HEALTH SEEKING BEHAVIOUR AND ACCESSIBILITY FACTORS THAT INFLUENCE UTILISATION OF SEXUAL AND REPRODUCTIVE HEALTH SERVICES BY ADOLESCENT AND YOUNG MALES IN NIGERIA

Sylvia Ekponimo
Nigeria

52nd Master of Public Health/International Course in Health Development
September 21, 2015 – September 9, 2016

KIT (ROYAL TROPICAL INSTITUTE)
Health Education/Vrije Universiteit Amsterdam

HEALTH SEEKING BEHAVIOUR AND ACCESSIBILITY FACTORS THAT INFLUENCE UTILISATION OF SEXUAL AND REPRODUCTIVE HEALTH SERVICES BY ADOLESCENT AND YOUNG MALES IN NIGERIA

A thesis submitted in partial fulfilment of the requirement for the degree of Master of Public Health

by

Sylvia Ekponimo

Nigeria

Declaration:

Where other people's work has been used (either from a printed source, internet or any other source) this has been carefully acknowledged and referenced in accordance with departmental requirements.

The thesis *Health Seeking Behaviour and Accessibility Factors that Influence Utilisation of Sexual and Reproductive Health Services by Adolescent and Young Males in Nigeria* is my work.

Signature: _____

52nd Master of Public Health/International Course in Health Development (MPH/ICHD)

September 21, 2015 – September 9, 2016

KIT (Royal Tropical Institute)/ Vrije Universiteit Amsterdam

Amsterdam, The Netherlands

September 2016

Organised by:

KIT (Royal Tropical Institute) Health Unit

Amsterdam, The Netherlands

In co-operation with:

Vrije Universiteit Amsterdam/ Free University of Amsterdam (VU)

Amsterdam, The Netherlands.

TABLE OF CONTENTS

LIST OF ACRONYMS

AHD	Adolescent Health and Development
AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral Treatment
AYF	Adolescents and Young Females
AYM	Adolescents and Young Males
AYP	Adolescents and Young People
CBHI	Community Based Health Insurance
CBO	Community based Organisation
CSE	Comprehensive Sexuality Education
FBO	Faith-based Organisation
FCT	Federal Capital Territory
FLHE	Family Life and HIV/AIDS Education
FMC	Federal Medical Center
FME	Federal Ministry of Education
FMOH	Federal Ministry of Health
FMYD	Federal Ministry of Youth Development
GDP	Gross Domestic Product
GEM	Gender Equitable Men's Scale
GGHE	General Government Health Expenditure
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HTC	HIV Testing and Counselling
ICPD	International Conference on Population and Development
IEC	Information, Education and Communication
ILO	International Labour Organisation
IPPF	International Planned Parenthood Federation
LGA	Local Government Area
MDA	Ministry, Department and Agency
NACA	National Agency for the Control of AIDS
NARHS	National HIV & AIDS and Reproductive Health Survey
NBS	National Bureau of Statistics
NDHS	Nigeria Demographic Health Survey
NGO	Non-governmental Organisation
NHIS	National Health Insurance Scheme
NiMAGES	Nigeria Men and Gender Equality Survey
OOP	Out-of-Pocket
PHC	Primary Health Care
PLHIV	People Living with HIV
PMTCT	Prevention of Mother-To-Child Transmission
PMV	Patent Medicine Vendor
PrvHE	Private Health Expenditure
RTI	Reproductive Tract Infection
SHIP	Social Health Insurance Programme

SMoE	State Ministry of Education
SMOH	State Ministry of Health
SRH	Sexual and Reproductive Health
SRHR	Sexual and Reproductive Health and Rights
STI	Sexually Transmitted Infections
TBA	Traditional Birth Attendant
THE	Total Health Expenditure
TWG	Technical Working Group
UN	United Nations
UNESCO	United Nations Educational Scientific and Cultural Organisation
UNICEF	United Nations Children Emergency Fund
UNFPA	United Nations Population Fund
US	United States
YFHS	Youth-friendly Health Services

LIST OF FIGURES, GRAPHS AND TABLES

Figures

Graphs

Tables:

Textbox

DEFINITION OF KEY TERMS AND CONCEPTS

Words and concepts have generic definitions and interpretations. However, in order to aid understanding, it is important to define words based on the context in which they are being used. In line with this, the words defined below apply in relation to this thesis. The definitions are derived from literature as well as interpretations of the author based on standard definitions.

Access: As defined by Levesque et al. (2013), this is the possibility to identify healthcare needs, to seek healthcare services, to reach the healthcare resources, to obtain or use health care services, and to actually be offered services appropriate to the needs for care (1).

Adolescence: The World Health Organisation defines adolescence as the "period in human growth and development that occurs after childhood and before adulthood, from ages 10 to 19" (2). The period of adolescence can be considered in 2 stages, early adolescence from 10 to 14 years; and late adolescence from 15 to 19 years (3).

Adolescents: Individuals from 10 to 19 years (3,4).

Adolescent and Young female: An individual of the female sex from ages **10 to 24**. This definition has been coined for this thesis instead of "young people" as defined by the United Nations (UN) in order to ensure that readers do not miss the adolescents who are also part of the target group. (Author's definition)

Adolescent and Young male: An individual of the male sex from ages **10 to 24**. This definition has been coined for this thesis instead of "young people" as defined by the United Nations in order to ensure that readers do not miss the adolescents who are also part of the target group. (Author's definition)

Concurrent sexual relationships: Having two or more sexual relationships simultaneously within a given period of time (5).

Gender: This refers to the socially constructed roles, expectations and definitions a given society considers appropriate for men and women. Male gender norms are the social expectations and roles assigned to men and boys in relation to or in contrast to women and girls. These include ideas that men should take risks, endure pain, be tough or stoic or should have multiple sexual partners to prove that they are "real men". (6).

Gender transformative: Seeking to transform gender roles and promote more gender-equitable relationships between men and women (7).

Health Literacy: This is defined as the cognitive and social skills that determine the motivation and ability of an adolescent to gain access to, understand and use information in ways that promote and maintain good health (8).

Formal health care provider: This is an individual such as a Nurse, Doctor, Pharmacists, Laboratory Scientists, Midwife and Community Health Extension Worker, who has undergone formal training to provide health care in a formal public or privately health care institution such as Primary health centres, hospitals and clinics.

Informal health care provider: This is an individual such as Patent Medicine vendors, traditional birth attendants and traditional healers who has not undergone formal training to provide health care but operates an institution with the intention to deliver health services.

Health seeking behaviour: Personal actions to promote optimum wellness, recovery and rehabilitation. Can occur with or without a health problem and covers the spectrum from potential to actual health problem. Therefore, contained within this concept is the aspect of health promotion that might be aimed at preventing a disease and includes behaviour such as lifestyle changes (9).

