care and respect, regardless of status.	Yes No Don't Know	Comment:
<p><u>Definition:</u> Support staff administers the same level of care and consideration to all youth patients people regardless of age, sex, social status, cultural background, ethnic origin, disability or any other reason.</p>		
<p><u>Question:</u> Do you think that support staff (such as the receptionist, clerk, cleaner or security guard) at this clinic, give the same amount of care and consideration to all youth patients without discrimination?</p>		



2.4. Community members understand the benefits that the youth will gain by obtaining the health services they need, and support their provision.	Yes	Comment *:
	No	
	Don't Know	
<u>Definition:</u> Community members (including parents) are well-informed about how the provision of health services could help the youth. They support the provision of these services as well as their use by the youth.		
<u>Question: 2.4.1.</u> Do you think that community members (including parents) understand the benefits that the youth will gain by obtaining health services at this clinic?	Yes No Don't Know	
<u>Question: 2.4.2.</u> Do you think that community members (including parents) support youth to obtain the health services at this clinic?	Yes No Don't Know	

2.5. Some health services and health-related commodities are provided to the youth in the community by selected community members, outreach workers and young people themselves.	Yes	Comment * :
	No	
	Don't Know	
<u>Definition:</u> Efforts are under way to provide health services close to where the youth are. Depending on the situation, outreach workers, selected community members (e.g. sports coaches) and young people themselves may be involved in this.		
<u>Question: 2.5.1.</u> Do you think that this clinic is making effort to provide health services close to where the youth are?	Yes No Don't Know	
<u>Question: 2.5.2.</u> Do you think that outreach workers, selected community members or youth themselves may be involved in any of these efforts to provide health services close to where the youth are?	Yes No Don't Know	



ACCEPTABLE:		
3.1. Policies and procedures are in place that guarantees patient confidentiality.	Yes No Don't Know	Comment *:
<p><u>Definition:</u> Policies and procedures are in place that maintain youth patient's confidentiality at all times (except where staff are obliged by legal requirements to report incidents such as sexual assaults, road traffic accidents or gunshot wounds, to the relevant authorities). Policies and procedures address:</p> <ul style="list-style-type: none"> – registration – information on the identity of the youth patient and the presenting issue are gathered in confidence; – consultation – confidentiality is maintained throughout the visit of the youth patient to the point of health service delivery (i.e. before, during and after a consultation); – record-keeping – case-records are kept in a secure place, accessible only to authorized personnel; – disclosure of information – staff do not disclose any information given to or received from a youth patient to third parties such as family members, school teachers or employers, without the patient's consent. 		
<u>Question: 3.1.1.</u> Do you think that registration of youth patients are done in a confidential way? (Obtaining their identity and presenting problem)?	Yes No Don't Know	
<u>Question: 3.1.2.</u> Do you think that youth consultations with the sister are done in a confidential way?	Yes No Don't Know	
<u>Question: 3.1.4.</u> Do you think that information that a youth patient gave to staff, are kept confidential and therefore not shared with family members, school teachers or employers without the patient's permission?	Yes No Don't Know	



3.3. Healthcare providers are non-judgmental, considerate, and easy to relate to.	Yes No Don't Know	Comment *:
<u>Definition:</u> Healthcare providers do not criticize their youth patients even if they do not approve of the patients' words and actions. They are considerate to their patients and reach out to them in a friendly manner.		
<u>Question:</u> Do you think that the youth regard the nurses at this clinic as non-judgmental, considerate, and easy to relate to?		

Annexure 4.6: Guide to expert evaluation: Observation



Guide to expert evaluation: Observation

Circle the appropriate option and comment in the comment box if marked with an *or if applicable.

EQUITABLE:		
1.2. Healthcare providers treat all their youth patients with equal care and respect, regardless of status.	Yes No Don't Know (could not observe)	Comment:
<u>Definition:</u> Health-care providers administer the same level of care and consideration to all youth patients regardless of age, sex, social status, cultural background, ethnic origin, disability or any other reason.		
<u>Question:</u> Does nurses at this clinic give the same amount of care and consideration to all youth patients without discrimination?		

ACCESSIBLE:		
2.3. The youth are well-informed about the range of available reproductive health services and how to obtain them.	Yes No Don't Know	Comment * :
<u>Definition:</u> The youth are aware of what health services are being provided, where they are provided and how to obtain them.		
<u>Question: 2.3.1</u> Is there any visible indication of the <u>range</u> of reproductive health services available at this clinic?	Yes No Don't Know	
<u>Question: 2.3.2</u> Are there clear directions for where youth patients can obtain reproductive health services at this clinic?	Yes No Don't Know	



ACCEPTABLE:

3.1. Policies and procedures are in place that guarantees patient confidentiality.	Yes	Comment *:
	No	
	Don't Know	

Definition: Policies and procedures are in place that maintains youth patient's confidentiality at all times (except where staff are obliged by legal requirements to report incidents such as sexual assaults, road traffic accidents or gunshot wounds, to the relevant authorities). Policies and procedures address:
– record-keeping – case-records are kept in a secure place, accessible only to authorized personnel; Etch.

<u>Question:</u> 3.1.3. Are case-records kept in a secure place, accessible only to authorized personnel?	Yes
	No
	Don't Know

3.2. The point of health service delivery ensures privacy.	Yes	Comment:
	No	
	Don't Know	

Definition: The point of health service delivery is located in a place that ensures the privacy of youth patients. It has a layout that is designed to ensure privacy throughout a youth patient's visit. This includes the point of entry, the reception area, the waiting area, the examination area and the patient-record storage area.

<u>Question:</u> 3.2.1. Is this clinic located in a place that ensures the privacy of youth patients?	Yes
	No
	Don't Know

<u>Question:</u> 3.2.2. Is this clinic's layout designed to ensure privacy throughout a youth patient's visit? (This includes the point of entry, the reception area, the waiting area, the examination area and the patient-record storage area.)	Yes
	No
	Don't Know



<p>3.3. Healthcare providers are non-judgmental, considerate, and easy to relate to.</p>	<p>Yes No Don't Know</p>	<p>Comment *:</p>
<p><u>Definition:</u> Healthcare providers do not criticize their youth patients even if they do not approve of the patients' words and actions. They are considerate to their patients and reach out to them in a friendly manner.</p>		
<p><u>Question:</u> Through observation: are the nurses at this clinic are non-judgmental, considerate and easy for the youth patients to relate to?</p>		
<p>3.4. The point of health service delivery ensures consultations occur in a short waiting time, with or without an appointment, and (where necessary) swift referral.</p>	<p>Yes No Don't Know</p>	<p>Comment *:</p>
<p><u>Definition:</u> The youth are able to consult with healthcare providers at short notice, whether or not they have a formal appointment. If their medical condition is such that they need to be referred elsewhere, the referral appointment also takes place within a short time frame.</p>		
<p><u>Question:</u> 3.4.1. Do youth patients wait long for a consultation?</p>	<p>Yes No Don't Know</p>	
<p>3.5. The point of health service delivery has an appealing and clean environment.</p>	<p>Yes No Don't Know</p>	<p>Comment:</p>
<p><u>Definition:</u> A point of health service delivery that is welcoming, attractive and clean.</p>		
<p><u>Question:</u> Is this clinic clean and does it have a welcoming atmosphere?</p>		



3.6. The point of health service delivery provides information and education through a variety of channels.	Yes	Comment *:
	No	
	Don't Know	
<u>Definition:</u> Information that is relevant to the health of the youth is available in different formats (e.g. posters, booklets and leaflets). Materials are presented in a familiar language, easy to understand and eye-catching.		
<u>Question: 3.6.1.</u> Is information that is relevant to the health of the youth available in <u>different formats</u> at this clinic?	Yes No Don't Know	
<u>Question: 3.6.2.</u> Is this information presented in a <u>familiar language and easy to understand</u> ?	Yes No Don't Know	
<u>Question: 3.6.3</u> Do you think that this information is <u>eye-catching</u> ?	Yes No Don't Know	

EFFECTIVE:		
5.1. Healthcare providers have the required competencies to work with the youth and to provide them with the required health services.	Yes	Comment *:
	No	
	Don't Know	
<u>Definition:</u> Healthcare providers have the required knowledge and skills to work with the youth and to provide them with the required health services.		
<u>Question:</u> Does nurses at this clinic have the required knowledge and skills to work with youth and to provide them with the required health services?		



5.3. Healthcare providers are able to dedicate sufficient time to work effectively with their youth patients.	Yes	Comment:
	No	
	Don't Know	
<u>Definition:</u> Healthcare providers are able to dedicate sufficient time to work effectively with their youth patients.		
<u>Question:</u> Do you think that nurses at this clinic dedicate sufficient time to work effectively with youth patients?		
5.4. The point of health service delivery has the required equipment, supplies, and basic services necessary to deliver the required health services.	Yes	Comment *:
	No	
	Don't Know	
<u>Definition:</u> Each point of health service delivery has the necessary equipment, supplies, including medicines, and basic services (e.g. water and sanitation) needed to deliver the health services.		
<u>Question:</u> During observation- does this clinic have the necessary equipment, supplies, medicines, and basic services (e.g. water and sanitation) needed to deliver the required health services?		

**Annexure 5: Key informant information document and informed
consent: Phase 1**

RESPONDENT’S INFORMATION LEAFLET & INFORMED CONSENT FORM FOR A NON-INTERVENTION STUDY

TITLE OF STUDY: Validation of a measure of youth-friendly primary healthcare services in Tshwane District

Phase 1: Expert evaluation

Principle investigator: Christelle Boersema

Institution: University of Pretoria

DAYTIME AND AFTER HOURS TELEPHONE NUMBER(S):

Daytime numbers: 012 354 1332

Afterhours: 082 302 8812

DATE AND TIME OF FIRST INFORMED CONSENT DISCUSSION:

			:
Dd	Mm	Yy	Time

Dear Mr. / Mrs.....

1) INTRODUCTION

We invite you to volunteer for a research study. This information leaflet is to help you to decide if you would like to participate. Before you agree to take part in this study you should fully understand what is involved. If you have any questions that this leaflet does not fully explain, please do not hesitate to ask the interviewer or primary investigator. You should not agree to take part unless you are completely happy about all the procedures involved.

2) THE NATURE AND PURPOSE OF THIS STUDY

The aim of this study is to determine how well a questionnaire (called the Youth-Friendly- World Health Organization+ questionnaire or YFHS-WHO+ questionnaire) can measure the friendliness of services delivered to young people (age 18- 24 years) by public primary healthcare clinics in Tshwane District. The first phase to this study is to select twelve primary healthcare clinics that represent a range of youth-friendliness. As a patient/ a healthcare provider/ support staff of facility manager at/of this clinic you are a very important source of information to determine the youth-friendliness of this clinic that is necessary as the first phase to determine the accuracy with which the YFHS-WHO+ questionnaire measures youth-friendliness.

3) EXPLANATION OF PROCEDURES TO BE FOLLOWED

This first phase involves an evaluation of the youth-friendliness of the primary healthcare clinic you are attending. We will ask you some questions about your opinion of the presence of youth-friendly characteristics in this clinic.

4) RISK AND DISCOMFORT INVOLVED.

There are no risks in participating in this study. The interview will not take more than 30 minutes of your time. The youth-friendly status of the clinic will not be used in any way to the detriment of this clinic or you as the informant.

5) POSSIBLE BENEFITS OF THIS STUDY.

Although you will not benefit directly from the study, the results of the study will enable us to determine if the YFHS-WHO+ questionnaire accurately measure the youth-friendliness of clinic services according to the perception of the youth. This may benefit young people since it will help to improve the quality of clinic service delivery to young people.

6) I understand that if I do not want to participate in this study, I will still receive standard treatment for my illness.

7) I may at any time withdraw from this study.

8) HAS THE STUDY RECEIVED ETHICAL APPROVAL?

This study has received written approval from the Research Ethics Committee of the Faculty of Health Sciences at the University of Pretoria and to Tshwane/ Metsweding Regional Research Ethics Committee. Copies of the approval letters are available if you wish to have them.

9) INFORMATION If I have any questions concerning this study, I should contact
Mrs Christelle Boersema
Tel: 012 354 1332 or Cell: 082 302 8812

10) CONFIDENTIALITY

All information that you give will be kept strictly confidential. Once we have analysed the information no one will be able to identify you or the clinic. Research report and articles for scientific journals will not include any information that may identify you or this clinic.

12) VERBAL RESPONDENT INFORMED CONSENT (when respondents cannot read or write)

I, the undersigned, _____, have read and have explained fully to the participant, named _____ and/ or his/her relative, the respondent information leaflet, which has indicated the nature and purpose of the study in which I have asked the individual to participate. The explanation I have given has mentioned both the possible risks and benefits of the study. The respondent indicated that he/she understands that he/she will be free to withdraw from the study at any time for any reason and without jeopardizing his/her treatment.

I hereby certify that the respondent has agreed to participate in this study.

Participant's Name _____
(Please print)

Participant's Signature/ thumbprint _____ Date _____

Investigator's Name _____
(Please print)

Investigator's Signature _____ Date _____

Witness's Name _____
(Please print)

Witness's Signature _____ Date _____

Annexure 6.1: Existing YFHS-WHO+ questionnaire



ACCESSIBLE: adolescent are able to obtain the health services that are available

Youth people are well informed about the range of health problems they can get help for at this facility

If you had one of the following complaints would you get help for it in this facility?

	1	2	3	4
1. Physical complaint for example stomach ache, cough, sore throat, acne, fever, fatigue, painful or irregular periods,..	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Injuries for example sports injury,...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Some very private or sensitive concern (such as a question about sexual orientation or about depression)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Concerns related to sexual health (questions or fears about pregnancy, questions about sexually transmitted infections)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Questions about contraception	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Concerns in relation to your friends or your boy/girl-friend	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Smoking cigarettes and wanting to stop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Problem related to alcohol	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Problem with marijuana or other drugs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Problem with your parents or family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Concerns in relation to work, school or university	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Concerns about your eating habits or exercise or sleep	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. If you felt sad, depressed or anxious, or if you had suicidal thoughts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Problems related to violence (being violent yourself or being a victim of violence or abuse)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Definitely not (1), Probably not (2), Probably (3), Definitely (4)



How did you learn you could get help for these health problems in this facility?

15. Through facility staff

1. Yes 2. No 3. Don't know

16. Through a youth association

1. Yes 2. No 3. Don't know

17. Through your religious community

1. Yes 2. No 3. Don't know

18. Through flyers describing the facility

1. Yes 2. No 3. Don't know

19. Through the radio, TV or magazines

1. Yes 2. No 3. Don't know

20. Through the internet

1. Yes 2. No 3. Don't know

21. Through friends

1. Yes 2. No 3. Don't know

22. Through school (school staff or activities at school)

1. Yes 2. No 3. Don't know

23. Through family members

1. Yes 2. No 3. Don't know

Policies and procedures are in place that ensure that health services are either free or affordable to youth

24. Where you or your parents asked to pay for the services you received in this facility?

1. Yes often 2. Yes, occasionally 3. No never
 4. Don't know

25. If you could not pay did you receive the services you needed?

1. Yes often 2. Yes, occasionally 3. No never
 4. Don't know

Point of delivery has convenient working hours

26. How do you rate the hours this practice is open for appointments?

1. Poor 2. Fair 3. Good
 4. Very good 5. Excellent

27. Did you ever postpone getting help for a health problem at this practice because the hours were inconvenient?

1. Yes often 2. Yes, occasionally 3. No never
 4. Don't know



If your parents or another significant adult in your family knew you had one of the following complaints would they encourage you to get help for it in this facility?

- | | 1 | 2 | 3 | 4 |
|---|-----------------------|-----------------------|-----------------------|-----------------------|
| 28. Physical complaint for example stomach ache, cough, sore throat, acne, fever, fatigue, painful or irregular periods,... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 29. Concerns related to sexual health for example questions or fear about pregnancy, questions about sexually transmitted infections) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 30. Concerns related to alcohol, cigarette or drug use | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 31. Concerns in relation to work, school or university | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 32. If you felt sad, depressed or anxious or if you had suicidal thoughts | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 33. Problems related to violence (being violent yourself or being victim of violence or abuse) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Definitely not (1), Probably not (2), Probably (3), Definitely (4).

If another adult in your community (school, friends, sports club,..) knew you had one of the following complaints would they encourage you to get help for it in this facility?

- | | 1 | 2 | 3 | 4 |
|---|-----------------------|-----------------------|-----------------------|-----------------------|
| 34. Physical complaint for example stomach ache, cough, sore throat, acne, fever, fatigue, painful or irregular periods,... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 35. Concerns related to sexual health for example questions or fear about pregnancy, questions about sexually transmitted infections) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 36. Concerns related to alcohol, cigarette or drug use | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 37. Concerns in relation to work, school or university | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 38. If you felt sad, depressed or anxious or if you had suicidal thoughts | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 39. Problems related to violence (being violent yourself or victim of violence or abuse) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Definitely not (1), Probably not (2), Probably (3), Definitely (4).



EQUITABLE: Equitable services are provided to all young people who require them

Policies and procedures are in place that do not restrict the provision of health services to youth on any terms

Here are some reasons for which young people might not have received proper care. For each of these do you think it could happen in this facility?

	1	2	3	4
40. Because they are too young	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
41. Because they are too old	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
42. Because they are a boy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
43. Because they are a girl	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
44. Because of their ethnic origin	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
45. Because of their social background (from the countryside, too rich, too poor...)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
46. Because of their religion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
47. Because of the way they dress or the way they look	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
48. Because they live on the street	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
49. Because they are not married	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
50. Because they are gay/ lesbian/ bisexual	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
51. Because they have a disability (for example hearing impairment)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
52. Because they have a mental illness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
53. Because they are drug users	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
54. Because they are violent or delinquent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
55. Because they are involved in prostitution activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
56. Because they fear their parents would know or would not agree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
57. Because they fear the school director or staff would know	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
58. Because they fear that the police will know	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
59. Other, please detail _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Definitely not (1), Probably not (2), Probably (3), Definitely (4).