Masculinity: A set of shared social beliefs about how women and men should behave; and stereotypes about what women and men like and can do (10).

Multiple sexual relationships: Having 2 or more sexual relationships within a given period of time.

Reproductive health: Reproductive health is defined as ""a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes". This implies that people are able to have a responsible, satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so (11).

Risky sexual behaviour: Sexual practices that "influence or increase the risk of contracting or transmitting a sexually transmitted infection including HIV or getting pregnant or impregnating a female. They include early sexual debut, unprotected sex, and transactional sex, multiple sexual relationships, concurrent sexual relationships" (12)

Sexual health: The "state of physical, mental and social well-being in relation to sexuality; not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to

sexuality and sexual relationships as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence" (11).

Underemployment: According to the National Bureau of Statistics, one is under employed if "you work less than full time which is 40 hours but work at least 20 hours on average a week and /or if you work full time but are engaged in an activity that underutilizes your skills, time and educational qualifications" (13).

Unemployment: According to the National Bureau of Statistics, Nigerian labour force population covers all persons aged 15 to 64 years. The definition of unemployment therefore covers persons (aged 15–64) who during the reference period were currently available for work, actively seeking for work but were without work (13).

Utilisation: The quantity of health care services used (14). That is the measure of a population's use of the health care services available to them.

Sexual and Reproductive Health Services: These are services such as information and counselling about puberty, contraceptives, sexual relationships and sexuality; prenatal and postnatal care and delivery; abortion services and post-abortion care; prevention, testing and treatment of reproductive tract and sexually transmitted diseases and infections including HIV (15). All the services apply to adolescent and young males except prenatal and postnatal care and delivery; abortion services and post-abortion care.

Young People: United Nations entities such as United Nations Children's Fund (UNICEF), United Nations Population Fund (UNFPA) and the World Health Organisation define young people as individuals from **10 to 24 years** (4).

Youths: The National Youth Policy 2009 defines youths in Nigeria as individuals from ages 18 – 35. Organisations such as United Nations Educational, Scientific and Cultural Organisation and International Labour Organisation (UNESCO) define youths as individuals from ages **15 to 24 years**. The United Nations Secretariat uses the term interchangeably with young people (4).

ACKNOWLEDGEMENTS

My deepest gratitude to God Almighty for making this possible, for keeping me safe and sound. I could not have done this without Him.

My sincere appreciation to the Netherlands Government for providing the finances, through the NFP fellowship, for my participation in the International Course in Health Development (ICHD) at KIT.

I would also like to thank all the staff of the ICHD course for their dedication, enthusiasm and resilience towards ensuring that we get the best throughout the year.

To my thesis advisor and back stopper who supported and patiently guided me in writing this thesis; your contributions are valuable.

My special thanks to family especially my mother, brothers and sister for their unconditional love, support and prayers.

To the memory of my father whose inspiring words linger and was always a source strength.

To my friends for their kind gestures and encouragement.

I also acknowledge the contribution of my course mates, learning with and from them has been worthwhile; I will always cherish every single day of the 12 months we spent together.

ABSTRACT

Background*:* Evidence from studies on the health seeking behaviour of males from different parts of the world including Nigeria, indicate that they are less likely than females to seek professional help for ill-health.

Overall objective*:* To explore how health seeking behaviour and access influences the utilisation of sexual and reproductive health services by adolescent and young males in Nigeria; in order to inform SRH program managers and policy makers on appropriate strategies to improve access and ensure utilisation of SRH services.

Methodology*:* The method for this study is a literature review. The Levesque et al. (2013) model was used to analyse findings.

Findings*:* SRH needs of AYMs are access to information, skills and quality healthcare services. Factors influencing abilities of AYMs to access and utilise healthcare services include misconceptions about SRH needs, healthcare providers' attitude, cost of services; non-availability of skilled and male-friendly healthcare providers.

Conclusion*:* Misconceptions about sexuality which derive from gender norms and masculinity beliefs and the indifference to needs of AYMs influence their utilisation of SRH services. The unhealthy choices emanating from these gaps increase the risk of undesirable health outcomes among AYMs, and in the long run affect the health of their sexual partners who are most likely AYFs.

Recommendations*:* The government through the Federal Ministry of Health should review policies to incorporate intent to address the SRH needs of AYMs; conduct research to increase understanding on the specific SRH needs of AYMs; and strengthen capacity of healthcare delivery system to provide male-friendly SRH services.

Key words: "health seeking behaviour" "sexual and reproductive health" "male sexuality" "Nigeria"

Word Count: 12,971

INTRODUCTION AND ORGANISATION OF THESIS

Adolescents and young people aged 10 – 24 account for about a quarter of the world's population (16). This stage of life is full of inevitable risks and vulnerabilities; but also a huge opportunity to invest and support them to steer through the right path to reach full potential in future (3). In Nigeria, like most countries in sub-Saharan Africa, adolescent and young people make up more than 30% of the population and are faced with sexual and reproductive health challenges such as teenage pregnancy, maternal mortality and HIV (17).

I work with Education as a Vaccine, a youth-led and youth-focused indigenous non-profit organisation in Nigeria, which focuses on SRH issues for adolescents and young people, were I serve as the Team Lead for Service Delivery & Strategic Behaviour Change Communication Programs. I was responsible for the design and supervision of SRH interventions focused on providing of SRH information and skills to adolescents and young people, strengthening the capacity of individuals and institutions that serve them such as teachers and healthcare providers, generating demand for utilisation of services; and also working with policymakers to develop youth-friendly SRH policies.