Health care providers treat all their youth clients with equal care and respect, regardless of status.

60. How do you rate the way you felt treated by the doctor/ nurse?

1. Poor 2. Fair 3. Good
 4. Very good 5. Excellent

61. When you were with the doctor/nurse how comfortable did you feel ?

1. Not at all 2. Not very
 3. Neutral 4. Comfortable
 5. Very comfortable

62. How do you rate the level of trust you have in this doctor/ nurse?

1. Poor 2. Fair 3. Good
 4. Very good 5. Excellent

63. How do you rate the way you felt treated by the receptionist?

1. Poor 2. Fair 3. Good
 4. Very good 5. Excellent



ACCEPTABLE: care meets the expectations of the young people who use the services.

Policies and procedures are in place that guarantees client confidentiality: Young people (minor or not) who are considered capable of making decisions about their health have the right to consult a doctor/ nurse without informing their parents.

64. Thinking about your last visit to this facility: were you provided with information about confidentiality while you were in the facility?

1. Yes 2. No 3. Don't know

65. How confident are you that your concerns will be kept confidential by the doctors/ nurses of this facility?

1. Not at all confident 2. Rather confident
 3. Neutral 4. Confident
 5. Extremely confident

66. Did the doctor/ nurse suggest he/she spends some time speaking to you on your own?

1. Yes, suggested and happened
 2. Yes suggested but did not happen
 3. No

67. How confident are you that your concerns will be kept confidential by the receptionists of this facility?

1. Not at all confident 2. Rather confident
 3. Neutral 4. Confident
 5. Extremely confident

Point of delivery insures privacy

About this facility's privacy:

1 2 3 4

68. You feel the registration at the reception is done in a way no one could overhear what you are saying

69. You feel the consultation (in the examination/treatment/consultation room) is done in a way no one could overhear what you are saying

Strongly disagree (1), Disagree (2), Agree (3), Strongly agree (4).

Health care providers are non-judgmental, considerate and easy to relate to

Thinking about your last consultation with a doctor:

1 2 3 4

70. The doctor gave you his/her full attention

71. The doctor respected your opinion and decision even if they were different from his or hers.

72. The doctor treated you in a supportive and caring manner.

73. The doctor seemed interested in what you had to say.

Strongly disagree (1), Disagree (2), Agree (3), Strongly agree (4).

Thinking about your last consultation with a nurse:

1 2 3 4

74. The nurse gave you his/her full attention

75. The nurse respected your opinion and decision even if they were different from his or hers.

76. The nurse treated you in a supportive and caring manner.

77. The nurse seemed interested in what you had to say.

Strongly disagree (1), Disagree (2), Agree (3), Strongly agree (4).



Point of service delivery ensures consultations occur in a short waiting time, with or without appointment, and where necessary swift referral

78. Thinking of the last time you wanted an appointment at this facility: how quickly could you get an appointment?

1. Same day 2. Next working day
 3. Within 2 days 4. Within 3 days
 5. Within 4 days 6. Within 5 days or more

79. How do you rate this?

1. Poor 2. Fair 3. Good
 4. Very good 5. Excellent

80. How long do you usually have to wait in the waiting room for your consultation to begin?

1. 5 min or less 2. 6-10 min 3. 11-20 min
 4. 21-30 min 5. > 30 min

81. How do you rate this?

1. Poor 2. Fair 3. Good
 4. Very good 5. Excellent

82. If you need to see a doctor/ nurse urgently do you get to be seen on that same day in this facility?

1. Yes 2. No 3. Don't know

83. Ability to get through to the facility on the phone

1. Poor 2. Fair 3. Good
 4. Very good 5. Excellent

84. Ability to speak to a doctor/ nurse

1. Poor 2. Fair 3. Good
 4. Very good 5. Excellent

Point of service delivery has appealing and clean environment

Thinking about your visits to this facility:

85. The waiting area and surroundings of the facility were appealing

1. Strongly disagree 2. Disagree 3. Agree
 4. Strongly agree

Point of service delivery provides information and education through a variety of channels

86. Did you notice any education material about adolescent health in this facility?

1. Yes 2. No 3. Don't know

87. How would you rate the quality of the information provided in these materials?

1. Poor 2. Fair 3. Good
 4. Very good 5. Excellent

88. Would you like to make a suggestion for improving the services to young people in this facility?



APPROPRIATE: required care is provided and unnecessary and harmful care is avoided

The required package of health care is provided to reflect and fulfil the individual needs of all youth either at the point of service delivery or through referral linkages

Thinking about your last consultation with a doctor/ nurse:

- | | 1 | 2 | 3 | 4 |
|--|-----------------------|-----------------------|-----------------------|-----------------------|
| 89. You received the treatment or service that met your expectations | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 90. The doctor/ nurse explained things in a way you could understand | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Strongly disagree (1), Disagree (2), Agree (3), Strongly agree (4).

EFFECTIVE: Care produces positive changes in health status or quality of life of client

Health care workers have the required competencies to work with youth

Thinking about your last consultation with a doctor/ nurse

- | | 1 | 2 | 3 | 4 |
|---|-----------------------|-----------------------|-----------------------|-----------------------|
| 91. The doctor/ nurse explained to you what tests he/she was doing when examining you | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 92. The doctor/ nurse explained to you the results of the tests or checkups he/she has done | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 93. The doctor/ nurse explained to you the treatment he/she proposed and why he/she proposed it | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 94. The doctor/ nurse discussed with you the pros and cons of the treatment he/she proposed | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Strongly disagree (1), Disagree (2), Agree (3), Strongly agree (4).

95. The doctor/ nurse asked you what treatment you preferred

1. Strongly disagree 2. Disagree 3. Agree
 4. Strongly agree

96. You understood the tests and/or treatments the doctor/ nurse proposed

1. Strongly disagree 2. Disagree 3. Agree
 4. Strongly agree

Health care providers are able to dedicate sufficient time to deal effectively with their youth clients

97. You had enough time to ask the doctor everything you wanted you wanted to ask

1. Strongly disagree 2. Disagree 3. Agree
 4. Strongly agree 5. Does not apply

98. You had enough time to ask the nurse everything wanted to ask

1. Strongly disagree 2. Disagree 3. Agree
 4. Strongly agree 5. Does not apply

Annexure 6.2: Existing YFHS-WHO+ questionnaire formatted for use in the 2nd phase of the study

Existing YFHS - WHO + QUESTIONNAIRE FOR THE ASSESSMENT OF YOUTH FRIENDLINESS IN PHC SERVICES

Please complete the questionnaire by marking the appropriate blocks with a cross (X).
Please answer all questions as honest as possible as there are no right or wrong answers.

SECTION A: BIOGRAPHIC INFORMATION

	For office use only										
Respondent number	A0 <input type="checkbox"/>										
1. Do you have a cell phone or land line? If yes, at what number/s can we contact you?	A1 <input type="checkbox"/>										
2. Age:years	A2 <input type="checkbox"/>										
3. Gender: <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 2px;">Female</td> <td style="padding: 2px; text-align: center;">1</td> </tr> <tr> <td style="padding: 2px;">Male</td> <td style="padding: 2px; text-align: center;">2</td> </tr> </table>	Female	1	Male	2	A3 <input type="checkbox"/>						
Female	1										
Male	2										
4. Population group: <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 2px;">African black</td> <td style="padding: 2px; text-align: center;">1</td> </tr> <tr> <td style="padding: 2px;">Coloured</td> <td style="padding: 2px; text-align: center;">2</td> </tr> <tr> <td style="padding: 2px;">Indian or Asian</td> <td style="padding: 2px; text-align: center;">3</td> </tr> <tr> <td style="padding: 2px;">White</td> <td style="padding: 2px; text-align: center;">4</td> </tr> <tr> <td style="padding: 2px;">Other (specify)</td> <td style="padding: 2px; text-align: center;">5</td> </tr> </table>	African black	1	Coloured	2	Indian or Asian	3	White	4	Other (specify)	5	A4 <input type="checkbox"/>
African black	1										
Coloured	2										
Indian or Asian	3										
White	4										
Other (specify)	5										
5. Marital status: <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 2px;">Married</td> <td style="padding: 2px; text-align: center;">1</td> </tr> <tr> <td style="padding: 2px;">Never Married</td> <td style="padding: 2px; text-align: center;">2</td> </tr> <tr> <td style="padding: 2px;">Widowed</td> <td style="padding: 2px; text-align: center;">3</td> </tr> <tr> <td style="padding: 2px;">Divorced</td> <td style="padding: 2px; text-align: center;">4</td> </tr> </table>	Married	1	Never Married	2	Widowed	3	Divorced	4	A5 <input type="checkbox"/>		
Married	1										
Never Married	2										
Widowed	3										
Divorced	4										



SECTION A: (continue)	For office use only																								
<p>6. First language:</p> <table border="1"><tbody><tr><td>Afrikaans</td><td>1</td></tr><tr><td>English</td><td>2</td></tr><tr><td>isiNdebele</td><td>3</td></tr><tr><td>isiXhosa</td><td>4</td></tr><tr><td>isiZulu</td><td>5</td></tr><tr><td>isiSwati</td><td>6</td></tr><tr><td>Sesotho</td><td>7</td></tr><tr><td>Sepedi</td><td>8</td></tr><tr><td>Setswana</td><td>9</td></tr><tr><td>Tshivenda</td><td>10</td></tr><tr><td>Xitsonga</td><td>11</td></tr><tr><td>Other (specify)</td><td>12</td></tr></tbody></table>	Afrikaans	1	English	2	isiNdebele	3	isiXhosa	4	isiZulu	5	isiSwati	6	Sesotho	7	Sepedi	8	Setswana	9	Tshivenda	10	Xitsonga	11	Other (specify)	12	<p>A6 <input type="checkbox"/></p>
Afrikaans	1																								
English	2																								
isiNdebele	3																								
isiXhosa	4																								
isiZulu	5																								
isiSwati	6																								
Sesotho	7																								
Sepedi	8																								
Setswana	9																								
Tshivenda	10																								
Xitsonga	11																								
Other (specify)	12																								
<p>7. Dwelling:</p> <table border="1"><tbody><tr><td>Formal dwelling</td><td>1</td></tr><tr><td>Informal dwelling</td><td>2</td></tr><tr><td>Traditional dwelling</td><td>3</td></tr></tbody></table>	Formal dwelling	1	Informal dwelling	2	Traditional dwelling	3	<p>A7 <input type="checkbox"/></p>																		
Formal dwelling	1																								
Informal dwelling	2																								
Traditional dwelling	3																								
<p>8. School or employment status:</p> <table border="1"><tbody><tr><td>Secondary school</td><td>1</td></tr><tr><td>College or University</td><td>2</td></tr><tr><td>Employed</td><td>3</td></tr><tr><td>Unemployed</td><td>4</td></tr><tr><td>Other (specify)</td><td>5</td></tr></tbody></table>	Secondary school	1	College or University	2	Employed	3	Unemployed	4	Other (specify)	5	<p>A8 <input type="checkbox"/></p>														
Secondary school	1																								
College or University	2																								
Employed	3																								
Unemployed	4																								
Other (specify)	5																								



SECTION A: (continue)	For office use only														
<p>9. Level of education:</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr><td>No schooling</td><td style="text-align: center;">1</td></tr> <tr><td>Some primary schooling</td><td style="text-align: center;">2</td></tr> <tr><td>Completed primary schooling</td><td style="text-align: center;">3</td></tr> <tr><td>Some secondary schooling</td><td style="text-align: center;">4</td></tr> <tr><td>Grade 12</td><td style="text-align: center;">5</td></tr> <tr><td>Higher than grade 12, e.g. diploma</td><td style="text-align: center;">6</td></tr> <tr><td>Other (please specify)</td><td style="text-align: center;">7</td></tr> </table>	No schooling	1	Some primary schooling	2	Completed primary schooling	3	Some secondary schooling	4	Grade 12	5	Higher than grade 12, e.g. diploma	6	Other (please specify)	7	<p>A9 <input style="width: 30px; height: 20px;" type="checkbox"/></p>
No schooling	1														
Some primary schooling	2														
Completed primary schooling	3														
Some secondary schooling	4														
Grade 12	5														
Higher than grade 12, e.g. diploma	6														
Other (please specify)	7														
<p>10. Pattern of primary health care attendance:</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr><td>Twice a year</td><td style="text-align: center;">1</td></tr> <tr><td>Once a year</td><td style="text-align: center;">2</td></tr> <tr><td>Once every 2 years</td><td style="text-align: center;">3</td></tr> <tr><td>Once every 3 years</td><td style="text-align: center;">4</td></tr> <tr><td>Once every 4 years</td><td style="text-align: center;">5</td></tr> <tr><td>Other (specify)</td><td style="text-align: center;">6</td></tr> </table>	Twice a year	1	Once a year	2	Once every 2 years	3	Once every 3 years	4	Once every 4 years	5	Other (specify)	6	<p>A10 <input style="width: 30px; height: 20px;" type="checkbox"/></p>		
Twice a year	1														
Once a year	2														
Once every 2 years	3														
Once every 3 years	4														
Once every 4 years	5														
Other (specify)	6														
<p>11. Did you visit this primary health care service before?</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr><td>Yes</td><td style="text-align: center;">1</td></tr> <tr><td>No</td><td style="text-align: center;">2</td></tr> </table>	Yes	1	No	2	<p>A11 <input style="width: 30px; height: 20px;" type="checkbox"/></p>										
Yes	1														
No	2														
<p>12. If yes, approximately how long ago have you visited this primary healthcare service?</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr><td>Less than 3 months or 3 months ago</td><td style="text-align: center;">1</td></tr> <tr><td>More than 3 months ago</td><td style="text-align: center;">2</td></tr> <tr><td>Approximately 1 year ago</td><td style="text-align: center;">3</td></tr> <tr><td>Approximately 2 years ago</td><td style="text-align: center;">4</td></tr> <tr><td>More than 2 years ago</td><td style="text-align: center;">5</td></tr> <tr><td>Other (specify)</td><td style="text-align: center;">6</td></tr> </table>	Less than 3 months or 3 months ago	1	More than 3 months ago	2	Approximately 1 year ago	3	Approximately 2 years ago	4	More than 2 years ago	5	Other (specify)	6	<p>A12 <input style="width: 30px; height: 20px;" type="checkbox"/></p>		
Less than 3 months or 3 months ago	1														
More than 3 months ago	2														
Approximately 1 year ago	3														
Approximately 2 years ago	4														
More than 2 years ago	5														
Other (specify)	6														
<p>13. Distance travelled to this clinic?</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr><td>Less than 5 kilometres</td><td style="text-align: center;">1</td></tr> <tr><td>5 to 10 kilometres</td><td style="text-align: center;">2</td></tr> <tr><td>More than 10 kilometres</td><td style="text-align: center;">3</td></tr> </table>	Less than 5 kilometres	1	5 to 10 kilometres	2	More than 10 kilometres	3	<p>A13 <input style="width: 30px; height: 20px;" type="checkbox"/></p>								
Less than 5 kilometres	1														
5 to 10 kilometres	2														
More than 10 kilometres	3														

SECTION B: EVALUATION OF THE DEVELOPMENT OF YOUTH-FRIENDLY PHC SERVICES

					For office use only
If you had one of the following complaints would you get help for it in this facility?					
	Definitely not	Probably not	Probably	Definitely	
1 Physical complaint e.g. stomach ache, cough, sore throat, acne, fever, fatigue, painful or irregular periods.	1	2	3	4	B1 <input type="checkbox"/>
2. Injuries for example sports injury ...	1	2	3	4	B2 <input type="checkbox"/>
3. Some very private or sensitive concern (such as a question about sexual orientation or about depression).	1	2	3	4	B3 <input type="checkbox"/>
4. Concerns related to sexual health (questions or fears about pregnancy, questions about sexually transmitted infections).	1	2	3	4	B4 <input type="checkbox"/>
5. Questions about contraception.	1	2	3	4	B5 <input type="checkbox"/>
6. Concerns in relation to your friends or your boy/girlfriend.	1	2	3	4	B6 <input type="checkbox"/>
7. Smoking cigarettes and wanting to stop.	1	2	3	4	B7 <input type="checkbox"/>
8. Problem related to alcohol.	1	2	3	4	B8 <input type="checkbox"/>
9. Problem with marijuana or other drugs.	1	2	3	4	B9 <input type="checkbox"/>
10. Problem with your parents or family.	1	2	3	4	B10 <input type="checkbox"/>
11. Concern in relation to work, school or university.	1	2	3	4	B11 <input type="checkbox"/>
12. Concern about your eating habits, exercise or sleep.	1	2	3	4	B12 <input type="checkbox"/>
13. If you felt sad, depressed or anxious, or if you had suicidal thoughts.	1	2	3	4	B13 <input type="checkbox"/>
14. Problems related to violence (being violent yourself, being a victim of violence or being a victim of violence or abuse.	1	2	3	4	B14 <input type="checkbox"/>



SECTION B: (continue)					For office use only		
How did you learn you could get help for these health problems in this facility?							
			Yes	No	Don't know		
15. Through facility staff.	1	2	3			B15 <input type="checkbox"/>	
16. Through a youth association	1	2	3			B16 <input type="checkbox"/>	
17. Through your religious community	1	2	3			B17 <input type="checkbox"/>	
18. Through flyers describing the facility.	1	2	3			B18 <input type="checkbox"/>	
19. Through the radio, TV or magazines	1	2	3			B19 <input type="checkbox"/>	
20. Through the internet	1	2	3			B20 <input type="checkbox"/>	
21. Through friends	1	2	3			B21 <input type="checkbox"/>	
22. Through school (school staff or activities at school)	1	2	3			B22 <input type="checkbox"/>	
23. Through family members	1	2	3			B23 <input type="checkbox"/>	
			Yes often	Yes occasionally	No never	Don't know	
24. Where you or your parents asked to pay for the services you received in this facility?	1	2	3	4		B24 <input type="checkbox"/>	
25. If you could not pay did you receive the services you needed?	1	2	3	4		B25 <input type="checkbox"/>	
26. Did you ever postpone getting help for a health problem at this practice because the hours were inconvenient?	1	2	3	4		B26 <input type="checkbox"/>	
		Poor	Fair	Good	Very good	Excellent	
27. How do you rate the hours this practice is open for appointments?	1	2	3	4	5	B27 <input type="checkbox"/>	



SECTION B: (continue)					For office use only
<p>If your parents or another significant adult in your family knew you had one of the following complaints would they encourage you to get help for it in this facility?</p>					
	Definitely not	Probably not	Probably	Definitely	
28. Physical complaint for example stomach ache, cough, sore throat, acne, fever, fatigue, painful or irregular periods.	1	2	3	4	B28 <input type="checkbox"/>
29. Concerns related to sexual health (for example questions of fear about pregnancy questions about sexually transmitted infections).	1	2	3	4	B29 <input type="checkbox"/>
30. Concerns related to alcohol, cigarette or drug use.	1	2	3	4	B30 <input type="checkbox"/>
31. Concern in relation to work, school or university.	1	2	3	4	B31 <input type="checkbox"/>
32. If you felt sad, depressed or anxious, or if you had suicidal thoughts.	1	2	3	4	B32 <input type="checkbox"/>
33. Problems related to violence (being violent yourself, or being victim of violence or abuse).	1	2	3	4	B33 <input type="checkbox"/>
<p>If an another adult in your community (school, friends, sports club) knew you had one of the following complaints would they encourage you the get help for it in this facility?</p>					
	Definitely not	Probably not	Probably	Definitely	
34. Physical complaint for example stomach ache, cough, sore throat, acne, fever, fatigue, painful or irregular periods.	1	2	3	4	B34 <input type="checkbox"/>
35 Concerns related to sexual health (for example questions of fear about pregnancy questions about sexually transmitted infection.)	1	2	3	4	B35 <input type="checkbox"/>
36 Concerns related to alcohol, cigarette or drug use.	1	2	3	4	B36 <input type="checkbox"/>
37. Concern in relation to work, school or university.	1	2	3	4	B37 <input type="checkbox"/>
38. If you felt sad, depressed or anxious, or if you had suicidal thoughts.	1	2	3	4	B38 <input type="checkbox"/>
39. Problems related to violence (being violent yourself, or being victim of violence or abuse).	1	2	3	4	B39 <input type="checkbox"/>



SECTION B: (continue)					For office use only
<p>Here are some reasons for which young people might not have received proper care for each of these do you think it could happen in this facility? For each of these do you think it could happen in this facility?</p>					
	Definitely not	Probably not	Probably	Definitely	
40. Because they are too young?	1	2	3	4	B40 <input type="checkbox"/>
41. Because they are too old?	1	2	3	4	B41 <input type="checkbox"/>
42. Because they are a boy?	1	2	3	4	B42 <input type="checkbox"/>
43. Because they are a girl?	1	2	3	4	B43 <input type="checkbox"/>
44. Because of their ethnic origin?	1	2	3	4	B44 <input type="checkbox"/>
45. Because of their social background (from the countryside, too rich, too poor...)	1	2	3	4	B45 <input type="checkbox"/>
46. Because of their religion?	1	2	3	4	B46 <input type="checkbox"/>
47. Because of the way they dress or the way they look	1	2	3	4	B47 <input type="checkbox"/>
48. Because they live on the street.	1	2	3	4	B48 <input type="checkbox"/>
49. Because they are not married.	1	2	3	4	B49 <input type="checkbox"/>
50. Because they are gay/lesbian/bisexual	1	2	3	4	B50 <input type="checkbox"/>
51. Because they have a disability (for example hearing impairment.	1	2	3	4	B51 <input type="checkbox"/>
52. Because they have a mental illness.	1	2	3	4	B52 <input type="checkbox"/>
53. Because they are drug users.	1	2	3	4	B53 <input type="checkbox"/>
54. Because they are violent or delinquent	1	2	3	4	B54 <input type="checkbox"/>
55. Because they are involved in prostitution activities.					<input type="checkbox"/>
56. Because they fear their parents would know or would not agree.	1	2	3	4	B55 <input type="checkbox"/>
57. Because they fear the school director or staff would know.	1	2	3	4	B57 <input type="checkbox"/>
58. Because they fear the police will know	1	2	3	4	B58 <input type="checkbox"/>
59. Other (please specify)	1	2	3	4	B59 <input type="checkbox"/>



SECTION B: (continue)						For office use only		
	Poor	Fair	Good	Very good	Excellent			
60. How do you rate the way you felt treated by the doctor/ nurse?	1	2	3	4	5	B60	<input type="text"/>	
61. How do you rate the level of trust you have in this doctor/nurse?	1	2	3	4	5	B61	<input type="text"/>	
62. How do you rate the way you felt treated by the receptionist?	1	2	3	4	5	B62	<input type="text"/>	
	Not at all	Not very	Neutral	Comfortable	Very comfortable			
63. When you were with this doctor/nurse how comfortable did you feel?	1	2	3	4	5	B63	<input type="text"/>	
				Yes	No	Don't know		
64. Thinking about your last visit to this facility: were you provided with information about confidentiality while you were in the facility?				1	2	3	B64	<input type="text"/>
	Not at all confident	Rather confident	Neutral	Confident	Extremely confident			
65. How confident are you that your concerns will be kept confidential by the doctor/nurses of this facility?	1	2	3	4	5	B65	<input type="text"/>	
66. How confident are you that your concerns will be kept confidential by the receptionists of this facility?	1	2	3	4	5	B66	<input type="text"/>	



SECTION B: (continue)				For office use only			
				Yes, suggested and happened	Yes, suggested and did not happened	No	
67. Did the doctor/nurse suggest s/he spends more time speaking to you on your own?	1	2	3				B67 <input type="text"/>
About this facility's privacy:							
				Strongly disagree	Disagree	Agree	Strongly agree
68. You feel the registration at the reception is done in a way no one could overhear what you are saying.	1	2	3	4			B68 <input type="text"/>
69. You feel the consultation in the examination/treatment/consultation room) is done in a way no one could overhear what you are saying.	1	2	3	4			B69 <input type="text"/>



SECTION B: (continue)						For office use only
79. How do you rate this?	Poor	Fair	Good	Very good	Excellent	B79 <input type="checkbox"/>
	1	2	3	4	5	
80. How long do you usually have to wait in the waiting room for your consultation to begin?	5 min or less	6-10 min	11-20 min	21-30 min	>30 min	B80 <input type="checkbox"/>
	1	2	3	4	5	
81. How do you rate this?	Poor	Fair	Good	Very good	Excellent	B 81 <input type="checkbox"/>
	1	2	3	4	5	
82. If you need to see a doctor/nurse urgently do you get to be seen on that same day in this facility?			Yes	No	Don't know	B82 <input type="checkbox"/>
			1	2	3	
83. Ability to get through to the facility on the phone?	Poor	Fair	Good	Very good	Excellent	B83 <input type="checkbox"/>
	1	2	3	4	5	
84. Ability to speak to a doctor/nurse?	Poor	Fair	Good	Very good	Excellent	B84 <input type="checkbox"/>
	1	2	3	4	5	



SECTION B: (continue)					For office use only	
Thinking about your visits in this facility.						
	Strongly disagree	Disagree	Agree	Strongly agree		
85. The waiting area and surroundings of the facility were appealing	1	2	3	4	B85 <input type="text"/>	
		Yes	No	Don't know		
86. Did you notice any educational material about adolescent health in this facility?	1	2	3		B86 <input type="text"/>	
	Poor	Fair	Good	Very good	Excellent	
87. How would you rate the quality of the information provided in these materials?	1	2	3	4	5	B87 <input type="text"/>
88. Would you like to make a suggestion for improving the services to young people in this facility?						



SECTION B: (continue)					For office use only	
Thinking about your visits in this facility.						
89. You received the treatment or service that met your expectations.	1	2	3	4	B89	<input type="checkbox"/>
90. The doctor/nurse explained things in a way you could understand.	1	2	3	4	B90	<input type="checkbox"/>
91. The doctor/nurse explained to you what tests s/he was doing when examining you.	1	2	3	4	B91	<input type="checkbox"/>
92. The doctor/nurse explained to you the results of the tests or check-ups s/he has done.	1	2	3	4	B92	<input type="checkbox"/>
93. The doctor/nurse explained to you the treatment s/he proposed and why s/he proposed it.	1	2	3	4	B93	<input type="checkbox"/>
94. The doctor/nurse discussed with you the pros and cons of the treatment s/he proposed.	1	2	3	4	B94	<input type="checkbox"/>
95. The doctor/nurse asked you what treatment you preferred.	1	2	3	4	B95	<input type="checkbox"/>
96. You understood the tests and/or treatments the doctor/nurse proposed	1	2	3	4	B96	<input type="checkbox"/>
97. You had enough time to ask the doctor/nurse everything you wanted to ask.	1	2	3	4	B97	<input type="checkbox"/>

**Annexure 7: Pre-test respondent information document and
informed consent**

RESPONDENT'S INFORMATION LEAFLET & INFORMED CONSENT FORM FOR NON-INTERVENTION STUDY

TITLE OF STUDY: Validation of a measure of youth-friendly primary healthcare services in Tshwane District

Phase 2: Pre-test

Principle investigator: Christelle Boersema

Institution: University of Pretoria

DAYTIME AND AFTER HOURS TELEPHONE NUMBER(S):

Daytime numbers: 012 354 1332

After hours: 082 302 8812

DATE AND TIME OF FIRST INFORMED CONSENT DISCUSSION:

			:
Dd	Mm	Yy	Time

Dear Mr. / Mrs. date/...../.....

1) INTRODUCTION

You are invited to volunteer for a research study. This information leaflet is to help you to decide if you would like to participate. Before you agree to take part in this study you should fully understand what is involved. If you have any questions, which are not fully explained in this leaflet, do not hesitate to ask the investigator. You should not agree to take part unless you are completely happy about all the procedures involved.

2) THE NATURE AND PURPOSE OF THIS STUDY

The aim of this study is to determine how well a questionnaire (called the Youth-Friendly- World Health Organization+ questionnaire or YFHS-WHO+ questionnaire) can measure the friendliness of services delivered to young people (age 18- 24 years) by public primary healthcare clinics. Accurate measurement is therefore requires the investigator to make sure that the questions in this questionnaire is clearly understood and relevant to young people in Tshwane District. This phase is called pretesting of the YFHS-WHO+ questionnaire.

3) EXPLANATION OF PROCEDURES TO BE FOLLOWED

The pretesting of the YFHS-WHO+ questionnaire involve two phase:

Phase 1: you will be asked to answer the questions of the YFHS-WHO+ questionnaire on your own.

Phase 2: you will then be asked to join a group of five other young people who also answered the questions of the YFHS-WHO+ questionnaire on their own prior to the group session. In this group session every young person will be asked to share their interpretation of the individual questions and then have a discussion on the meaning among the group. The group will be asked to suggest a new formulation of the question if it differ form a predetermined definition or if not well understood by all.

4) RISK AND DISCOMFORT INVOLVED.

The interview and group session may take 1-2 hours of your time. The questions of the YFHS-WHO+ questionnaire will only ask for your opinion and in so doing you do not need to reveal any sensitive matters.

5) POSSIBLE BENEFITS OF THIS STUDY.

A questionnaire that can accurately measure the youth-friendliness of primary healthcare services according to the perception of the youth is of benefit to improve the quality of primary healthcare service delivery to young people. This is the first instrument to measure youth-friendliness of primary healthcare services according to the perception of youth and is therefore also of benefit internationally as the questionnaire is validated in English.

6) I understand that if I do not want to participate in this study, I will not be discriminated against in any way.

7) I may at any time withdraw from this study.

8) HAS THE STUDY RECEIVED ETHICAL APPROVAL?

This Protocol was submitted to the Faculty of Health Sciences Research Ethics Committee, University of Pretoria and Tshwane/ Metsweding Regional Research Ethics Committee. Written approval has been granted by these committees. The study has been structured in accordance with the Belmont Report which deals with the recommendations guiding ethical research involving human beings. A copy of the Belmont Report may be obtained from the investigator should you wish to review it.

9) INFORMATION

If I have any questions concerning this study, I should contact the primary investigator:

Mrs Christelle Boersema tel: 012 354 1332 or cell: 082 3028812

10) CONFIDENTIALITY

All records obtained whilst in this study will be regarded as confidential. Results will be published or presented in such a fashion that respondents remain unidentifiable.



12) VERBAL RESPONDENT INFORMED CONSENT (when respondents cannot read or write)

I, the undersigned,, have read and have explained fully to the participant, named and/ or his/her relative, the respondent information leaflet, which has indicated the nature and purpose of the study in which I have asked the individual to participate. The explanation I have given has mentioned both the possible risks and benefits of the study. The respondent indicated that he/she understands that he/she will be free to withdraw from the study at any time for any reason and without jeopardizing his/her treatment.

I hereby certify that the respondent has agreed to participate in this study.

Participant's Name _____
(Please print)

Participant's Signature/ thumbprint _____ Date _____

Investigator's Name _____
(Please print)

Investigator's Signature _____ Date _____

Witness's Name _____
(Please print)

Witness's Signature _____ Date _____

Annexure 8: Guide to the YFHS-WHO+ questionnaire

INTRODUCION

The objective of this guide is to provide the research team involved in pre-testing the questionnaire with precise information about how the questionnaire should be administered and about the type of responses that are expected from each question. The latter will help the research team to assess the extent to which the questionnaires used in the pre-test adequately capture the desired information on youth-friendly services as defined by the group of international experts (additional step of the content validation).

DETAILING THE MEANING ASSIGNED TO EACH QUESTION

If you had one of the following complaints would you get help for it in this facility?

This is a slightly tricky question because it is a hypothetical one. They may never have had some of these complaints, yet we want them to reflect on how they would react if they had such a complaint. Do they think the facility is a good place to go to when one has one of these complaints?

Important: we are not interested here in whether or not they are likely to ever have one of the listed complaints!

1. Physical complaint for example stomach ache, cough, sore throat, acne, fever, fatigue, painful or irregular periods,...

Any common illness for which one usually goes to see a doctor/ nurse...

2. Injuries for example sports injury,...

This includes motor-vehicle accidents etc. but does not theoretically include injuries due to physical abuse (listed below)

3. Some very private or sensitive concern (such as a question about sexual orientation or about depression)

This refers to any concern the young person is likely to want to keep confidential, and is unlikely to find easy to discuss with anyone. The idea is: do they know that the doctor/ nurse can in fact discuss these sorts of problems with them.

4. Concerns related to sexual health (questions or fears about pregnancy, questions about sexually transmitted infections)

This question has similarities with the one above in that it is likely the young people will want to keep these concerns confidential. But what it also really tries to assess is whether they know that a doctor/ nurse is competent in these health domains and can answer their questions, and whether they would feel they can bring these questions to the consultation (would they make an appointment if they just had these types of questions?).

5. Questions about contraception

As above

6. Concerns in relation to your friends or your boy/girl-friend

Would they access the doctor/ nurse if they had problems in their relationships? If the doctor/ nurse is really youth-friendly, young people should feel comfortable sharing their concerns about their relationships and thus revealing for example situations where they may be

depressed because they broke-up with their partner, or that they are being bullied at school or they may want to talk about a friend who has suicidal ideas etc.

7. Smoking cigarettes and wanting to stop

Primary health care doctor/ nurse can provide preventive care.

8. Problem related to alcohol

9. Problem with marijuana or other drugs

The way these two questions are formulated, this may be a problem they experience themselves, or possibly also a problem experienced by someone in their family or a friend. The idea is really to assess whether they feel they can access the doctor/ nurse for substance use issues

10. Problem with your parents or family

A youth-friendly primary health care doctor/ nurse has a role to play as an adult the young people can turn to if they experience conflict at home, or if they have worries about their parents (for example a parent with a chronic illness).

11. Concerns in relation to work, school or university

They should be able to access care if they are experiencing stress or anxiety related to their work or studies, if they are being bullied, if they experience learning difficulties...

12. Concerns about your eating habits or exercise or sleep

A youth-friendly doctor/ nurse should be able to provide advice and counselling about health behaviours and lifestyle

13. If you felt sad, depressed or anxious, or if you had suicidal thoughts

This examines whether they would access the primary health care doctor/ nurse for mental health issues

14. Problems related to violence (being violent yourself or being a victim of violence or abuse)

This examines whether they know primary health care doctor/ nurse can address these questions and whether they would go to see the doctor/ nurse for this

How did you learn you could get help for these health problems in this facility?

15. Through facility staff

16. Through a youth association

17. Through your religious community

18. Through flyers describing the facility

19. Through the radio, TV or magazines

20. Through the internet

21. Through friends

22. Through school (school staff or activities at school)

23. Through family members

These questions are uncomplicated. Check that the list is appropriate and that the young people do not suggest another obvious source of information that has not been listed here.

24. Where you or your parents asked to pay for the services you received in this facility?

They should answer yes even if they only had to pay for part of the services. They should also answer yes if they did not have to pay while in the facility but only later (received a bill at home).