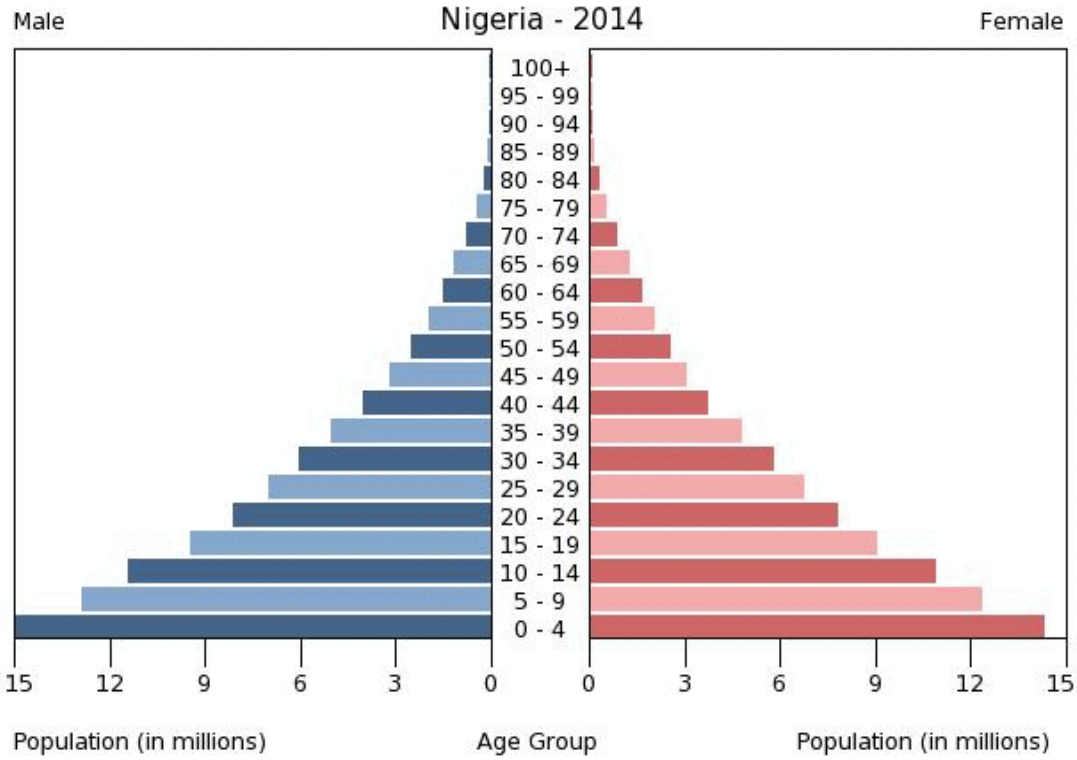
My interest in the low utilisation of SRH services by adolescents and young males was as a result of my assessment of the organisation's yearly statistics which indicated that the proportion of adolescents and young males reached with education and information strategies was significantly higher compared to those utilising SRH (clinical) services at partner health facilities. This is critical at this time due to the fact that they form the other half of adolescents and young people who are affected by developmental challenges. In addition, compared to adolescents and young females, very few interventions or studies have been commissioned to specifically address the issues affecting them. Finally, addressing the SRH issues of adolescents and young males is important in order to avoid jeopardising the gains from efforts to improve the SRH of females. This thesis is a literature review which will explore the health seeking behaviour and access factors which influence utilization of SRH services by adolescents and young males aged 10 – 24 years. The thesis is organised into 6 chapters. Chapter 1 is an overview of relevant background information about Nigeria. Chapter 2 is on the problem statement, justification and objectives; methodology and a description of the framework to be used for analysis. The framework for analysis is the Levesque et al. (2013) model of access to health services. Chapter 3 presents the findings in line with the objectives and analytical framework. Chapter 4 is an assessment of health and youth specific policies in Nigeria to identify intent to address SRH issues related adolescents and young males. Chapter 5 presents evidence informed interventions that have improved health seeking behaviour, and increased access to and utilisation of SRH services by adolescents and young males in Nigeria and other parts of the world. Chapter 6 is the final chapter and will be a discussion of the findings in line with the objectives, a conclusion and recommendations for action by different stakeholders.

CHAPTER ONE: BACKGROUND INFORMATION ON NIGERIA

1.1 Geography and Population

Nigeria is located in West Africa and is the most populous country in Africa (16). As at 2013, its population was estimated at 174 million (18); about a third are adolescents and young people (AYP) aged 10 – 24 years (18,19). The population is unevenly distributed, areas around the Northern zones are sparsely populated; while the southern zones are densely populated (16). The urban centres are also densely populated with implications on the demand for scarce amenities, infrastructure and social services such as healthcare services (19).

Figure 1: Nigeria population pyramid



Source: https://www.cia.gov/library/publications/the-world-factbook/geos/ni.html

1.2 Governance

Nigeria runs a presidential system of government with three tiers (Federal, State and Local) and 3 arms of government (Executive, Legislature and Judiciary). Seat of government is at the Federal Capital Territory (FCT), Abuja. The country is divided into 36 states; the states and the FCT are further grouped into six geopolitical zones – North Central, North East, North West, South East, South South and South West (17).

Figure 2: Map of Nigeria showing states and zones

Source: http://www.nigerianmuse.com/sections/pictures-maps-cartoons/

1.3 Sociodemographic

Males make up 49.5% of the population. Literacy rate is 53% and 75% for women and men aged 15 – 49 respectively. Literacy is highest in the South East (87.1%) and lowest in the North West (44%). Women and men aged 15 – 24 have the highest literacy levels at 62.8% and 79.9% respectively; it is also significantly higher among people in urban (84%) compared to rural (49.3%) areas (17).

1.4 Socioeconomic situation

Oil accounts for close to 90% of exports and roughly 75% of the country's consolidated budgetary revenues (20). The real gross domestic product (GDP) growth for 2014 was estimated at 6.3% up from 5.4% in 2013. This growth is credited to the contributions from the non-oil sector, such as services and agriculture (21). In spite of this growth, there has been a major downside to the country's economy resulting from the sharp decline in oil prices since 2014, oil-sector growth fell by 1.2% (21). National unemployment rate dropped from 23.9% in 2011 (22) to 12.1% as at first quarter of 2016 (13). During the same period, the labour force population (i.e. those within the working age population willing, able and actively looking for work) was estimated at 78.4 million; however, 19.2% were underemployed. The underemployment and unemployment rates are highest among those aged 15 – 24 at 21.5% and 34.6% respectively (13).

1.5 Sociocultural situation

Nigeria is culturally diverse, the 2013 Nigeria Demographic Health Survey (NDHS) reports that there are "374 identifiable ethnic groups" with Igbo (South East), Hausa (North West and North East) and Yoruba (South West) being the major groups (17). English is the official language of communication, with 3 major local languages (Igbo, Yoruba and Hausa) with about 200 others (23). Christians constitute 47% and Muslims are 51.5%; the remaining 1.5% practise traditional religion (17). The beliefs and practises of the people are defined majorly by a mix of the culture and religion; which in turn also defines the gender constructs for males and females. The sociocultural and religious environment (including masculine and feminine ideologies) in most parts of the country favours patriarchy; and this is reflected in every aspect of life such as leadership, career, reproductive health, sexuality and decision making (24,25). Masculinity or femininity is a set of shared social beliefs about how women and men should behave; and stereotypes about what women and men like and can do (10). In Nigeria, perceived masculinity features such as firmness, fearlessness, strong-will, independence, taking on responsibility, control, physical and emotional strength, risk taking, assertiveness, high social status, and virility are upheld (10,26,27). While femininity is expressed through features such as submissiveness, dependence, physical and emotional weakness, fragility and gentleness (10,27).