(NB: since your health insurance functions with a state insurance, please let us know if this question is altogether superfluous and should be left out (if the response is always “no, never” there is no point in keeping the question)

25. If you could not pay did you receive the services you needed?

This could have been formulated as a hypothetical question (“imagine you could not pay, would you have received the services you needed?”), but hypothetical questions should be kept to a minimum since there is a difference between people’s intentions and their true actions. So here, only those who were actually in a situation in which they were asked to pay but had no money should be asked to respond to this question. Again, if such a situation never exists in your country, we may decide to drop the question.

26. How do you rate the hours this practice is open for appointments?

This question examines whether the hours the practice is open are convenient for young people, in particular in relation to their school timetable (for example if they do have school on Wednesdays and the practice is closed every Wednesday, this is not convenient for young people). The question relates to the regular hours of the practice, not the availability for emergencies

27. Did you ever postpone getting help for a health problem at this practice because the hours were inconvenient?

This means the young person did not try to get an appointment as quickly as they would have liked to, but waited a few days, or alternatively, they did not go to see the doctor/ nurse at all for this health problem.

28. If your parents or another significant adult in your family knew you had one of the following complaints would they encourage you to get help for it in this facility?

This question examines whether the service is supported by influential people who are close to the young people in their lives. Access is facilitated if young people receive support from them. This is again a hypothetical question. The older adolescents, for example, if they no longer live at home, may never inform their parents that they access care. The question is: if they did inform them would they be supportive of them accessing this specific care. (this question may be problematic if for example the parents live in another town and do not even know the service, please let us know how often you think this problem may arise).

29. If another adult in your community (school, friends, sports club,..) knew you had one of the following complaints would they encourage you to get help for it in this facility?

This assesses whether the service has wide community support (as opposed to being supported only by a few individuals and their families). A truly youth friendly service has good links with the community and is well supported by it.

30. Here are some reasons for which youth might not have received proper care. For each of these do you think it could happen in this facility?

They will of course not know of a concrete case where this happened for each of the proposed characteristics. They are expected to give a subjective response (“do they think that for example young people who live on the streets can receive care if they come here”)

40. Because they are too young

41. Because they are too old

42. Because they are a boy

43. Because they are a girl

44. Because of their ethnic origin

45. Because of their social background (from the countryside, too rich, too poor...)

46. Because of their religion

47. Because of the way they dress or the way they look

48. Because they live on the street

49. Because they are not married

50. Because they are gay/lesbian/bisexual

51. Because they have a disability (for example hearing impairment)

52. Because they have a mental illness

53. Because they are drug users

54. Because they are violent or delinquent

55. Because they are involved in prostitution activities

56. Because they fear their parents would know or would not agree

57. Because they fear the school director or staff would know

58. Because they fear that the police will know

Please let us know if the young people in the pre-tests think some of these items are superfluous, or if they suggest any item that should be added

60. How do you rate the way you felt treated by the doctor/nurse?

Treated here refers to being treated in general (in school, the question would be “how do you feel treated by your teacher?”), not to the medical treatment per se (in some cases, the young people may not even have received a treatment)

61. When you were with the doctor/nurse how comfortable did you feel?

This question assesses whether the doctor/ nurse had a non-judgmental, respectful attitude, and was able to communicate with the young person in a way that made them feel at ease. It also assesses how the young person felt during the physical examination.

The question is not meant to assess a broader, more individual range of attributes such as the physical comfort of the room (examination bed is not too hard, examination room too cold or too warm), or questions of taste (the colour of the walls etc)

62. How do you rate the level of trust you have in this doctor/ nurse?

This can be trust in the quality of the doctor's/ nurse's medical ability, and also trust in the fact that the doctor/ nurse will keep elements of the consultation confidential, or trust that the doctor/ nurse will tell the entire truth about a diagnosis...

63. How do you rate the way you felt treated by the receptionist?

See question 60 above

64. Thinking about your last visit to this facility: were you provided with information about confidentiality while you were in the facility?

The information may have been provided in a written way (a flyer or a poster about confidentiality at reception or in the waiting room) or orally, by the doctor/ nurse, or by the receptionist/ nurse upon registering for the consultation.

65. How confident are you that your concerns will be kept confidential by the doctors/ nurse of this facility?

This is similar to the question about trust, but more specific. The answer may depend on what young people understand about confidentiality. It would be in the retesting to clarify this in the pre-tests. Would they, for example, consider transmission of information about them to a specialist a breach of confidentiality? (we would not necessarily...)

66. Did the doctor/ nurse suggest he/she spends some time speaking to you on your own?

The aim here is to assess whether they had an opportunity for a confidential conversation with the doctor/ nurse.

67. How confident are you that your concerns will be kept confidential by the receptionists of this facility?

See above

68. You feel the registration at the reception is done in a way no one could overhear what you are saying

Other patients are unable to hear details in relation to the patient's complaints or personal details

69. You feel the consultation (in the examination/treatment/consultation room) is done in a way no one could overhear what you are saying

Sometimes the walls are so thin you can hear everything that is said in the neighbouring room. You therefore know that anyone in the adjacent room can hear what you are saying.

Alternatively, the doctor/ nurse may consult with the door or the window open, or speak so loudly that the young person feels anyone can hear what he/she says.

Thinking about your last consultation with a doctor:

70. The doctor gave you his/her full attention

71. The doctor respected your opinion and decision even if they were different from his or hers.

72. The doctor treated you in a supportive and caring manner.

73. The doctor seemed interested in what you had to say.

These questions refer to the last consultation only, so that young people can reflect on a concrete situation and thus provide more precise answers. In the pre-tests, it should of course be a consultation in the service they have been referring to when answering the questions above.

Please note that in the validation study, the last consultation will be the consultation they had at the time when they were recruited into the study (and the re-test a week later will have to refer to the same consultation)

Thinking about your last consultation with a nurse:

74. The nurse gave you his/her full attention

75. The nurse respected your opinion and decision even if they were different from his or hers.

76. The nurse treated you in a supportive and caring manner.

77. The nurse seemed interested in what you had to say.

If their last consultation was with a nurse, they should respond to these questions and skip questions 70 to 73, and vice versa if their last consultation was with a doctor. Please do not ask them to recall a consultation with a nurse that may be far back in time.

78. Thinking of the last time you wanted an appointment at this facility: how quickly could you get an appointment?

79. How do you rate this?

This would generally be an appointment with the doctor, except if the last consultation they had and have been referring to throughout was a consultation with a nurse.

80. How long do you usually have to wait in the waiting room for your consultation to begin?

81. How do you rate this?

How long do they have to wait until the doctor/ nurse calls them for the consultation?

82. If you need to see a doctor/ nurse urgently do you get to be seen on that same day in this facility?

83. Ability to get through to the facility on the phone

Assesses the ability to talk to a nurse or receptionist to make an appointment or receive advice / information. Sometimes, practice numbers are always busy, or always have the answering machine on. Alternatively, the receptionist is only available a few hours a day...

84. Ability to speak to a doctor/ nurse

Young people may prefer to speak directly to the doctor/ nurse to receive advice, particularly for sensitive or urgent issues. A youth friendly doctor/ nurse is expected to be available to provide such advice.

85. The waiting area and surroundings of the facility were appealing

With this question, we would like to capture their views on the facility's environment. For example did they find it clean and welcoming, did they find attractive reading material for them in the waiting room, or were there only magazines for adults and games for little children etc.

86. Did you notice any education material about adolescent health in this facility?

This could be posters, magazines, flyers, books, internet addresses etc

87. How would you rate the quality of the information provided in these materials?

If there were several different materials, this should be an overall rating

Thinking about your last consultation with a doctor/ nurse:

89. You received the treatment or service that met your expectations?

For example, if they were hoping the doctor/ nurse would explain what was wrong with them did he/she do that?, or if they expected a prescription, did they receive it?

90. The doctor/ nurse explained things in a way you could understand

The doctor/ nurse used words that could be understood, and not obscure medical language. He/she took into account the fact that the young person has little experience with the health issues and the health system

Thinking about your last consultation with a doctor/ nurse:

91. The doctor/ nurse explained to you what tests he/she was doing when examining you

The doctor/ nurse commented on what he/she was doing during physical examination; the doctor/ nurse explained what was tested in the blood if blood was drawn for a blood test.

92. The doctor/ nurse explained to you the results of the tests or check-ups he/she has done

For example, if he/she listened to the lungs, he/she explained what was heard and whether this was normal.

93. The doctor/ nurse explained to you the treatment he/she proposed and why he/she proposed it

94. The doctor/ nurse discussed with you the pros and cons of the treatment he/she proposed

The doctor/ nurse explained what the positive and negative aspects of the treatment would be and checked that the young person understood what the alternatives were.

95. The doctor/ nurse asked you what treatment you preferred

The doctor/ nurse enquired about preference, even if in the end he/she prescribed a treatment which was not the preferred one.

96. You understood the tests and/or treatments the doctor/ nurse proposed

At the end of the consultation. If the young person did not understand immediately he/she had the opportunity to ask the doctor/ nurse to explain things in more detail.

97. You had enough time to ask the doctor everything you wanted to ask

During the consultation, not at a later stage

98. You had enough time to ask the nurse everything you wanted to ask

Only if the consultation was with a nurse (in this case skip the previous question). Otherwise, skip this question.

**Annexure 9: Face validation expert information document and
informed consent**



RESPONDENT'S INFORMATION LEAFLET & INFORMED CONSENT FORM FOR NON-INTERVENTION STUDY

TITLE OF STUDY: Validation of a measure of youth-friendly primary healthcare services in Tshwane District

Phase 2: Pre-test Face validation

Principle investigator: Christelle Boersema

Institution: University Of Pretoria

DAYTIME AND AFTER HOURS TELEPHONE NUMBER(S):

Daytime numbers: 012 354 1332

Afterhours: 082 302 8812

DATE AND TIME OF FIRST INFORMED CONSENT DISCUSSION:

10	06	2014	:
Dd	Mmm	ivy	Time

Dear Mr. / Mrs. MASHIA..... date 10.1.06.1.2014

1) INTRODUCTION

You are invited to volunteer for a research study. This information leaflet is to help you to decide if you would like to participate. Before you agree to take part in this study you should fully understand what is involved. If you have any questions, which are not fully explained in this leaflet, do not hesitate to ask the investigator. You should not agree to take part unless you are completely happy about all the procedures involved.

2) THE NATURE AND PURPOSE OF THIS STUDY

The aim of this study is to determine how well a questionnaire (called the Youth-Friendly- World Health Organization+ questionnaire or YFHS-WHO+ questionnaire) can measure the friendliness of services delivered to young people (age 18- 24 years) by fixed public primary healthcare clinics. Accurate measurement therefore requires the investigator to make sure that the questions in this questionnaire are clearly understood and relevant to the context of young people in Tshwane District. This phase is called pretesting of the YFHS-WHO+ questionnaire.

3) EXPLANATION OF PROCEDURES TO BE FOLLOWED

The pretesting of the YFHS-WHO+ questionnaire involves two steps:

1. Youth attending fixed primary healthcare clinics discuss the relevance of the questions. They suggest a better formulation that will lead to more accurate responses if the question is unclear or not relevant.
2. Experts in youth-friendly services provide their subject opinion of the relevance of questions or question formulation.

Questions within the questionnaire will be changed according to the youth's better formulation of the question or removed when they find the question irrelevant. The expert's opinion will be used to support these changes.

You are asked to participate (step 2) as an expert to provide your opinion of the relevance of the questions in the YFHS- WHO+ questionnaire and to suggest a better formulation for questions that are not clear to the context of youth attending fixed public primary healthcare clinics in Tshwane District.

4) RISK AND DISCOMFORT INVOLVED.

No risk or discomfort involved.

5) POSSIBLE BENEFITS OF THIS STUDY.

A questionnaire that can accurately measure the youth-friendliness of primary healthcare services according to the perception of the youth is of benefit to improve the quality of primary healthcare service delivery to young people. This is the first instrument to measure youth-friendliness of primary healthcare services according to the perception of youth and is therefore also of benefit internationally as the questionnaire is validated in English.

6) I understand that if I do not want to participate in this study, I will not be discriminated against in any way.

7) I may at any time withdraw from this study.

8) HAS THE STUDY RECEIVED ETHICAL APPROVAL?

This Protocol was submitted to the Faculty of Health Sciences Research Ethics Committee, University of Pretoria and Tshwane/ Metsweding Regional Research Ethics Committee. Written approval has been granted by these committees. The study has been structured in accordance with the Belmont Report which deals with the recommendations guiding ethical research involving human beings. A copy of the Belmont Report may be obtained from the investigator should you wish to review it.

9) INFORMATION

If I have any questions concerning this study, I should contact the primary investigator: Mrs Christelle Boersema tel: 012 354 1332 or cell: 082 302 8812



10) CONFIDENTIALITY

All records obtained whilst in this study will be regarded as confidential. Results will be published or presented in such a fashion that respondents remain unidentifiable.

11) CONSENT TO PARTICIPATE IN THIS STUDY.

I have read the above information before signing this consent form. I have been given opportunity to ask questions and am satisfied that they have been answered satisfactorily. I understand that if I do not participate it will not alter my position in any way. I hereby volunteer to take part in this study.

ESTHER OLGA MORHIA

Respondent's name

10 June 2014

Date



Respondent's signature

10/06/2014

Date

GC Boersema

Investigator's name

10/6/2014

Date



Investigator's signature

10/6/2014

Date

J M Das JmDas

Witness name and signature

10/6/2014

Date

RESPONDENT'S INFORMATION LEAFLET & INFORMED CONSENT FORM FOR NON-INTERVENTION STUDY

TITLE OF STUDY: Validation of a measure of youth-friendly primary healthcare services in Tshwane District

Phase 2: Pre-test Face validation

Principle investigator: Christelle Boersema

Institution: University of Pretoria

DAYTIME AND AFTER HOURS TELEPHONE NUMBER(S):

Daytime numbers: 012 354 1332

Afterhours: 082 302 8812

DATE AND TIME OF FIRST INFORMED CONSENT DISCUSSION:

19	06	2015	:
Dd	Mmm	Iyy	Time

Dear Mr. / Mrs. L. Sekoala date ..19../06../2015.

1) INTRODUCTION

You are invited to volunteer for a research study. This information leaflet is to help you to decide if you would like to participate. Before you agree to take part in this study you should fully understand what is involved. If you have any questions, which are not fully explained in this leaflet, do not hesitate to ask the investigator. You should not agree to take part unless you are completely happy about all the procedures involved.

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If I have any questions concerning this study, I should contact the primary investigator: Mrs Christelle Boersema tel: 012 354 1332 or cell: 082 3028812



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11) CONSENT TO PARTICIPATE IN THIS STUDY.

I have read the above information before signing this consent form. I have been given opportunity to ask questions and am satisfied that they have been answered satisfactorily. I understand that if I do not participate it will not alter my position in any way. I hereby volunteer to take part in this study.

Saape Lizzy Sekoale
.....
Respondent's name

19/06/2015
.....
Date


.....
Respondent's signature

19/06/2015
.....
Date

Christelle Beersma
.....
Investigator's name

19/06/2015
.....
Date


.....
Investigator's signature

19/06/2015
.....
Date

JmDas
.....
Witness name and signature

19/06/2015
.....
Date

Annexure 10: Flipchart recordings of group discussions (GDs)



Clinic 5 GD1

15/4/11

11h00

clinic

A = 23
Male

B = 21
Male
(let's after 5 minutes)

C = 22
Female

① 1 change

1. Δ acute to pimples
Fatigue \rightarrow tiredness
Fever not clear \rightarrow high temperature

2. Use only injury, not spine injury

3.

5. Contraception \rightarrow prevention of pregnancy and

6. Concerns in relation to \rightarrow Would you feel free to talk to sr. about your friends/befriend

9. Marijuana \rightarrow Use kum dagga/weed

11. Concern, Δ to problem

12. Concern Δ to problem

* 13. Anxious \leftarrow nervous, Fear, scared, suicidal thoughts?

* 14. Abuse \leftarrow physical, emotional \rightarrow physical/emotional abuse ? sexual abuse



Clinic 5 GD2

All * Change word practice to clinic 23/4/14
→ * Change facility to clinic

15. Facility staff → Nurses/staff members working at this clinic

16/24: Not applicable - Do not pay

26 - Change practice to clinic

28 - Fatigue → change to exhaustion

29 Concerns → ? Problems (Does not matter)

31 University/College (add college)

33 Change 'being violent yourself' to 'being a violent person'

44 Ethnic origin → change to Race/Cultural background (will include Zulu/Xhosa)

45 ~~change countryside to rural/urban; too rich or too poor~~

45 Remove social: Because of their background (rural/urban)

49 ... they are married (Add with/without children) ^{where they come from}

50 gay (homosexual) / lesbian / bisexual

51 Change impairment to problem. Add physical disability, blind

53 Change drug users to ^{signs of} drug abuse

57 School director, change to school principal

* Vident or delinquent - Remove delinquent

63 - Separate for nurse/doctor - Apply throughout

65 - Change word 'confident' to 'how sure are you?'

66 " " "

67 Remove 'on your own'

77 Spelling 'you' - 'ow'

78 Some day ~~not applicable~~ change waiting room to the que for consultation

80 How long → ~~change~~ Remove 5min/less
Not applicable 1) 30
2) 30-1hr
3) > 1h
4) > 3hrs
5) > 5hrs

↳ Different questions:
60.1 Opening a file
60.2 Receiving file
60.3 Consultation
60.4 Pharmacy

81 Scale - fair, poor, very poor

82 ... see dr/nurse urgently due to emergency



ClinicL GD3

24/4/14

①

Members

A female 20yrs

B F 23yrs

C F 23yrs

D F 20yrs

E: Female 22yrs

F: Male 23yrs

11/15
- 12h50

Section A: Biographic

5. Single as 1st option

7. Dwelling (Where you live)

- Formal settlement ^{Urban} (housing)
- Informal " (shacks)
- Traditional / Rural area

8. Going to ^{Focus only on employment status} work and college/school/university

a. -> Add 'completed' Grade 12

10. How often do you come to the clinic?

Options:

- 1) Once a month
- 2) Every 2 months
- 3) " 3 months
- 4) " 6 months
- 5) Once a year

11. Did you visit the clinic before 'today'!



Clinic GD3

(2)

→ Clinic in place of PHC services

Section B: Add question on what is your 2nd language?
which language do you prefer to speak

Section B:

- Change facility to clinic
- 1 → Acne → Skin problems (Pimple/rash)
fatigue → getting tired
- 2) Add car accident as example
- 5) (prevention)
- 9) marijuana (dagga)
- 13) Anxious (nervous)
- 85) Appealing, change to satisfied
- 86) Spelling adolescent
- 93) gave in place of propose (94)/96
- 94) Change 'pros/cons' to adv/disadv
- 60)/61 → Separate dr/nurse
- 15) Clinic staff in place of facility staff
- 16) youth association (group)
- 18) Flyers/pamphlets
- 19) Add newspapers
- 20) Remove +25
- 26) inconvenient replace with 'not suitable'



ClinicL GD3

Between 33 & 34 'If ~~an~~ another... you ~~the~~ to ³

44 ^{cultural} Ethnic origin: (example ^{African/Indian/white} race / Xhosa/Zulu) include all.

45 countryside (urban/rural)

51 Hearing impairment → ^{hearing} problem

53 Fine with 'drug users' ≠ change to 'drug abusers'

56 Should violence ~~or delinquents~~

change scale
1 → not comfortable at all.

63 Separate dr and nurse → Add option of not applicable.

65 Keep word 'confident' ≠ change to 'sure'

67 Keep as is, not change - can come with neighbour

78 you wanted 'to visit this clinic', how quickly. - -

- 80 - Option 1 → ≠ 5 min < 30 min
2 30 min - 1hr
3 1-2hrs
4 2-3hrs
5 < 3hrs

Include a question on different cues — 1) Registration
2) Consultation
3) Pharmacy

83) Remove



ClinicE GD4

15/5/14

(page 1)

A - Female 23 yrs
B - " "

C - Male 22 yrs.

scored with q/ 79-98

93) The doctor/nurse expl to you ^{the treatment} he/she should give to you and why he/she should give it

94) Change 'pro's and cons' → replace with advantages/disadv.

78) Thinking ^{last time} ... appointment was given at this clinic
→ leave out "some day" → or use 'not applicable'

79) option "poor" enough ≠ 'very poor'

80) Options ~~2 hrs~~ 30-1 hr > 1h > 2 hr > 3 hrs ~~> 4 hrs~~

81) Rate what → hint with question 80 → waiting time
- Add 'Very poor'

* Different ques → Reception
→ Consultation
→ Medication

82) → change urgently to 'due to an emergency'

83) Applicable

→ ~~40)~~ 44) Replace 'Ethnic origin' with cultural background

45) Keep social background

49) - Add with/without children

50) = 1) Change impairment to problem (≠ add blind, physical disab)

53) Drug users/abusers

57) Change school director → principle

60) Different question (2) and (1) same question → Not applicable added

63) Add 'comfortable' person 1 & 2

67) Fine, keep as is.

△ Faculty to clinic.

1. Replace Acne with skin problems; Replace fatigue with tired

5. Prevention of pregnancy → replace contraception

6. Not applicable - remove

9. Add njaopes (after) marijuana (Nyope)



Clinic K, GD5

KT Moxobatshe

8 Participants

- A - Female 18 yrs
- B - Male, 22
- C - Female, 23
- D - Female 22 yrs
- E - Female - 20 yrs
- F - Female 23 yrs
- G - Female 21 yrs
- ~~H - Female~~

page 4 → DR → Injuries → only spare injury

- nr 3. - sexual orientation: problems regarding sexuality
Keep the word concern
- 6 - Applicable, depend on type of problem, how friendly the sister is.
- 9 - Add nyope, cocaine

Keep word concern

26 - 'Inconvenient' - 'not suitable' (4 person); 'not reasonable' (2 persons)

page 6 - 'community' very applicable; → 'sports club' ≠ applicable
↳ neighbours

- P. 7, 44 → cultural background, ≠ race
- 45 Keep social background, Pure rural/urban in brackets
- 50 leave as it is
- 51 - Impairment change to hearing problem; blindness, may not be able to talk, slow learner
- 53 - drug users / drug abusers
- 63 - Separate nurse / doctor - Add option not applicable
- 64 - provided → replace with given
- 78 - ^{change} confidentiality - Privacy
- 78 - ^{change} appointments to visit, how quickly were you attended to...

80 - Queues → Reception
↳ consultation
↳ pharmacy

→ Reception 5 min	shortest	longest - less than 10 min / 10-15 min
(Reception 5 min or less)		
(Consultation - shortest 45 min)		longest - More than 45 min
pharmacy - " 20 min		" - 45-1 hr.

Scale
81 Add very poor

Scale	<ul style="list-style-type: none"> - less 1 hr - 1 - 2 hrs - 2 - 3 hrs - 3 - 4 hrs - ^{more} 5 hrs
-------	---

- 82 change urgently ~~to~~ (due to an emergency)
- 83 Not applicable, remove
- 85 Change 'appealing' to ~~some~~ 'satisfying'
- 90 - 96 - Separate nurse/doctor. → Add to scale 'not applicable'
- 93 change ~~to~~ ^{as} suggested (1)



Clinic E, GD6

21/5/14

A - Female 23

C - Female 21 yrs

B - Female 23

→ change concern to problem

3 - Sexual orientation → change to sexuality

5 - Contraception → Family planning rather than prevention

6 - Reliance

9 Add ^{Replace marijuana with} Nuppe and ~~cocaine~~ other drugs

Page 6 → remove sports club → Add neighbours

51 - hearing problem → impairment

Add blindness, slow learner, physical disability

64 - keep 'provided', privacy in brackets

78 - ~~keep as it is~~ to visit the clinic / appointments

93 - proposed → gave ~~eg~~ given (rather than suggest)

Annexure 11: IA YFHS-WHO+ questionnaire

IA YFHS-WHO+ QUESTIONNAIRE FOR THE ASSESSMENT OF YOUTH FRIENDLINESS IN PHC SERVICES IN TSHWANE DISTRICT

Please complete the questionnaire by marking the appropriate blocks with a cross (X) or writing i in the space provided.

Please answer all questions as honest as possible as there are no right or wrong answers.

SECTION A: BIOGRAPHIC INFORMATION

	For office use only												
Questionnaire number	A0 <input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>												
1. How old are you? years	A1 <input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>												
2. Are you male or female? <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Male</td> <td style="width: 20%; text-align: center;">1</td> </tr> <tr> <td>Female</td> <td style="text-align: center;">2</td> </tr> </table>	Male	1	Female	2	A2 <input style="width: 20px; height: 20px;" type="text"/>								
Male	1												
Female	2												
3. To which population group do you belong? <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">African black</td> <td style="width: 20%; text-align: center;">1</td> </tr> <tr> <td>Coloured</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Indian or Asian</td> <td style="text-align: center;">3</td> </tr> <tr> <td>White</td> <td style="text-align: center;">4</td> </tr> <tr> <td>Other (please detail)</td> <td style="text-align: center;">5</td> </tr> </table>	African black	1	Coloured	2	Indian or Asian	3	White	4	Other (please detail)	5	A3 <input style="width: 20px; height: 20px;" type="text"/>		
African black	1												
Coloured	2												
Indian or Asian	3												
White	4												
Other (please detail)	5												
4. Are you employed? <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Yes</td> <td style="width: 20%; text-align: center;">1</td> </tr> <tr> <td>No</td> <td style="text-align: center;">2</td> </tr> </table>	Yes	1	No	2	A4 <input style="width: 20px; height: 20px;" type="text"/>								
Yes	1												
No	2												
5. Mark all your sources of income. <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Self</td> <td style="width: 20%; text-align: center;">1</td> </tr> <tr> <td>Social Grant</td> <td style="text-align: center;">2</td> </tr> <tr> <td>From parents</td> <td style="text-align: center;">3</td> </tr> <tr> <td>From relatives</td> <td style="text-align: center;">4</td> </tr> <tr> <td>From friends</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Other (please detail)</td> <td style="text-align: center;">6</td> </tr> </table>	Self	1	Social Grant	2	From parents	3	From relatives	4	From friends	5	Other (please detail)	6	A5a <input style="width: 20px; height: 20px;" type="text"/> A5b <input style="width: 20px; height: 20px;" type="text"/> A5c <input style="width: 20px; height: 20px;" type="text"/> A5d <input style="width: 20px; height: 20px;" type="text"/> A5e <input style="width: 20px; height: 20px;" type="text"/> A5f <input style="width: 20px; height: 20px;" type="text"/>
Self	1												
Social Grant	2												
From parents	3												
From relatives	4												
From friends	5												
Other (please detail)	6												



SECTION A: (continue)	For office use only																								
<p>6. What is your highest level of education?</p> <table border="1"><tr><td>No formal school education</td><td>1</td></tr><tr><td>Primary school education</td><td>2</td></tr><tr><td>Secondary school education</td><td>3</td></tr><tr><td>Tertiary education (college/ university)</td><td>4</td></tr></table>	No formal school education	1	Primary school education	2	Secondary school education	3	Tertiary education (college/ university)	4	<p>A6 <input type="checkbox"/></p>																
No formal school education	1																								
Primary school education	2																								
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<p>7. What language do you mostly use at home? (choose one)</p> <table border="1"><tr><td>Afrikaans</td><td>1</td></tr><tr><td>English</td><td>2</td></tr><tr><td>isiNdebele</td><td>3</td></tr><tr><td>isiXhosa</td><td>4</td></tr><tr><td>isiZulu</td><td>5</td></tr><tr><td>isiSwati</td><td>6</td></tr><tr><td>Sesotho</td><td>7</td></tr><tr><td>Sepedi</td><td>8</td></tr><tr><td>Setswana</td><td>9</td></tr><tr><td>Tshivenda</td><td>10</td></tr><tr><td>Xitsonga</td><td>11</td></tr><tr><td>Other (please detail)</td><td>12</td></tr></table>	Afrikaans	1	English	2	isiNdebele	3	isiXhosa	4	isiZulu	5	isiSwati	6	Sesotho	7	Sepedi	8	Setswana	9	Tshivenda	10	Xitsonga	11	Other (please detail)	12	<p>A7 <input type="checkbox"/></p>
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Sepedi	8																								
Setswana	9																								
Tshivenda	10																								
Xitsonga	11																								
Other (please detail)	12																								
<p>8. How often do you visit this clinic?</p> <table border="1"><tr><td>More than once a month</td><td>1</td></tr><tr><td>Once a month</td><td>2</td></tr><tr><td>Once in two to three months</td><td>3</td></tr><tr><td>Once in 6 months</td><td>4</td></tr><tr><td>Once a year</td><td>5</td></tr><tr><td>Less than once a year</td><td>6</td></tr><tr><td>Other (please detail)</td><td>7</td></tr></table>	More than once a month	1	Once a month	2	Once in two to three months	3	Once in 6 months	4	Once a year	5	Less than once a year	6	Other (please detail)	7	<p>A8 <input type="checkbox"/></p>										
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Less than once a year	6																								
Other (please detail)	7																								
<p>9. Did you visit this clinic before today?</p> <table border="1"><tr><td>Yes</td><td>1</td></tr><tr><td>No</td><td>2</td></tr></table>	Yes	1	No	2	<p>A9 <input type="checkbox"/></p>																				
Yes	1																								
No	2																								



SECTION A: (continue)	For office use only																
<p>10. If yes, approximately how long ago was your previous visit to t this clinic?</p> <table border="1"> <tr> <td>Less than 3 months or 3 months ago</td> <td>1</td> </tr> <tr> <td>More than 3 months but less than 1 year ago</td> <td>2</td> </tr> <tr> <td>Approximately 1 year ago</td> <td>3</td> </tr> <tr> <td>More than a year ago</td> <td>4</td> </tr> <tr> <td>Other (please detail)</td> <td>5</td> </tr> </table>	Less than 3 months or 3 months ago	1	More than 3 months but less than 1 year ago	2	Approximately 1 year ago	3	More than a year ago	4	Other (please detail)	5	<p>A10 <input type="checkbox"/></p>						
Less than 3 months or 3 months ago	1																
More than 3 months but less than 1 year ago	2																
Approximately 1 year ago	3																
More than a year ago	4																
Other (please detail)	5																
<p>11. Mark the services that you mostly use at this clinic? (Mark all applicable)</p> <table border="1"> <tr> <td>Treatment when I am ill</td> <td>1</td> </tr> <tr> <td>Treatment of my children when they are ill</td> <td>2</td> </tr> <tr> <td>Immunization of my children</td> <td>3</td> </tr> <tr> <td>For care when I am pregnant</td> <td>4</td> </tr> <tr> <td>To collect condoms</td> <td>5</td> </tr> <tr> <td>To use other family planning services</td> <td>6</td> </tr> <tr> <td>To get information of how to live healthy</td> <td>7</td> </tr> <tr> <td>Other (please detail)</td> <td>8</td> </tr> </table>	Treatment when I am ill	1	Treatment of my children when they are ill	2	Immunization of my children	3	For care when I am pregnant	4	To collect condoms	5	To use other family planning services	6	To get information of how to live healthy	7	Other (please detail)	8	<p>A11a <input type="checkbox"/></p> <p>A11b <input type="checkbox"/></p> <p>A11c <input type="checkbox"/></p> <p>A11d <input type="checkbox"/></p> <p>A11e <input type="checkbox"/></p> <p>A11f <input type="checkbox"/></p> <p>A11g <input type="checkbox"/></p> <p>A11 <input type="checkbox"/></p>
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Treatment of my children when they are ill	2																
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To use other family planning services	6																
To get information of how to live healthy	7																
Other (please detail)	8																
<p>12. Did you visit other clinics than this clinic before?</p> <table border="1"> <tr> <td>Yes</td> <td>1</td> </tr> <tr> <td>No</td> <td>2</td> </tr> </table>	Yes	1	No	2	<p>A12 <input type="checkbox"/></p>												
Yes	1																
No	2																
<p>13. If yes, were these clinics...</p> <table border="1"> <tr> <td>Less friendly/ good to you?</td> <td>1</td> </tr> <tr> <td>More friendly/ good to you?</td> <td>2</td> </tr> <tr> <td>Some clinics were more friendly / good to me and others less.</td> <td>3</td> </tr> </table>	Less friendly/ good to you?	1	More friendly/ good to you?	2	Some clinics were more friendly / good to me and others less.	3	<p>A13 <input type="checkbox"/></p>										
Less friendly/ good to you?	1																
More friendly/ good to you?	2																
Some clinics were more friendly / good to me and others less.	3																















**SECTION B: EVALUATION OF THE DEVELOPMENT OF YOUTH-FRIENDLY
PHC SERVICES IN TSHWANE DISTRICT**

					For office use only
If you had one of the following complaints would you get help for it in this clinic?					
	Definitely not	Probably not	Probably	Definitely	
1. Physical complaint for example stomach ache, cough, sore throat, skin problems (such as pimples), fever, tiredness, painful or irregular periods,...	1	2	3	4	B1 <input type="checkbox"/>
2. Injuries for example sport injuries,...	1	2	3	4	B2 <input type="checkbox"/>
3. Some very private or sensitive concerns (such as questions about sexual orientation or about depression).	1	2	3	4	B3 <input type="checkbox"/>
4. Concerns related to sexual health (questions or fears about pregnancy, questions about sexually transmitted infections, including HIV)	1	2	3	4	B4 <input type="checkbox"/>
5. Questions about contraception (prevention of pregnancy).	1	2	3	4	B5 <input type="checkbox"/>
6. Concerns in relation to your friends or your boy/ girlfriend	1	2	3	4	B6 <input type="checkbox"/>
7. Smoking cigarettes and wanting to stop.	1	2	3	4	B7 <input type="checkbox"/>
8. Problem related to alcohol.	1	2	3	4	B8 <input type="checkbox"/>
9. Problem with marijuana (dagga), nyaope or other drugs.	1	2	3	4	B9 <input type="checkbox"/>
10. Problem with your parents or family.	1	2	3	4	B10 <input type="checkbox"/>
11. Problems related to work, school or university/ college.	1	2	3	4	B11 <input type="checkbox"/>
12. Problems related to your eating habits, exercise or sleep.	1	2	3	4	B12 <input type="checkbox"/>
13. If you felt sad, depressed or nervous, or if you had suicidal thoughts.	1	2	3	4	B13 <input type="checkbox"/>
14. Problems related to violence (being a violent person or being a victim of violence or abuse).	1	2	3	4	B14 <input type="checkbox"/>



SECTION B: (continue)						For office use only		
How did you learn you could get help for these health problems in this clinic?								
				Yes	No			
15.	Through clinic staff.	1	2			B15	<input type="checkbox"/>	
16.	Through a youth group	1	2			B16	<input type="checkbox"/>	
17.	Through your religious community	1	2			B17	<input type="checkbox"/>	
18.	Through flyers/ pamphlets describing the clinic.	1	2			B18	<input type="checkbox"/>	
19.	Through the radio, TV, newspapers or magazines	1	2			B19	<input type="checkbox"/>	
20.	Through the internet	1	2			B20	<input type="checkbox"/>	
21.	Through friends	1	2			B21	<input type="checkbox"/>	
22.	Through school (school staff or activities at school)	1	2			B22	<input type="checkbox"/>	
23.	Through family members	1	2			B23	<input type="checkbox"/>	
				Yes often	Yes occasionally			
24.	Did you ever postpone getting help for a health problem at this clinic because the clinic's working hours were not suitable?	1	2	3		B24	<input type="checkbox"/>	
		Very poor	Poor	Fair	Good			
25.	How do you rate the hours this clinic is open for service?	1	2	3	4	5	B25	<input type="checkbox"/>