1.6 Security situation

In the past decade, Nigeria has experienced increasing levels of insecurity and unrest. From the militancy in the South South (Niger Delta), to Boko Haram in the North East and most recently the clash between Fulani herdsmen and farmers in the North Central zone. Adolescent and young males (AYM) are often caught at the centre of these instability and restiveness; which is most often as a result of economic deprivation and loss of economic source such as farming and fishing in the Niger Delta case (28). The unstable situation has serious health implications including loss of health facilities, abduction and rape of AYFs, death of health providers during raids. AYMs are often recruited as perpetrators and are also exposed to harmful lifestyles such as alcohol and drug abuse and sexual abuse.

1.7 Health System

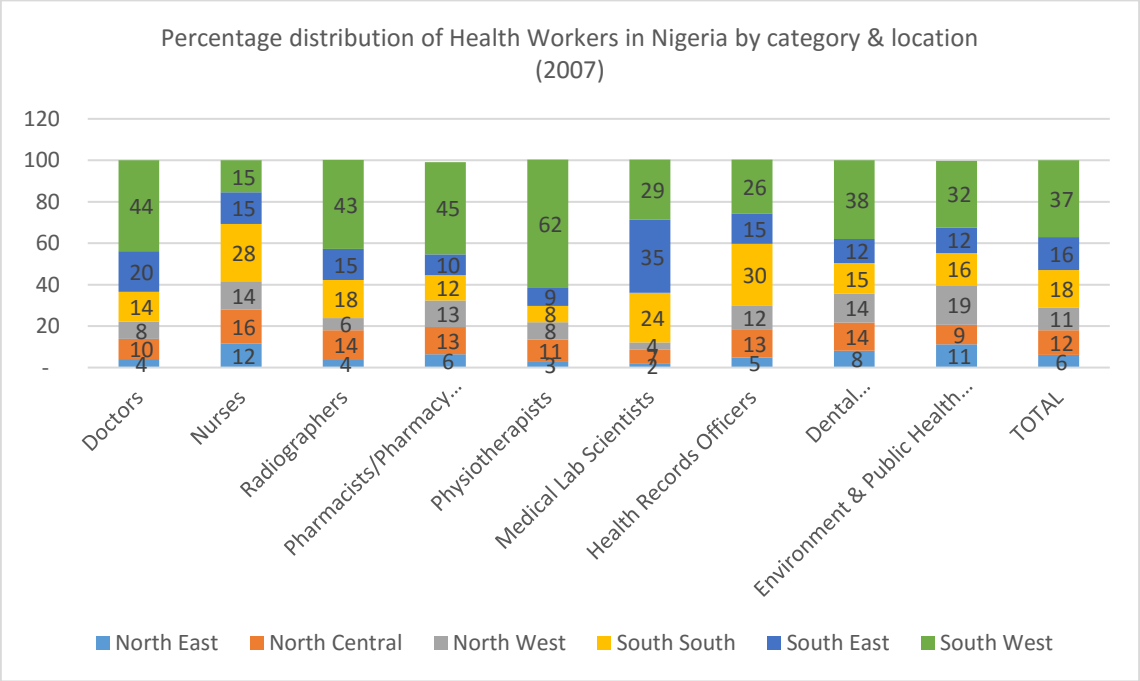
The Nigerian health system is based on the framework specified in the National Health Act 2014. The health system is made up of the public and private sectors. The public sector comprises the federal and state ministries of health, and their parastatals; local government health authorities, ward health committees, village health committees (29). The private sector which may be for-profit or not-for-profit include private practitioners, Non-

governmental organisations (NGOs), Faith-based organisations (FBOs), Community based organisations (CBOs), traditional health care providers and alternative health providers (29,30,31). Healthcare providers are diverse and range from skilled professionals such as Nurses and Doctors to the non-professionals such as traditional birth attendants (TBAs) and Patent medicine vendors (PMVs) (30).

1.7.1 Healthcare delivery

Healthcare delivery is at three levels - primary, secondary and tertiary. Primary Health Care (PHC) serves as the entry point of the healthcare delivery system and is largely the responsibility of the Local government (30,31). The State Ministries of Health (SMOH) serve as administrative headquarters supervising all healthcare programs of the state (30,31). At the tertiary level, the Federal Ministry of Health (FMOH) provides policy guidance, planning and technical assistance, coordinating state-level implementation of the policies and establishing health management information systems (32,33).

Graph 1: Healthcare Providers by category, sector and location



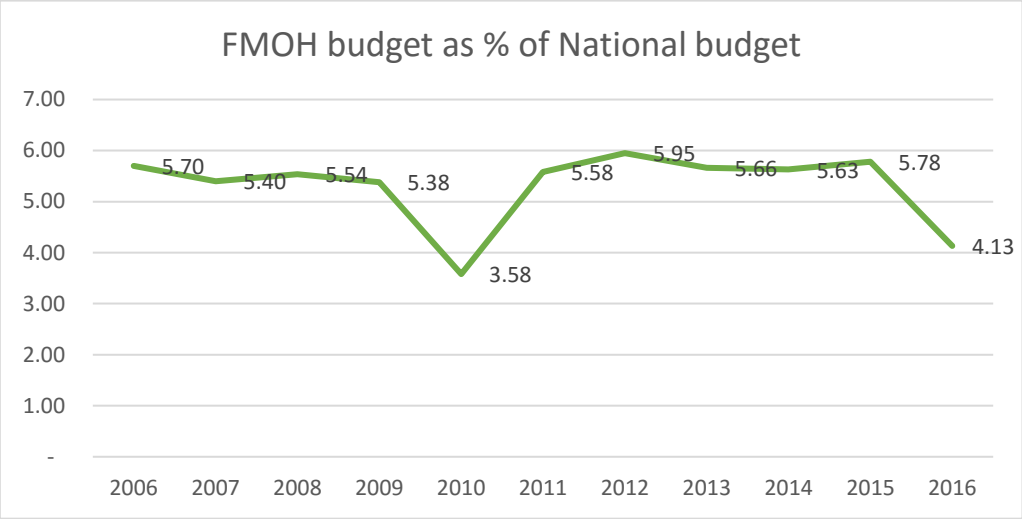
Source: NBS (34)

1.7.2 Health financing

The FMOH receives budgetary allocation directly from the federal government, while the SMOH and local government health authorities are funded by their respective state governments. Budgetary allocation for health in Nigeria has been inadequate; it has been below 6% for the past

10 years. This is a renege on the commitment to allocate 15% of national budget to health as agreed in the 2001 Abuja declaration (35,36).

Graph 2: Federal Ministry of Health trend 2006 – 2016



Source: (36)

For health expenditure, the World Health Organisation (WHO) global health expenditure data for 2010 - 2014 shows that total health expenditure (THE) as a percentage of GDP was below 5% (37). The data for 2014 indicates that the General Government Health Expenditure (GGHE) as a percentage of THE was only 25% (37). PrvtHE in Nigeria consist of out-of-pocket (OOP) expenditure and private health insurance; the OOP expenditure as a percentage of PrvtHE has been more than 95% for the last 5 years (37).

Table 1: Expenditure on health in Nigeria for the period 2010 – 2014

Indicators	2010	2011	2012	2013	2014
Total health expenditure (THE) % of GDP	3	4	3	4	4
General Government Health Expenditure (GGHE) as % of GDP	1	1	1	1	1
GGHE as % of THE	26	31	31	24	25
Private Health Expenditure (PrvtHE) as % of THE	74	69	69	76	75
GGHE (excluding external resources) as % of THE	18	26	25	19	18
External resources of health as % of THE	8	5	6	5	7
Out-of-pocket (OOP) expenditure as % of THE	71	66	66	73	72
Private insurance as % of THE	3	3	3	3	3
Out-of-pocket (OOP) expenditure as % of PrvtHE	96	96	96	96	96
Private insurance as % of PrvtHE	3	3	3	3	3

Source: (37)

To decrease OOP expenditure, the National Health Insurance Scheme (NHIS), was established in 1999 and became fully operational in 2005. However, its coverage is limited because only the formal sector social health insurance programme (SHIP) is currently operational (38,39,40). Access to the insurance scheme is mainly by those in urban centres, residents of the South West, South South and North Central; among men and women who are better educated and those in the highest wealth quantile (17). Data shows that Community Based Health Insurance (CBHI) schemes has been piloted in Kwara, Lagos and Anambra states (39,40).

1.8 General health situation

Nigeria ranks among countries with high child and maternal mortality: the infant and under-five mortality rate is 69 and 128 per 1,000 live births respectively. Maternal mortality ratio is estimated at 576 per 100,000 live births (17). Life expectancy for males and females is 53 and 56 years respectively (41). Malaria is endemic and was the most reported illness in 2013, accounting for 56.8% of notifiable diseases. This resulted in 29.2% fatalities among males and 26.3% among females during that reporting period (18). Nigeria has the second highest number of people infected with the Human Immunodeficiency Virus (HIV) globally; about 3.1 million people are living with the virus (42) which accounts for 13% of people living with HIV (PLHIV) in sub-Saharan Africa (43). There has been some progress in the fight against Acquired Immune Deficiency Syndrome (AIDS) in the country, prevalence in the general population has reduced from 5.8% in 2001 to 3.4% by 2012 (19).

1.9 Sexual & Reproductive Health of Adolescents & Young people

The median age at first sex for 15-24 year olds is 17 years for both males and females (19). National contraceptive prevalence rate increased from 6% in 1990 to 15% in 2013; however, only 18% of young women 15-24 years currently use a form of modern contraception and married adolescent girls are less likely to use contraception overall (17). HIV prevalence among 15–19 year olds is estimated at 2.9% and 3.2% among young people aged 20–24. The prevalence among AYMs 15 – 24 years is 2.7% (12). Factors which drive the epidemic include multiple and concurrent sexual partnerships, intergenerational sex, sexual coercion, low risk perception, and transactional sex, entrenched gender inequalities and inequities, and persistence of HIV/AIDS-related stigma and discrimination (44). For example, the proportion of AYMs aged 15 – 19 and 20 – 24 who reported to have had multiple sexual relationships was 22.7% and 23.8% respectively. They were also less likely to use male condom during sexual intercourse with a non-marital partner compared to older men (19).

CHAPTER TWO: PROBLEM STATEMENT AND METHODOLOGY

This chapter is about the problem statement, justification and objectives for the study. The methodology used such as the search strategy and analytical framework for analysis will also presented.

2.1 Problem Statement

Evidence from studies on the health seeking behaviour of males from different parts of the world including Nigeria, indicate that they are less likely than females to seek professional help for any type of ill-health (45,46,47,48,49). The Nigeria Men and Gender Equality Survey (NiMAGES) conducted to investigate gender-related perceptions and behaviours among men and women including AYMs, reported that men in the study were reluctant to seek routine healthcare, such as prostate cancer screenings, or HIV tests; only 35% report having tested for HIV (50). Other studies from sub-Saharan African countries report that men's sexual health seeking behaviour are influenced by factors such as knowledge about their sexual and reproductive health (SRH) needs, low risk perception, severity of the problem, gender norms and masculinity (49,51,52); affordability, healthcare provider's attitude and availability of healthcare facilities (24,53,54,55,56).

A review of studies on men's health seeking behaviour show that even when males are aware of their health condition, they are more likely to delay seeking healthcare compared to females (57,58,7). It is reported that they perceive seeking or utilizing healthcare services as a sign of weakness and associated with femininity (55). Gender norms and masculinity beliefs have been associated with poor SRH knowledge and health outcomes; and less engagement with health services by AYMs (45). Amongst AYMs in Nigeria, virility and sexual prowess or conquest are perceived as the most vital features of masculinity (26,59). This prompts risky sexual behaviour such as early sexual debut which is believed to signify maturity; multiple sexual relationships perceived as "natural" for boys; not using a condom as proof of fidelity, and sexual aggression to exert socially accepted sign of control over girls and women (59,60,61). These beliefs and practises are evident in median age at first sex among 15 – 24 year old boys being 17 years; the proportion of AYM aged 15 – 19 and 20 – 24 who reported to have had multiple sexual relationships was 22.7% and 23.8% respectively (19).

A baseline study among AYP in North Central Nigeria reports that AYMs felt it was okay for boys to have sex with more than one person at a time (M - 18.8%; F - 12%) and also believed that only sexually promiscuous people can get sexually transmitted infections (STIs) (M - 63.2%; F - 58.8%). Among these cohorts, the AYMs were also about 3 times more likely to report having an STI (20.3%) compared to females (7.5%) (62).

Explanations such as the asymptomatic presentation of STIs in females or the tendency of males to engage in risky sexual behaviour may be suggested for this significant difference. In spite of the apparent SRH needs arising from the risky sexual behaviour, AYMs still do not seek healthcare when required. An analysis of SRH service utilisation data from 43 healthcare facilities in Benue state shows a male to female client ratio of 2:3 for a period of 23 months. This trend was documented for services such as HIV testing and counselling (HTC), STI testing and treatment; it was only male condoms that had more AYMs clients (63).