SECTION B: (continue)					For office use only
If your parents or another significant adult in your family knew you had one of the following complaints would they encourage you to get help for it in this clinic?					
	Definitely not	Probably not	Probably	Definitely	
26. Physical complaint for example stomach ache, cough, sore throat, skin problems (such as pimples), fever, tiredness, painful or irregular periods.	1	2	3	4	B26 
27. Concerns related to sexual health (for example questions or fears about pregnancy, questions about sexually transmitted infections).	1	2	3	4	B27 
28. Problems related to alcohol, cigarette or drug use.	1	2	3	4	B28 
29. Problems related to work, school or university/ college.	1	2	3	4	B29 
30. If you felt sad, depressed or nervous, or if you had suicidal thoughts.	1	2	3	4	B30 
31. Problems related to violence (being violent yourself or being a victim of violence or abuse).	1	2	3	4	B31 
If another adult in your community (at school, friends, neighbours,...) knew you had one of the following complaints would they encourage you to get help for it in this clinic?					
	Definitely not	Probably not	Probably	Definitely	
32. Physical complaint for example stomach ache, cough, sore throat, skin problems (such as pimples), fever, tiredness, painful or irregular periods.	1	2	3	4	B32 
33. Concerns related to sexual health (for example questions or fears about pregnancy, questions about sexually transmitted infections).	1	2	3	4	B33 
34. Problems related to alcohol, cigarette or drug use.	1	2	3	4	B34 
35. Problems related to work, school or university/ college.	1	2	3	4	B35 
36. If you felt sad, depressed or nervous, or if you had suicidal thoughts.	1	2	3	4	B36 
37. Problems related to violence (being violent yourself, or being victim of violence or abuse).	1	2	3	4	B37 



SECTION B: (continue)					For office use only
Here are some reasons for which young people might not have received proper care. For each of these do you think it could happen in this clinic?					
	Definitely did <u>not</u> receive proper care	Did probably <u>not</u> receive proper care	Probably received proper care	Definitely received proper care	
38. Because they are too young?	1	2	3	4	B38 <input type="checkbox"/>
39. Because they are too old?	1	2	3	4	B39 <input type="checkbox"/>
40. Because they are a boy?	1	2	3	4	B40 <input type="checkbox"/>
41. Because they are a girl?	1	2	3	4	B41 <input type="checkbox"/>
42. Because of their cultural background?	1	2	3	4	B42 <input type="checkbox"/>
43. Because of their social background (where they come from: rural or urban; too rich or too poor...)?	1	2	3	4	B43 <input type="checkbox"/>
44. Because of their religion?	1	2	3	4	B44 <input type="checkbox"/>
45. Because of the way they dress or the way they look?	1	2	3	4	B45 <input type="checkbox"/>
46. Because they live on the street?	1	2	3	4	B46 <input type="checkbox"/>
47. Because they are not married (with or without children)?	1	2	3	4	B47 <input type="checkbox"/>
48. Because they are gay/ lesbian/ bisexual?	1	2	3	4	B48 <input type="checkbox"/>
49. Because they have a disability (for example hearing problems, blindness or physical disability)?	1	2	3	4	B49 <input type="checkbox"/>
50. Because they have a mental illness?	1	2	3	4	B50 <input type="checkbox"/>
51. Because they are drug users?	1	2	3	4	B51 <input type="checkbox"/>
52. Because they are violent?	1	2	3	4	B52 <input type="checkbox"/>
53. Because they are sex workers?	1	2	3	4	B53 <input type="checkbox"/>



SECTION B: (continue)							For office use only	
Do you think young people might not visit this clinic because...								
							Yes	No
54. They fear their parents could find out or not agree of the visit?							1	2
55. They fear the school principal or staff could find out of the visit?							1	2
56. They fear the police will know of the visit?							1	2
57. Other (please detail)							1	2
Thinking about your last (most recent) consultations at this clinic								
							I did not visit a doctor	
							Very poor	
							Poor	
							Fair	
							Good	
							Excellent	
58. How do you rate the way you felt treated by the doctor?	0	1	2	3	4	5		
59. How do you rate the level of trust you have in this doctor?	0	1	2	3	4	5		
							I did not visit a doctor	
							Not comfortable at all	
							Not very comfortable	
							Neutral	
							Comfortable	
							Very comfortable	
60. When you were with this doctor how comfortable did you feel?	0	1	2	3	4	5		

B54
B55
B56
B57

B58
B59

B60



SECTION B: (continue)						For office use only	
	Very poor	Poor	Fair	Good	Excellent		
61. How do you rate the way you felt treated by the nurse?	1	2	3	4	5	B61	<input type="checkbox"/>
62. How do you rate the level of trust you have in this nurse?	1	2	3	4	5	B62	<input type="checkbox"/>
	Not comfortable at all	Not very comfortable	Neutral	Comfortable	Very comfortable		
63. When you were with this nurse how comfortable did you feel?	1	2	3	4	5	B63	<input type="checkbox"/>
	Very poor	Poor	Fair	Good	Excellent		
64. How do you rate the way you felt treated by the receptionist?	1	2	3	4	5	B64	<input type="checkbox"/>
				Yes	No		
65. Thinking about your visits to this clinic: were you provided with information about confidentiality (privacy) while you were in the clinic?				1	2	B65	<input type="checkbox"/>



SECTION B: (continue)						For office use only	
	Not at all confident	Rather confident	Neutral	Confident	Extremely confident		
66. How sure are you that your concerns will be kept confidential (private) by the doctor/s of this clinic?	1	2	3	4	5	B66	<input type="checkbox"/>
67. How sure are you that your concerns will be kept confidential (private) by the nurses of this clinic?	1	2	3	4	5	B67	<input type="checkbox"/>
68. How sure are you that your concerns will be kept confidential (private) by the receptionists of this clinic?	1	2	3	4	5	B68	<input type="checkbox"/>
	I came on my own	Yes, suggested and happened	Yes, suggested and did not happen	No			
69. Did the doctor/ nurse suggests he/she spends some time speaking to you on your own, without the presence of a parent, friend or other person?	0	1	2	3		B69	<input type="checkbox"/>
About this clinic's privacy:							
	Strongly disagree	Disagree	Agree	Strongly agree			
70. You feel the registration at the reception is done in a way that no one else could overhear what you are talking about.	1	2	3	4		B70	<input type="checkbox"/>
71. You feel the consultation is done in a way that no one else could see the examination or overhear what you are talking about.	1	2	3	4		B71	<input type="checkbox"/>



SECTION B: (continue)						For office use only
Thinking about your last (most recent) consultations at this clinic						
	I did not visit a doctor	Strongly disagree	Disagree	Agree	Strongly agree	
72. The doctor gave you his/ her full attention.	0	1	2	3	4	B72 <input type="checkbox"/>
73. The doctor respected your opinion and decision even if they were different from his/ hers.	0	1	2	3	4	B73 <input type="checkbox"/>
74. The doctor treated you in a supportive and caring manner.	0	1	2	3	4	B74 <input type="checkbox"/>
75. The doctor seemed interested in what you had to say.	0	1	2	3	4	B75 <input type="checkbox"/>
	Strongly disagree	Disagree	Agree	Strongly agree		
76. The nurse gave you his/ her full attention.	1	2	3	4		B76 <input type="checkbox"/>
77. The nurse respected your opinion and decision even if they were different from his/ hers.	1	2	3	4		B77 <input type="checkbox"/>
78. The nurse treated you in a supportive and caring manner.	1	2	3	4		B78 <input type="checkbox"/>
79. The nurse seemed interested in what you had to say.	1	2	3	4		B79 <input type="checkbox"/>



SECTION B: (continue)							For office use only
	Same Day	Next working day	Within 2 days	Within 3 days	Within 4 days	Within 5 days or more	
80. Thinking of the last time you wanted to use this clinic, how quickly were you attended to?	1	2	3	4	5	6	B80 <input type="checkbox"/>
	Excellent	Good	Fair	Poor	Very poor		
81. How do you rate this?	1	2	3	4	5		B81 <input type="checkbox"/>
	Less than 10 min	10 min - 30 min	31 min - 1 hour	More than 1 hour but less than 3 hours	3 hours or more		
82. How long do you usually have to wait in the waiting room at the reception (to receive your file)?	1	2	3	4	5		B82 <input type="checkbox"/>
	Excellent	Good	Fair	Poor	Very poor		
83. How do you rate this?	1	2	3	4	5		B83 <input type="checkbox"/>



SECTION B: (continue)					For office use only		
Thinking about your last (most recent) visits in this clinic							
	Strongly disagree	Disagree	Agree	Strongly agree			
89. The waiting area and surroundings of the clinic were appealing/ satisfying.	1	2	3	4	B89	<input type="checkbox"/>	
				Yes	No		
90. Did you notice any educational material about adolescent health in this clinic?				1	2	B90	<input type="checkbox"/>
	Very poor	Poor	Fair	Good	Excellent		
91. How would you rate the quality of the information provided in these materials?	1	2	3	4	5	B91	<input type="checkbox"/>
92. Would you like to make a suggestion for improving the services to young people in this clinic?	<div style="border: 1px solid black; height: 40px; width: 100%;"></div>					B92a	<input type="checkbox"/>
						B92b	<input type="checkbox"/>
						B92c	<input type="checkbox"/>
						B92d	<input type="checkbox"/>
Thinking about your last (most recent) consultations in this clinic							
	Strongly disagree	Disagree	Agree	Strongly agree			
93. You received the treatment or service that met your expectations.	1	2	3	4	B93	<input type="checkbox"/>	
94. The doctor/ nurse explained things in a way you could understand.	1	2	3	4	B94	<input type="checkbox"/>	
95. The doctor/ nurse explained to you what tests she/ he was doing when examining you.	1	2	3	4	B95	<input type="checkbox"/>	
96. The doctor/ nurse explained to you the results of the tests or check-ups she/ he has done.	1	2	3	4	B96	<input type="checkbox"/>	
97. The doctor/ nurse explained to you the treatment she/ he gave and why she/ he gave it.	1	2	3	4	B97	<input type="checkbox"/>	
98. The doctor/ nurse discussed with you the advantages and disadvantages of the treatment she/ he gave.	1	2	3	4	B98	<input type="checkbox"/>	
99. The doctor/ nurse asked you what treatment you preferred.	1	2	3	4	B99	<input type="checkbox"/>	
100. You understood the tests and/or treatments the doctor/ nurse gave.	1	2	3	4	B100	<input type="checkbox"/>	
101. You had enough time to ask the doctor/ nurse everything you wanted to ask.	1	2	3	4	B101	<input type="checkbox"/>	

Annexure 12: Respondent information document and informed consent, Phase 3

RESPONDENT'S INFORMATION LEAFLET & INFORMED CONSENT FORM FOR NON-INTERVENTION STUDY

**TITLE OF STUDY: Validation of a measure of youth-friendly primary healthcare services in Tshwane District
Phase 3: Collect youth scores**

Principle investigator: Christelle Boersema

Institution: University of Pretoria

DAYTIME AND AFTER HOURS TELEPHONE NUMBER(S):

Daytime numbers: 012 354 1332

Afterhours: 082 302 8812

DATE AND TIME OF FIRST INFORMED CONSENT DISCUSSION:

		2014
Dd	Mm	ivy

:
Time

Dear Mr. / Mrs. date/...../.....

1) INTRODUCTION

You are invited to volunteer for a research study. This information leaflet is to help you to decide if you would like to participate. Before you agree to take part in this study you should fully understand what is involved. If you have any questions, which are not fully explained in this leaflet, do not hesitate to ask the investigator. You should not agree to take part unless you are completely happy about all the procedures involved.

2) THE NATURE AND PURPOSE OF THIS STUDY

The aim of this study is to determine how well a questionnaire (called the Youth-Friendly-World Health Organization+ questionnaire can measure the friendliness of services delivered to young people (age 18- 24 years) by public primary healthcare clinic. The questions in this questionnaire will ask you how you perceive the friendliness of the clinic you came to today. In doing so we wish to learn more about the accuracy of this questionnaire to be able to use it in future with the purpose of improving service delivery to young people in Tshwane District.

3) EXPLANATION OF PROCEDURES TO BE FOLLOWED

This study involves answering the questions of the YFHS-WHO+ questionnaire either in a face-to face interview with a research assistant or the principle investigator or by completing the questionnaire on your own. A research assistant will be available to clarify any question that you may have.

4) RISK AND DISCOMFORT INVOLVED.

You will have to allow us 30- 60 minutes of your time. The questions of the YFHS-WHO+ questionnaire will only ask for your opinion and in so doing you do not need to reveal any sensitive matters.

5) POSSIBLE BENEFITS OF THIS STUDY.

A questionnaire that can accurately measure the youth-friendliness of primary healthcare services according to the perception of the youth is of benefit to improve the quality of primary healthcare service delivery to young people. This is the first instrument to measure youth-friendliness of primary healthcare services according to the perception of youth and is therefore also of benefit internationally as the questionnaire is validated in English.

6) I understand that if I do not want to participate in this study, I will not be discriminated against in any way.

7) I may at any time withdraw from this study.

8) HAS THE STUDY RECEIVED ETHICAL APPROVAL?

This Protocol was submitted to the Faculty of Health Sciences Research Ethics Committee, University of Pretoria and Tshwane/ Metsweding Regional Research Ethics Committee. Written approval has been granted by these committees. The study has been structured in accordance with the Belmont Report which deals with the recommendations guiding ethical research involving human beings. A copy of the Belmont Report may be obtained from the investigator should you wish to review it.

9) INFORMATION If I have any questions concerning this study, I should contact:

Mrs Christelle Boersema tel: 012 354 1332 or cell: 082 3028812

10) CONFIDENTIALITY

All records obtained whilst in this study will be regarded as confidential. Results will be published or presented in such a fashion that respondents remain unidentifiable.

12) VERBAL RESPONDENT INFORMED CONSENT (applicable when respondents cannot read or write)

I, the undersigned, _____, have read and have explained fully to the participant, named _____ and/or his/her relative, the respondent information leaflet, which has indicated the nature and purpose of the study in which I have asked the individual to participate. The explanation I have given has mentioned both the possible risks and benefits of the study. The respondent indicated that he/she understand that he/she will be free to withdraw from the study at any time for any reason and without jeopardizing his/her treatment.

I hereby certify that the respondent has agreed to participate in this study.

Participant's Name _____
(Please print)

Participant's Signature/ thumbprint _____ Date _____

Investigator's Name _____
(Please print)

Investigator's Signature _____ Date _____

Witness's Name _____
(Please print)

Witness's Signature _____ Date _____

**Annexure 13: Letter of approval from the Faculty of Health
Sciences Research Ethics Committee of the University of Pretoria**



The Research Ethics Committee, Faculty Health Sciences, University of Pretoria complies with ICH-GCP guidelines and has US Federal wide Assurance.

- FWA 00002567, Approved dd 22 May 2002 and Expires 20 Oct 2016.
- IRB 0000 2235 IORG0001762 Approved dd 13/04/2011 and Expires 13/04/2014.

Faculty of Health Sciences Research Ethics Committee

27/11/2013

Approval Certificate
New Application

Ethics Reference No.: 342/2013

Title Validation of a measure of youth-friendly primary healthcare services in Tshwane District

Dear Mrs Geertien Christelle Boersema

The **New Application** as supported by documents specified in your cover letter for your research received on the 13/11/2013, was approved by the Faculty of Health Sciences Research Ethics Committee on the 20/11/2013.

Please note the following about your ethics approval:

- Ethics Approval is valid for 1 year
- Please remember to use your protocol number (**342/2013**) on any documents or correspondence with the Research Ethics Committee regarding your research.
- Please note that the Research Ethics Committee may ask further questions, seek additional information, require further modification, or monitor the conduct of your research.

Ethics approval is subject to the following:

- The ethics approval is conditional on the receipt of 6 monthly written Progress Reports, and
- The ethics approval is conditional on the research being conducted as stipulated by the details of all documents submitted to the Committee. In the event that a further need arises to change who the investigators are, the methods or any other aspect, such changes must be submitted as an Amendment for approval by the Committee.

We wish you the best with your research.

Yours sincerely

Dr R Sommers; MBChB; MMed (Int); MPharMed.

Deputy Chairperson of the Faculty of Health Sciences Research Ethics Committee, University of Pretoria

The Faculty of Health Sciences Research Ethics Committee complies with the SA National Act 61 of 2003 as it pertains to health research and the United States Code of Federal Regulations Title 45 and 46. This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki, the South African Medical Research Council Guidelines as well as the Guidelines for Ethical Research: Principles Structures and Processes 2004 (Department of Health).

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◆ H W Snyman Bld (South) Level 2-34

◆ Private Bag x 323, Arcadia, Pta, S.A., 0007

**Annexure 14: Letter of approval from the Tshwane/ Metsweding
Regional Research Ethics Committee**



GAUTENG PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

Kuyasheshwa! Gauteng Working Better

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e-mail: Manei.Letebele@gauteng.gov.za

TSHWANE RESEARCH COMMITTEE

CLEARANCE CERTIFICATE

Meeting Date: N/A

PROJECT NUMBER: 02/2014

Title: Validation of a measure of youth-friendly primary healthcare services in Tshwane District.