As quoted by Levesque et al. (2013), Penchansky describes access to health services as resulting from the interface between the characteristics of persons, households, social and physical environments and the characteristics of health systems, organisations and providers (1). A study in the South East reported that AYMs mentioned "the need to be independent, fear of being perceived as vulnerable, ignorance, the cost, time and type of illness, attitudes of healthcare providers" as reasons for not seeking healthcare (64). Furthermore, most AYMs perceive SRH services to be for adult women because services such as family planning and HIV test are offered under maternal and child health services. In addition, a significant proportion of the healthcare providers responsible for providing these services are females (48,65,66,67). This organisation also influences their choice of healthcare provider, as reported in an analysis of AYP's STI treatment seeking behaviour, which showed that although more males than females sought treatment for STIs, a greater proportion of males (54%) than females (40%) had sought treatment in the informal health sector (68). In addition to the cost of services, the AYMs in the study reported being uncomfortable to be treated by a female provider. Based on the above assertions, this thesis seeks to present a take on this issue with justifications as described below.

2.2 Justification

An outcome from the 1994 International Conference on Population and Development (ICPD) Program of Action was a section on male responsibility and participation in SRH. The section has as objective "to promote gender equality in all spheres of life and to encourage and enable men to take responsibility for their sexual and reproductive behaviour and their social and family roles" (69). This recommendation contributed to the shift of focus from population control to a more comprehensive and human rights based approach to SRH; as well as gradual increase in attention for the SRH needs of men and boys (48,55).

However, about 20 years later, the focus on males is still inadequate compared to females (48,70,71). SRH programs most often engage men as partners and change agents in relation to their influence on outcomes of SRH of females. Without prejudice to the importance of this approach,

males also have SRH needs and should be engaged as clients (55). In addition, the minimal attention to the SRH needs of men and boys through the organization of healthcare delivery has affected their utilization of SRH services.

Presently, there are studies with evidence on the factors that influence health seeking behaviour, access and utilization of services of males across the world. However, there are few studies with specific information on AYMs (71). In addition, there is also a dearth of studies exploring the issue for AYMs in Nigeria. Given the diverse characteristics of AYMs in Nigeria as well as the dynamics of the health system; it is of the essence to explore the specific factors as it affects them. It is expected that this review will enable in-depth understanding of the issue and also inform interventions to address the gaps.

2.3 Study Objectives

2.3.1 Overall Objective

To explore how health seeking behaviour and access influences the utilisation of SRH services by AYMs in Nigeria; in order to inform SRH program managers and policy makers on appropriate strategies to improve access and ensure utilisation of SRH services.

2.3.2 Specific Objectives

1. To identify SRH needs of AYMs
2. To explore how AYMs' health seeking behaviour and access influences their utilisation of SRH services
3. To identify and analyse policies that cater for the SRH needs of AYMs
4. To identify evidence informed interventions that have improved access to and utilisation of SRH services by AYMs
5. To propose strategies for improving access and ensuring utilisation of SRH services by AYMs in Nigeria.

2.4 Methodology

2.4.1 Search strategy

The method for this study is a literature review. Peer reviewed journal articles were sourced through a search of the internet using the Vrije Universiteit library, PubMed, Biosemantics, Google scholar and JStor. Grey literatures such as national surveys, policies, and other national documents were accessed through websites of the Government of Nigeria's FMOH, National Population Commission (NPC) and National Bureau of Statistics

(NBS). Reports, reviews and other publications where sourced from the websites of organisations working on sexual and reproductive health (SRH) of AYP such as WHO, United Nations Population Fund (UNFPA), Promundo, Guttmacher Institute, International Planned Parenthood Federation (IPPF), Population Council and Pathfinder International. In addition, key persons who are experts on the SRH issues of AYMs were approached for relevant documents. The reference list of some journal articles were also checked for follow-up and detailed information. Due to the scarcity of studies specifically focusing on SRH issues for AYMs in Nigeria especially very young adolescents (10 – 14 years) and those in the Northern zones, the review also includes studies from other countries with near similar context as Nigeria such as Ghana, and Kenya. In addition, studies that had both male and female AYP as respondents were also used; where possible only the findings related to the male respondents were cited. Table 2 is a description of the criteria used for final selection of materials for the review. The search words used are listed on table 3.

Table 2: Inclusion and exclusion criteria for literature selected

Criteria	Inclusion	Exclusion
Location	Study conducted in Nigeria and Anglophone sub-Saharan African countries	Study not conducted in Nigeria or Anglophone sub-Saharan countries
Population	Study population assessed included AYMs aged 10 – 24 years or results were stratified by age and sex	Study population assessed did not include AYMs or results were not stratified by age and sex
Aim of study	Study includes analysis of SRH knowledge, attitudes and practices; barriers faced by AYMs or AYP (by age & sex) in accessing SRH services; healthcare delivery system factors that impede access to SRH services	Study focus did not meet inclusion criteria

Table 3: Search words

Search engines or websites	Search words	
	Broad search	**Narrowed search**
Biosemantics VU e-library PubMed JStor Google scholar	"health access models" "sexual and reproductive health" "health needs" "access AND health services" "Male sexuality" "adolescent male sexuality" "men's sexual health needs" "masculinity" "health AND masculinity" "MSM AND Nigeria" "sexuality AND disability" "distribution of health facilities AND Nigeria"	"health needs AND male adolescents" "male sexual debut AND Nigeria" "health seeking behaviour" "health seeking behaviour AND health outcomes" "men's health AND Africa" "access AND reproductive health" "sexual health services AND young men" "health access AND young males" "male sexuality Africa" "male sexuality Nigeria" "sexual health needs of adolescent boys AND Nigeria" "reproductive health needs of adolescent boys" "sexual health needs of young men" "reproductive health needs of young men AND Nigeria" "young people AND disability" "men AND health service utilisation" "health AND masculinity in Nigeria" "health care access AND MSM" "adolescent boys sexuality" "distribution of health facilities AND Nigeria" "sexual health AND disability" "sexual health of disabled young people"
NBS; FMOH; Population Council Nigeria; UNFPA; WHO; Promundo; Pathfinder International; IPPF	Social statistics; Sexuality and gender; Youth programs	Health and population statistics; Adolescent males' sexual health; Engaging men and boys; Men as partners
Key contacts	Adolescent sexual & reproductive health; Utilisation of health services by males; YFHS	Adolescent and young male's sexual and reproductive health; Utilisation of SRH services by males; Young males' access and utilisation of SRH services; Youth-friendly health service facilities (YFHS) in Nigeria

2.4.2 Analytical framework

To identify a suitable framework for analysis, 3 models on access and utilisation of services were reviewed. Below are short descriptions of the models and their limitations or suitability with respect to the objectives of this thesis.

PASS-model was originally used to analyse health seeking behaviour, access and utilisation of malaria. It describes the steps of the path that people follow when seeking healthcare and focuses on the factors involved in each step that hinders or facilitates a prompt treatment and access to care. This model focuses mainly on health seeking behaviour and decision to seek and access health services; and does not respond fully to the objectives of the thesis because it doesn't analyse the link between access and actual utilisation of services (72).

Anderson's Behavioural Model proposes that people's use of health services is a function of their predisposition to use services, factors which enable or impede use and their need for care (73). This model analyses access, however it does not allow for easy differentiation between factors related to demand and supply.

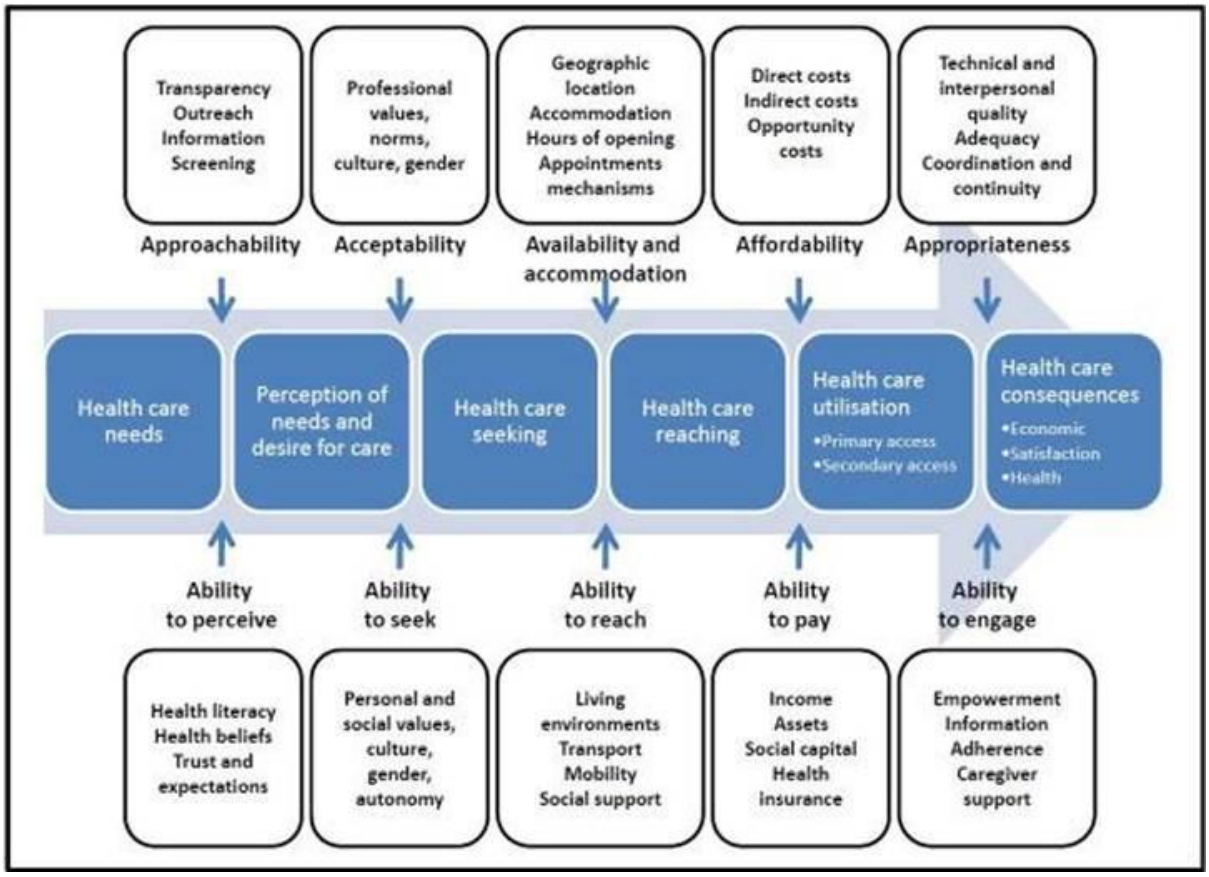
The Levesque et al. (2013) model for access describes access as the opportunity to identify healthcare needs, to seek healthcare services, to reach, to obtain or use healthcare services and to actually have the need for services fulfilled. The model categorizes the demand and supply side factors and also describes the pathway through which utilisation of health services is achieved.

The study will use the Levesque et al. model because it not only allows analysis of the factors which relate to supply and demand-side features of access; but also links specific demand and supply factors and clearly defines the process of achieving access which is utilisation. The proposed factors are split into 5 dimensions for accessibility – approachability, acceptability; availability and accommodation; affordability; appropriateness; and 5 corresponding abilities of populations - ability to perceive; ability to seek; ability to reach; ability to pay; ability to engage. The process through which access is achieved forms the midsection of the framework (Figure 3). It begins with the health needs, and onto perception of health needs and desire for care, healthcare seeking, healthcare reaching, healthcare utilisation and healthcare consequences. All the components of the model are relevant for this study and therefore no adaptation is necessary. However, the factors associated with the different components have been reviewed to reflect the specific health issue, which is SRH and the context of the study location (Figure 4).

The framework will serve as the main guide for the analysis of findings of this thesis. Factors associated with each dimension for accessibility and abilities of AYMs will be highlighted. This will be presented based on the pathway to achieving utilisation as described on the midsection of the

framework in order to establish the process that leads to utilization of services.