Researcher: Geertien Christelle Boersema

Department: Health Sciences

DECISION OF THE COMMITTEE

Approved

**NB: THIS OFFICE REQUESTS A FULL REPORT ON THE OUTCOME
OF THE RESEARCH DONE**

Date: 27 January 2014

.....
Dr. K.E Letebele-Hartell
Chairperson Tshwane Research Committee
Tshwane District

.....
Mrs. M Morewane
Director: District Health Services Support
Tshwane District

NOTE: Resubmission of the protocol by researcher(s) is required if there is departure from the protocol procedures as approved by the committee.

**Annexure 15: Response per key informant category per expert,
Phase 1**



Clinic	Key informant category	Expert 1	Expert 2	Expert 3
L	YP	88.67	81.48	94.44
	OP	100.00	83.33	100.00
	HP	100.00	Not interviewed	93.75
	M	100.00	100.00	93.33
	SS	100.00	100.00	71.42
	GO	100.00	100.00	100.00
	A	YP	94.87	87.50
OP		60.00	100.00	60.00
HP		100.00	87.50	100.00
M		93.33	100.00	100.00
SS		85.71	85.71	71.42
GO		100.00	81.81	90.90
E		YP	78.37	82.75
	OP	100.00	80.00	50.00
	HP	93.75	86.66	75.00
	M	92.85	80.00	80.00
	SS	100.00	100.00	71.42
	GO	100.00	100.00	80.00
	T	YP	89.47	58.82
OP		83.33	100.00	83.33
HP		100.00	93.75	100.00
M		100.00	93.33	93.33
SS		83.33	Not interviewed	71.42
GO		100.00	100.00	90.90
H		YP	84.48	87.93
	OP	100.00	100.00	0.00
	HP	75.00	93.75	93.75
	M	86.66	85.71	73.33
	SS	100.00	85.71	83.33
	GO	100.00	90.90	90.00
	R	YP	83.78	85.71
OP		100.00	100.00	100.00
HP		64.28	62.50	87.50
M		86.66	86.66	73.33
SS		100.00	100.00	100.00
GO		90.90	63.63	81.81
P		YP	83.05	69.23
	OP	80.00	80.00	50.00
	HP	100.00	81.25	62.50
	M	93.33	93.33	93.33
	SS	100.00	100.00	100.00
	GO	90.90	54.54	63.63
	K	YP	96.15	45.00
OP		100.00	83.33	Not interviewed
HP		93.75	62.50	87.50
M		93.33	Not interviewed	86.66
SS		100.00	71.42	66.66
GO		90.90	90.90	81.81



Clinic	Key informant category	Expert 1	Expert 2	Expert 3
B	YP	81.13	70.58	75.86
	OP	66.66	83.33	83.33
	HP	68.75	87.50	81.25
	M	66.66	78.57	71.42
	SS	100.00	71.42	100.00
	GO	90.90	63.63	63.63
S	YP	79.31	84.21	74.57
	OP	60.00	50.00	50.00
	HP	75.00	37.50	66.66
	M	86.66	86.66	84.61
	SS	100.00	100.00	60.00
	GO	75.00	90.90	62.50

Annexure 16: Item and reliability analyses results: Subscale 1

Item mean values and standards deviations (SD)

Item	Mean	SD
B1: If you had one of the following complaints would you get help in this clinic: Physical complaint for example stomach ache, cough, sore throat, skin problems, fever, tiredness, painful or irregular periods	3.45	.772
B2: Injuries for example sport injuries	3.13	.953
B3: Some very private or sensitive concerns (such as questions about sexual orientation or about depression)	3.04	.987
B4: Concerns related to sexual health	3.35	.894
B5: Questions about contraception	3.49	.835
B6: Concerns in relation to your friends or your boy/girlfriend	2.62	1.038
B7: Smoking cigarettes and wanting to stop	2.67	1.031
B8: Problem related to alcohol	2.63	1.060
B9: Problem with marijuana (dagga), nyaope or other drugs	2.63	1.106
B10: Problem with your parents or family	2.56	1.055
B11: Problems related to work, school or university/ college	2.29	1.015
B12: Problems related to your eating habits, exercise or sleep	2.93	1.052
B13: If you felt sad, depressed or nervous, or if you had suicidal thoughts	2.65	1.115
B14: Problems related to violence	2.57	1.066

Inter-item correlation matrix

Item	B1:	B2:	B3:	B4:	B5:	B6:	B7:	B8:	B9:	B10:	B11:	B12:	B13:	B14:
B1: If you had one of the following complaints would you get help in this clinic: Physical complaint for example stomach ache, cough, sore throat, skin problems, fever, tiredness, painful or irregular periods	1.000													
B2: Injuries for example sport injuries	.370	1.000												
B3: Some very private or sensitive concerns (such as questions about sexual orientation or about depression)	.415	.297	1.000											
B4: Concerns related to sexual health	.338	.393	.671	1.000										
B5: Questions about contraception	.305	.289	.427	.593	1.000									
B6: Concerns in relation to your friends or your boy/girlfriend	.123	.352	.472	.572	.457	1.000								
B7: Smoking cigarettes and wanting to stop	.328	.272	.364	.342	.304	.309	1.000							
B8: Problem related to alcohol	.234	.379	.402	.464	.232	.355	.724	1.000						
B9: Problem with marijuana (dagga), nyaope or other drugs	.355	.528	.374	.345	.263	.405	.543	.695	1.000					
B10: Problem with your parents or family	.261	.268	.442	.350	.218	.376	.399	.429	.294	1.000				
B11: Problems related to work, school or university/ college	.234	.337	.318	.269	.191	.410	.508	.493	.493	.344	1.000			
B12: Problems related to your eating habits, exercise or sleep	.467	.491	.383	.396	.350	.144	.399	.430	.380	.427	.380	1.000		
B13: If you felt sad, depressed or nervous, or if you had suicidal thoughts	.288	.510	.427	.449	.227	.438	.381	.443	.464	.464	.365	.462	1.000	
B14: Problems related to violence	.342	.410	.414	.510	.334	.455	.264	.472	.494	.402	.516	.544	.629	1.000



Corrected item-total correlation and Cronbach's alpha if item deleted

Item	Corrected item-total correlation	Cronbach's alpha if item deleted
B1: If you had one of the following complaints would you get help in this clinic: Physical complaint for example stomach ache, cough, sore throat, skin problems, fever, tiredness, painful or irregular periods	.461	.900
B2: Injuries for example sport injuries	.566	.896
B3: Some very private or sensitive concerns (such as questions about sexual orientation or about depression)	.620	.894
B4: Concerns related to sexual health	.655	.893
B5: Questions about contraception	.470	.899
B6: Concerns in relation to your friends or your boy/girlfriend	.561	.896
B7: Smoking cigarettes and wanting to stop	.600	.895
B8: Problem related to alcohol	.683	.891
B9: Problem with marijuana (dagga), nyaope or other drugs	.662	.892
B10: Problem with your parents or family	.542	.897
B11: Problems related to work, school or university/ college	.570	.896
B12: Problems related to your eating habits, exercise or sleep	.605	.894
B13: If you felt sad, depressed or nervous, or if you had suicidal thoughts	.651	.892
B14: Problems related to violence	.681	.891

Annexure 17: Item and reliability analyses results: Subscale 2



Item mean and standards deviations

Item	Mean	SD
B15: How did you learn you could help for these health problems in this clinic?: Through clinic staff	1.51	.503
B16: Through a youth group	1.81	.395
B17: Through your religious community	1.77	.421
B18: Through flyers/ pamphlets describing the clinic	1.54	.502
B19: Through the radio, TV, newspapers or magazines	1.73	.449
B20: Through the internet	1.70	.460
B21: Through friends	1.51	.503
B22: Through school	1.55	.501
B23: Through family members	1.37	.485

Inter-item correlation matrix

Item	B15:	B16:	B17:	B18:	B19:	B20:	B21:	B22:	B23:
B15: How did you learn you could help for these health problems in this clinic?: Through clinic staff	1.000								
B16: Through a youth group	.194	1.000							
B17: Through your religious community	.155	.462	1.000						
B18: Through flyers/ pamphlets describing the clinic	.237	.156	.238	1.000					
B19: Through the radio, TV, newspapers or magazines	.202	.178	.370	.392	1.000				
B20: Through the internet	.146	.148	.270	.386	.593	1.000			
B21: Through friends	.190	.315	.383	-.002	.095	.042	1.000		
B22: Through school	.309	.290	.481	.401	.461	.402	.548	1.000	
B23: Through family members	.155	.308	.413	.217	.138	.228	.204	.398	1.000



Corrected item-total correlation and Cronbach's alpha if item deleted

Item	Corrected item-total correlation	Cronbach's alpha if item deleted
B15: How did you learn you could help for these health problems in this clinic?: Through clinic staff	.320	.775
B16: Through a youth group	.415	.760
B17: Through your religious community	.576	.738
B18: Through flyers/ pamphlets describing the clinic	.412	.761
B19: Through the radio, TV, newspapers or magazines	.502	.748
B20: Through the internet	.454	.754
B21: Through friends	.353	.770
B22: Through school	.714	.712
B23: Through family members	.415	.760

Annexure 18: Item and reliability analyses results: Subscale 3

Item mean values and standard deviations (SD)

Item	Mean	SD
B25r: How do you rate the hours this clinic is open for service	2.78	1.272
B81: How do you rate how quickly you were attended to	2.42	1.136
B83: How do you rate having to wait at reception to receive your file	3.15	1.173
B85: How do you rate having to wait for your consultation to begin	3.08	1.185
B87: How do you rate having to wait to receive medication	2.58	1.106

Inter-item correlation matrix

Item	B25:	B81:	B83:	B85:	B87:
B25: How do you rate the hours this clinic is open for service	1.000	.372	.485	.490	.455
B81: How do you rate how quickly you were attended to	.372	1.000	.610	.496	.406
B83: How do you rate having to wait at reception to receive your file	.485	.610	1.000	.631	.444
B85: How do you rate having to wait for your consultation to begin	.490	.496	.631	1.000	.474
B87: How do you rate having to wait to receive medication	.455	.406	.444	.474	1.000

Corrected item-total correlations and Cronbach's alpha if item deleted if item deleted

Item	Corrected Item-Total Correlation	Cronbach's Alpha if item deleted
B25: How do you rate the hours this clinic is open for service	.567	.807
B81: How do you rate how quickly you were attended to	.595	.797
B83: How do you rate having to wait at reception to receive your file	.708	.764
B85: How do you rate having to wait for your consultation to begin	.677	.773
B87: How do you rate having to wait to receive medication	.559	.807

Annexure 19: Item and reliability analyses results: Subscale 4



Item mean and standards deviations (SD)

Item	Mean	SD
B26: If your parents or another significant adult in your family knew you had one of the following complaints would they encourage you to get help for it in this clinic: Physical complaint for example stomach ache, cough, sore throat, skin problems, fever	3.318	.9025
B27: Concerns related to sexual health	3.306	1.0003
B28: Problems related to alcohol, cigarette or drug use	2.800	1.1106
B29: Problems related to work, school or university/ college	2.294	1.1215
B30: If you felt sad, depressed or nervous, or if you had suicidal thoughts	2.624	1.0908
B31: Problems related to violence	2.588	1.1882

Inter-item correlation matrix

Item	B26:	B27:	B28:	B29:	B30:	B31:
B26: If your parents or another significant adult in your family knew you had one of the following complaints would they encourage you to get help for it in this clinic: Physical complaint for example stomach ache, cough, sore throat, skin problems, fever	1.000					
B27: Concerns related to sexual health	.471	1.000				
B28: Problems related to alcohol, cigarette or drug use	.468	.602	1.000			
B29: Problems related to work, school or university/ college	.271	.396	.583	1.000		
B30: If you felt sad, depressed or nervous, or if you had suicidal thoughts	.208	.314	.409	.588	1.000	
B31: Problems related to violence	.234	.438	.532	.539	.733	1.000



Item-total correlations and Cronbach's alpha if item deleted

Item	Corrected Item-total correlation	Cronbach's alpha if item deleted
B26: If your parents or another significant adult in your family knew you had one of the following complaints would they encourage you to get help for it in this clinic: Physical complaint for example stomach ache, cough, sore throat, skin problems, fever	.417	.842
B27: Concerns related to sexual health	.584	.814
B28: Problems related to alcohol, cigarette or drug use	.703	.789
B29: Problems related to work, school or university/ college	.648	.800
B30: If you felt sad, depressed or nervous, or if you had suicidal thoughts	.619	.807
B31: Problems related to violence	.682	.793

Annexure 20: Item and reliability analyses results: Subscale 6



Item means and standards deviations (SD)

Item	Mean	SD
B38: Here are some reasons for which young people might not have received proper care: Because they are too young	3.12	1.045
B39: Because they are too old	3.24	.920
B40: Because they are a boy	3.28	.903
B41: Because they are a girl	3.38	.883
B42: Because of their cultural background	3.33	.951
B43: Because of their social background	3.38	.883
B44: Because of their religion	3.40	.858
B45: Because of the way they dress or the way they look	3.37	.882
B46: Because they live on the street	3.35	.891
B47: Because they are not married	3.36	.906
B48: Because they are gay/ lesbian/ bisexual	3.42	.833
B49: Because they have a disability	3.50	.793
B50: Because they have a mental illness	3.43	.888
B51: Because they are drug users	3.26	1.008
B52: Because they are violent	3.15	.988
B53: Because they are sex workers	3.29	.931

Inter-item correlation matrix

Item	B38:	B39:	B40:	B41:	B42:	B43:	B44:	B45:	B46:	B47:	B48:	B49:	B50:	B51:	B52:	B53:
B38: Here are some reasons for which young people might not have received proper care: Because they are too young	1.000															
B39: Because they are too old	.626	1.000														
B40: Because they are a boy	.632	.658	1.000													
B41: Because they are a girl	.627	.678	.946	1.000												
B42: Because of their cultural background	.558	.539	.778	.791	1.000											
B43: Because of their social background	.601	.558	.662	.653	.791	1.000										
B44: Because of their religion	.532	.511	.761	.764	.757	.749	1.000									
B45: Because of the way they dress or the way they look	.501	.548	.787	.796	.669	.569	.804	1.000								

Item	B38:	B39:	B40:	B41:	B42:	B43:	B44:	B45:	B46:	B47:	B48:	B49:	B50:	B51:	B52:	B53:
B46: Because they live on the street	.502	.585	.705	.671	.649	.641	.801	.843	1.000							
B47: Because they are not married	.582	.480	.731	.754	.715	.665	.839	.716	.682	1.000						
B48: Because they are gay/lesbian/bisexual	.552	.627	.784	.786	.703	.658	.707	.698	.696	.624	1.000					
B49: Because they have a disability	.527	.631	.727	.719	.643	.702	.717	.695	.714	.602	.790	1.000				
B50: Because they have a mental illness	.452	.613	.641	.626	.541	.611	.593	.618	.632	.520	.643	.833	1.000			
B51: Because they are drug users	.319	.515	.478	.428	.403	.428	.300	.433	.506	.268	.599	.590	.677	1.000		
B52: Because they are violent	.450	.517	.616	.593	.577	.552	.517	.637	.664	.414	.709	.655	.689	.781	1.000	
B53: Because they are sex workers	.484	.545	.675	.677	.638	.591	.564	.625	.647	.475	.645	.681	.586	.636	.757	1.000

Corrected item-total correlations and Cronbach's alpha if item deleted

Item	Corrected item-total correlation	Cronbach's alpha if Item deleted
B38: Here are some reasons for which young people might not have received proper care: Because they are too young	.645	.963
B39: Because they are too old	.703	.962
B40: Because they are a boy	.877	.959
B41: Because they are a girl	.870	.959
B42: Because of their cultural background	.805	.960
B43: Because of their social background	.777	.960
B44: Because of their religion	.815	.960
B45: Because of the way they dress or the way they look	.819	.960
B46: Because they live on the street	.804	.960
B47: Because they are not married	.743	.961
B48: Because they are gay/ lesbian/ bisexual	.847	.959
B49: Because they have a disability	.832	.960
B50: Because they have a mental illness	.764	.960
B51: Because they are drug users	.604	.964
B52: Because they are violent	.751	.961
B53: Because they are sex workers	.761	.961

Annexure 21: Item and reliability analyses results: Subscale 7

Item means and standards deviations (SD)

Item	Mean	SD
B54: Do you think young people might not visit this clinic because: They fear their parents could find out or not agree of the visit	1.66	.475
B55: The fear the school principal or staff could find out of the visit	1.83	.381
B56: They fear the police will know of the visit	1.95	.228

Inter-item correlation matrix

Item	B54:	B55:	B56:
B54: Do you think young people might not visit this clinic because: They fear their parents could find out or not agree of the visit	1.000		
B55: The fear the school principal or staff could find out of the visit	.583	1.000	
B56: They fear the police will know of the visit	.336	.396	1.000

Item-total correlations and Cronbach's alpha if item deleted

Item	Corrected item-total correlation	Cronbach's alpha if item deleted
B54: Do you think young people might not visit this clinic because: They fear their parents could find out or not agree of the visit	.579	.517
B55: The fear the school principal or staff could find out of the visit	.620	.416
B56: They fear the police will know of the visit	.407	.725

Annexure 22: Item and reliability analyses results: Subscale 8

Item mean values and standards deviations (SD)

Item	Mean	SD
B58: How do you rate the way you felt treated by the doctor	3.77	1.276
B59: How do you rate the level of trust you have in this doctor	3.83	1.076
B60: When you were with this doctor how comfortable did you feel	3.73	1.227
B61: How do you rate the way you felt treated by the nurse	3.60	1.197
B62: How do you rate the level of trust you have in this nurse	3.39	1.277
B63: When you were with this nurse how comfortable did you feel	3.36	1.373
B64: How do you rate the way you felt treated by the receptionist	3.34	1.273

Inter-item correlation matrix

Item	B58:	B59:	B60:	B61:	B62:	B63:	B64:
B58: How do you rate the way you felt treated by the doctor	1.000						
B59: How do you rate the level of trust you have in this doctor	.826	1.000					
B60: When you were with this doctor how comfortable did you feel	.756	.711	1.000				
B61: How do you rate the way you felt treated by the nurse	.727	.756	.606	1.000			
B62: How do you rate the level of trust you have in this nurse	.651	.713	.604	.804	1.000		
B63: When you were with this nurse how comfortable did you feel	.635	.572	.626	.759	.730	1.000	
B64: How do you rate the way you felt treated by the receptionist	.263	.287	.320	.358	.435	.377	1.000



Corrected item-total correlation and Cronbach's alpha if item deleted

Item	Corrected Item-Total Correlation	Cronbach's alpha if item deleted
B58: How do you rate the way you felt treated by the doctor	.792	.889
B59: How do you rate the level of trust you have in this doctor	.798	.890
B60: When you were with this doctor how comfortable did you feel	.741	.895
B61: How do you rate the way you felt treated by the nurse	.836	.885
B62: How do you rate the level of trust you have in this nurse	.818	.886
B63: When you were with this nurse how comfortable did you feel	.763	.892
B64: How do you rate the way you felt treated by the receptionist	.395	.931

Annexure 23: Item and reliability analyses results: Subscale 9

Item and reliability analysis for items B66-B68

Item means and standards deviations (SD)

Item	Mean	SD
B66: How sure are you that your concerns will be kept confidential by the doctor/s of this clinic	3.49	1.129
B67: How sure are you that your concerns will be kept confidential by the nurses of this clinic	3.39	1.197
B68: How sure are you that your concerns will be kept confidential by the receptionists of this clinic	3.35	1.192

Inter-item correlation matrix

Item	B66:	B67:	B68:
B66: How sure are you that your concerns will be kept confidential by the doctor/s of this clinic	1.000		
B67: How sure are you that your concerns will be kept confidential by the nurses of this clinic	.754	1.000	
B68: How sure are you that your concerns will be kept confidential by the receptionists of this clinic	.559	.613	1.000

Corrected item-total statistics and Cronbach's alpha if item deleted

Item	Corrected item-total correlation	Cronbach's alpha if item deleted
B66: How sure are you that your concerns will be kept confidential by the doctor/s of this clinic	.731	.760
B67: How sure are you that your concerns will be kept confidential by the nurses of this clinic	.772	.716
B68: How sure are you that your concerns will be kept confidential by the receptionists of this clinic	.626	.859

Item and reliability analysis for items B70-B71

Item means and standards deviations (SD)

Item	Mean	SD
B70: You feel the registration at the reception is done in a way that no one else could overhear what you are talking about	2.77	.870
B71: You feel the consultation is done in a way that no one else could see the examination or overhear what you are talking about	3.04	.836

Inter-item correlation

Item	B70:	B71:
B70: You feel the registration at the reception is done in a way that no one else could overhear what you are talking about	1.000	
B71: You feel the consultation is done in a way that no one else could see the examination or overhear what you are talking about	.315	1.000

Corrected item-total statistics and Cronbach's alpha if item deleted

Item	Corrected item-total correlation	Cronbach's alpha if item deleted
B70: You feel the registration at the reception is done in a way that no one else could overhear what you are talking about	.315	
B71: You feel the consultation is done in a way that no one else could see the examination or overhear what you are talking about	.315	

Annexure 24: Item and reliability analyses results: Subscale 10

Item mean values and standard deviations (SD)

Item	Mean	SD
B72: Thinking about your last consultations at this clinic: The doctor gave you his/ her full attention	3.15	.786
B73: The doctor respected your opinion and decision even if they were different from his/ hers	3.00	.878
B74: The doctor treated you in a supportive and caring manner	3.15	.822
B75: The doctor seemed interested in what you had to say	3.10	.777
B76: The nurse gave you his/ her full attention	3.06	.860
B77: The nurse respected your opinion and decision even if they were different from his/ hers	2.89	.871
B78: The nurse treated you in a supportive and caring manner	2.97	.861
B79: The nurse seemed interested in what you had to say	2.87	.877

Inter-item correlation matrix

Item	B72:	B73:	B74:	B75:	B76:	B77:	B78:	B79
B72: Thinking about your last consultations at this clinic: The doctor gave you his/ her full attention	1.000							
B73: The doctor respected your opinion and decision even if they were different from his/ hers	.682	1.000						
B74: The doctor treated you in a supportive and caring manner	.471	.495	1.000					
B75: The doctor seemed interested in what you had to say	.629	.607	.713	1.000				
B76: The nurse gave you his/ her full attention	.726	.586	.351	.526	1.000			
B77: The nurse respected your opinion and decision even if they were different from his/ hers	.485	.560	.384	.523	.733	1.000		
B78: The nurse treated you in a supportive and caring manner	.513	.453	.733	.665	.619	.643	1.000	
B79: The nurse seemed interested in what you had to say	.526	.445	.444	.626	.729	.766	.789	1.000



Corrected Item-total correlations and Cronbach's alpha if item deleted

Item	Corrected Item-Total Correlation	Cronbach's alpha if Item deleted
B72: Thinking about your last consultations at this clinic: The doctor gave you his/ her full attention	.715	.909
B73: The doctor respected your opinion and decision even if they were different from his/ hers	.671	.913
B74: The doctor treated you in a supportive and caring manner	.624	.916
B75: The doctor seemed interested in what you had to say	.765	.906
B76: The nurse gave you his/ her full attention	.766	.905
B77: The nurse respected your opinion and decision even if they were different from his/ hers	.733	.908
B78: The nurse treated you in a supportive and caring manner	.793	.903
B79: The nurse seemed interested in what you had to say	.777	.904

Annexure 25: Item and reliability analyses results: Subscale 11



Item statistics: mean and standards deviations (SD)

Item	Mean	SD
B93: Thinking about your last consultations in this clinic: You received the treatment or service that met your expectations	2.91	.759
B94: The doctor/ nurse explained things in a way you could understand	3.18	.663
B95: The doctor/ nurse explained to you what tests she/he was doing when examining you	3.09	.830
B96: The doctor/ nurse explained to you the results of the tests or check-ups she/he has done	3.11	.785
B97: The doctor/ nurse explained to you the treatment she/ he gave and why she/ he gave it	3.10	.750
B98: The doctor/ nurse discussed with you the advantages and disadvantages of the treatment she/ he gave	2.84	.873
B99: The doctor/nurse asked you what treatment you preferred	2.39	.991
B100: You understood the tests and/ or treatments the doctor/ nurse gave	3.12	.791
B101: You had enough time to ask the doctor/ nurse everything you wanted to ask	3.02	.861

Inter-item correlation matrix

Item	B93:	B94:	B95:	B96:	B97:	B98:	B99:	B100:	B101:
B93: Thinking about your last consultations in this clinic: You received the treatment or service that met your expectations	1.000								
B94: The doctor/ nurse explained things in a way you could understand	.612	1.000							
B95: The doctor/ nurse explained to you what tests she/he was doing when examining you	.405	.440	1.000						
B96: The doctor/ nurse explained to you the results of the tests or check-ups she/he has done	.413	.544	.571	1.000					
B97: The doctor/ nurse explained to you the treatment she/ he gave and why she/ he gave it	.430	.619	.491	.496	1.000				
B98: The doctor/ nurse discussed with you the advantages and disadvantages of the treatment she/ he gave	.301	.378	.500	.435	.539	1.000			
B99: The doctor/nurse asked you what treatment you preferred	.256	.218	.162	.305	.295	.434	1.000		
B100: You understood the tests and/ or treatments the doctor/ nurse gave	.505	.665	.428	.503	.623	.516	.311	1.000	
B101: You had enough time to ask the doctor/ nurse everything you wanted to ask	.553	.603	.296	.379	.518	.498	.266	.574	1.000



Corrected Item-total correlations and Cronbach's alpha if item deleted

Item	Corrected item-total correlation	Cronbach's alpha if item deleted
B93: Thinking about your last consultations in this clinic: You received the treatment or service that met your expectations	.595	.859
B94: The doctor/ nurse explained things in a way you could understand	.710	.851
B95: The doctor/ nurse explained to you what tests she/he was doing when examining you	.561	.862
B96: The doctor/ nurse explained to you the results of the tests or check-ups she/he has done	.632	.856
B97: The doctor/ nurse explained to you the treatment she/ he gave and why she/ he gave it	.703	.850
B98: The doctor/ nurse discussed with you the advantages and disadvantages of the treatment she/ he gave	.638	.855
B99: The doctor/nurse asked you what treatment you preferred	.381	.883
B100: You understood the tests and/ or treatments the doctor/ nurse gave	.723	.847
B101: You had enough time to ask the doctor/ nurse everything you wanted to ask	.636	.855

Annexure 26: FA YFHS-WHO+ questionnaire



**FA YFHS-WHO+ QUESTIONNAIRE TO MEASURE YOUTH-FRIENDLINESS
OF PHC SERVICES IN TSHWANE DISTRICT**

					For office use only
If you had one of the following complaints would you get help for it in this clinic?					
	Definitely not	Probably not	Probably	Definitely	
1. Physical complaint for example stomach ache, cough, sore throat skin problems (such as pimples), fever, tiredness, painful or irregular periods,...	1	2	3	4	B1 <input type="checkbox"/>
2. Injuries for example sport injuries,...	1	2	3	4	B2 <input type="checkbox"/>
3. Some very private or sensitive concerns (such as questions about sexual orientation or about depression).	1	2	3	4	B3 <input type="checkbox"/>
4. Concerns related to sexual health (questions or fears about pregnancy, questions about sexually transmitted infections, including HIV)	1	2	3	4	B4 <input type="checkbox"/>
5. Questions about contraception (prevention of pregnancy).	1	2	3	4	B5 <input type="checkbox"/>
6. Problem related to alcohol, cigarette or drug (such as dagga, nyaope...) use.	1	2	3	4	B6 <input type="checkbox"/>
7. Problems related to work, school or university/ college.	1	2	3	4	B7 <input type="checkbox"/>
8. Problems related to your eating habits, exercise or sleep.	1	2	3	4	B8 <input type="checkbox"/>
9. If you felt sad, depressed or nervous, or if you had suicidal thoughts.	1	2	3	4	B9 <input type="checkbox"/>
10. Problems related to violence (being a violent person or being a victim of violence or abuse).	1	2	3	4	B10 <input type="checkbox"/>



(continue)				For office use only		
				Yes often	Yes occasionally	
				No never		
11. Did you ever postpone getting help for a health problem at this clinic because the clinic's working hours were not suitable?				1	2	3
<p>If your parents or another significant person in your community knew you had one of the following complaints would they encourage you to get help for it in this clinic?</p>						
				Definitely not	Probably not	Probably
				Definitely		
12. Physical complaint for example stomach ache, cough, sore throat, skin problems (such as pimples), fever, tiredness, painful or irregular periods.				1	2	3
13. Concerns related to sexual health (for example questions or fears about pregnancy, questions about sexually transmitted infections).				1	2	3
14. Problems related to alcohol, cigarette or drug use.				1	2	3
15. Problems related to work, school or university/ college.				1	2	3
16. If you felt sad, depressed or nervous, or if you had suicidal thoughts.				1	2	3
17. Problems related to violence (being violent yourself or being a victim of violence or abuse).				1	2	3

B11

B12

B13

B14

B15

B16

B17



(continue)					For office use only
Here are some reasons for which young people might not have received proper care. For each of these do you think it could happen in this clinic?					
	Definitely did <u>not</u> receive proper care	Did probably <u>not</u> receive proper care	Probably received proper care	Definitely received proper care	
18. Because they are too young?	1	2	3	4	B18 <input type="checkbox"/>
19. Because of their cultural background?	1	2	3	4	B19 <input type="checkbox"/>
20. Because of they are too rich or too poor?	1	2	3	4	B20 <input type="checkbox"/>
21. Because they are gay/ lesbian/ bisexual?	1	2	3	4	B21 <input type="checkbox"/>
22. Because they have a disability (for example hearing problems, blindness or physical disability)?	1	2	3	4	B22 <input type="checkbox"/>
23. Because they have a mental illness?	1	2	3	4	B23 <input type="checkbox"/>
24. Because they are drug users?	1	2	3	4	B24 <input type="checkbox"/>
25. Because they are violent?	1	2	3	4	B25 <input type="checkbox"/>
26. Because they are sex workers?	1	2	3	4	B26 <input type="checkbox"/>



(continue)							For office use only						
Do you think young people might not visit this clinic because...													
							Yes	No					
27.	They fear their parents could find out or not agree of the visit?						1	2					
28.	They fear the school principal or staff could find out of the visit?						1	2					
Thinking about your last (most recent) consultations at this clinic													
		I did not visit a doctor	Very poor	Poor	Fair	Good	Excellent						
29.	How do you rate the way you felt treated by the doctor?					0	1	2	3	4	5	B29	<input type="checkbox"/>
30.	How do you rate the level of trust you have in this doctor?					0	1	2	3	4	5	B30	<input type="checkbox"/>
			Very poor	Poor	Fair	Good	Excellent						
31.	How do you rate the way you felt treated by the nurse?					1	2	3	4	5	B31	<input type="checkbox"/>	
32.	How do you rate the level of trust you have in this nurse?					1	2	3	4	5	B32	<input type="checkbox"/>	
			Very poor	Poor	Fair	Good	Excellent						
33.	How do you rate the way you felt treated by the receptionist?					1	2	3	4	5	B33	<input type="checkbox"/>	



(continue)						For office use only	
	Not at all confident	Rather confident	Neutral	Confident	Extremely confident		
34. How sure are you that your concerns will be kept confidential (private) by the doctor/s of this clinic?	1	2	3	4	5	B34	<input type="checkbox"/>
35. How sure are you that your concerns will be kept confidential (private) by the nurses of this clinic?	1	2	3	4	5	B35	<input type="checkbox"/>
36. How sure are you that your concerns will be kept confidential (private) by the receptionists of this clinic?	1	2	3	4	5	B36	<input type="checkbox"/>
About this clinic's privacy:							
	Strongly disagree	Disagree	Agree	Strongly agree			
37. You feel the registration at the reception is done in a way that no one else could overhear what you are talking about.	1	2	3	4	B37	<input type="checkbox"/>	
38. You feel the consultation is done in a way that no one else could see the examination or overhear what you are talking about.	1	2	3	4	B38	<input type="checkbox"/>	



(continue)						For office use only
Thinking about your last (most recent) consultations at this clinic.						
	I did not visit a doctor	Strongly disagree	Disagree	Agree	Strongly agree	
39. The doctor gave you his/ her full attention.	0	1	2	3	4	B39 <input type="checkbox"/>
40. The doctor respected your opinion and decision even if they were different from his/ hers.	0	1	2	3	4	B40 <input type="checkbox"/>
41. The doctor treated you in a supportive and caring manner.	0	1	2	3	4	B41 <input type="checkbox"/>
		Strongly disagree	Disagree	Agree	Strongly agree	
42. The nurse gave you his/ her full attention.		1	2	3	4	B42 <input type="checkbox"/>
43. The nurse respected your opinion and decision even if they were different from his/ hers.		1	2	3	4	B43 <input type="checkbox"/>
44. The nurse treated you in a supportive and caring manner.		1	2	3	4	B44 <input type="checkbox"/>



(continue)						For office use only	
45. How long do you usually have to wait in the waiting room for your consultation to begin?	1	2	3	4	5	B45 <input type="checkbox"/>	
46. How do you rate this?	1	2	3	4	5	B46 <input type="checkbox"/>	
47. How long do you usually have to wait in the waiting room to receive medication at the pharmacy?	0	1	2	3	4	5	B47 <input type="checkbox"/>
48. How do you rate this?	1	2	3	4	5	B48 <input type="checkbox"/>	



(continue)						For office use only					
Thinking about your last (most recent) visits in this clinic.											
						Strongly disagree	Disagree	Agree	Strongly agree		
49. The waiting area and surroundings of the clinic were appealing/ satisfying.	1	2	3	4						B49 <input type="checkbox"/>	
								Yes	No		
50. Did you notice any educational material about adolescent health in this clinic?								1	2	B50 <input type="checkbox"/>	
						Very poor	Poor	Fair	Good	Excellent	
51. How would you rate the quality of the information provided in these materials?	1	2	3	4	5						B51 <input type="checkbox"/>
52. Would you like to make a suggestion for improving the services to young people in this clinic?	<div style="border: 1px solid black; height: 40px; width: 100%;"></div>									B52a <input type="checkbox"/>	
										B52b <input type="checkbox"/>	
										B52c <input type="checkbox"/>	
										B52d <input type="checkbox"/>	



SECTION B: (continue)					For office use only	
Thinking about your last (most recent) consultations in this clinic						
	Strongly disagree	Disagree	Agree	Strongly agree		
53. You received the treatment or service that met your expectations.	1	2	3	4	B53	<input type="text"/>
54. The doctor/ nurse explained things in a way you could understand.	1	2	3	4	B54	<input type="text"/>
55. The doctor/ nurse discussed with you the advantages and disadvantages of the treatment she/ he gave.	1	2	3	4	B55	<input type="text"/>
56. The doctor/ nurse asked you what treatment you preferred.	1	2	3	4	B56	<input type="text"/>
57. You had enough time to ask the doctor/ nurse everything you wanted to ask.	1	2	3	4	B57	<input type="text"/>