Figure 3: Levesque et al. (2013) framework for access

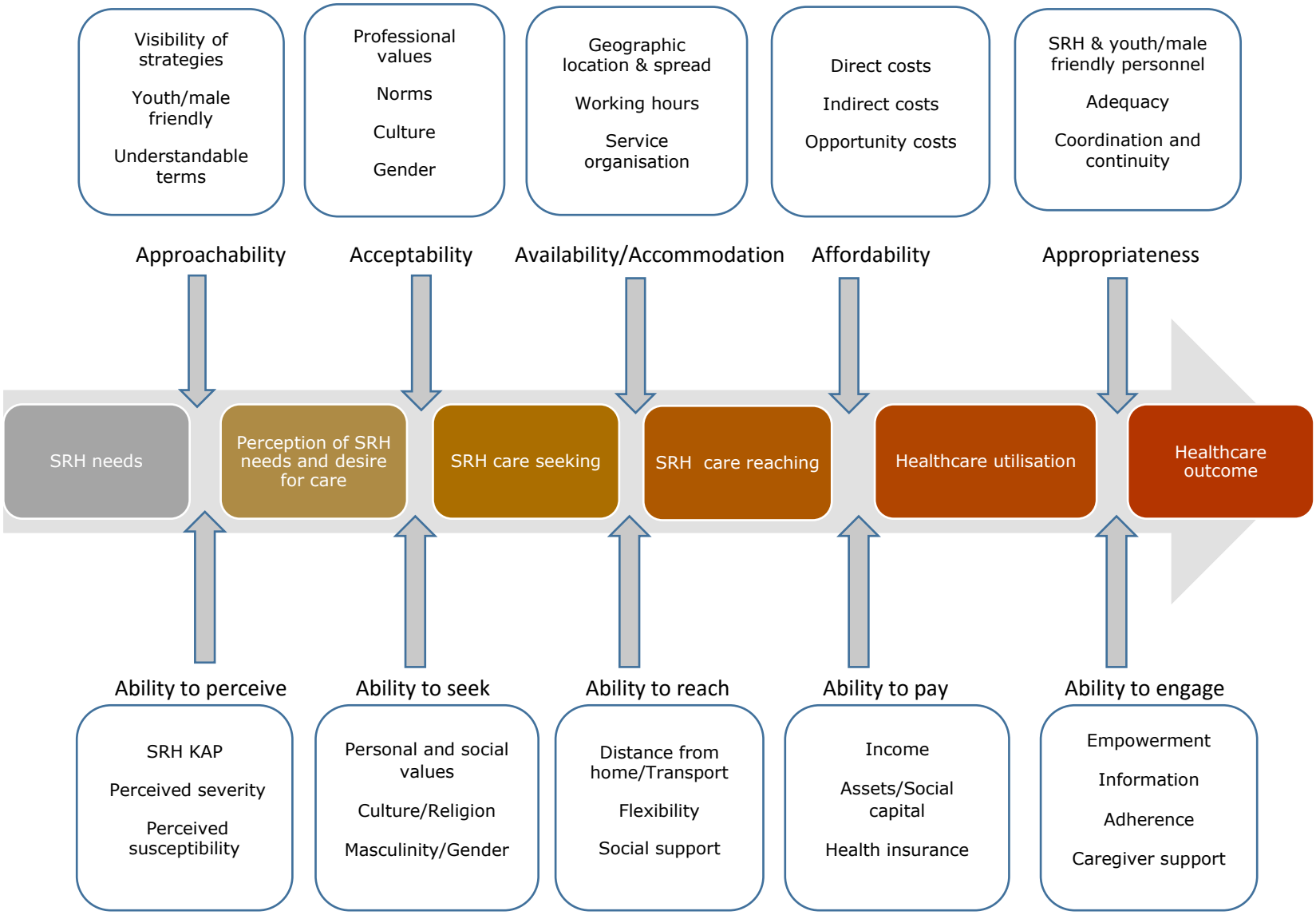


Source: (1)

2.4.3 Study Limitations

The methodology for this thesis is a review of literature because it was not possible to collect primary data due unavailability of funds. In addition, the example of data on SRH service utilisation for AYMs that was presented inadequate. The data is an unofficial and unpublished data from 43 health facilities across 4 LGAs in Benue state.

Figure 4: Levesque et al. (2013) – contextualised version



CHAPTER THREE: SRH NEEDS OF ADOLESCENTS AND YOUNG MALES

In Nigeria issues of sex and sexuality are not discussed openly, especially among AYP (74,75). Notwithstanding, AYMs are known to seek information on sex and sexuality from different sources such as their peers, teachers, parents, TV, radio and the internet (28,59). However, information received through these different sources may be distorted, for example peers tend to be misinformed because they also lack accurate knowledge of SRH issues (76). Table 4 below is a summary of knowledge gaps as reported in different studies.

Table 4: SRH knowledge gaps among AYMs.

SRH area	Knowledge area	Finding	Notes about study
HIV	Being able to correctly identify ways of preventing sexual transmission of HIV and rejecting major misconceptions about HIV transmission (12).	Only 33.5% of young males had comprehensive knowledge (17)	National data from NDHS 2013
	Modes of IV transmission	39.8% of AYMs in rural areas and 28.6% of their peers in urban areas had poor knowledge. (17)	Study among AYP 15 to 24 years old from urban and rural townships in Nigeria through a household survey
	HIV prevention methods	45.3% of rural AYMs and 54.2% of urban AYMs had poor knowledge (77).	
STIs	Had heard, could describe at least on symptom and were aware that STIs can cause infertility in both men and women	only 41.1% of AYM respondents had high knowledge about STIs (68)	Males and females aged 15–24 with at least one STI symptom drawn from the 2003 and 2005 NARHS surveys
Contraceptives	Knowledge about any modern method of contraceptives	34% of males aged 15 -19 and 50.5% of 20 -24 year olds males (19).	National HIV & AIDS and Reproductive Health (NARHS) survey data; 2012
	Knowledge about at least one contraceptive method	Only 27% of the AYMs with disabilities (78)	Study among in-school AYP with disabilities
Condoms	Aware of condoms	Among AYMs 35.3% who self-reported as HIV negative and 33.5% of those who self-reported as HIV positive (79).	Study conducted among nationally representative sample of 10–19 years old adolescents residing in Nigeria

Sources: (17,19,68,77,79)

Beside SRH knowledge gaps, AYMs engage in risky sexual behaviour such as early sexual debut, multiple sexual relationships; and sex with a casual partner or sex workers (17,19,60,77). Findings from studies representative of AYP in different parts of the country estimates the median age at sexual debut among AYMs as 15 years (80,79). Another survey showed that 27.5% of AYMs 15 - 24 years had multiple sexual relationships, 24.6% had concurrent sexual relationships and 12.6% had sex with a casual partner and/or sex worker (5).

AYMs' needs also differ based on conditions they may be experiencing or their status in society. For example, among key population groups at risk for HIV in Nigeria there are many AYMs. Compared with heterosexual AYMs, young men who have sex with men (MSM) are at high risk of HIV. Data shows that among 18 -19 and 20 – 24 year old MSM, HIV prevalence is 12% and 16.2% respectively (81). This is significantly higher than 15 -19 and 20 – 24 year old AYMs in the general population who have HIV prevalence of 2.9% and 2.5% respectively (19). Furthermore, contrary to the general assumption that they are sexually inactive, AYMs with disabilities also aspire to conform to society's definition of "maleness" (82). A study among in-school AYP with disabilities in South West Nigeria reported that they have similar sexual experience as their able-bodied peers. The study reported that their mean age of sexual debut was 15 years; and 43% of males were sexually active (78). The study also reported that about 28% of the AYP with disabilities had been raped by perpetrators such as family members and friends (78). The AYMs including young MSM and those living with disability in the studies above have also reported experiencing stigma and discrimination; verbal, physical, and sexual harassment and violence (83,84,85).

In spite of these issues, access to SRH services is also limited. AYP in general encounter barriers such as cost, judgmental attitude of healthcare providers, inadequate and unskilled healthcare providers; and ill-equipped facilities (68,78). The study with disable AYP indicated that among those who were sexually active, just 53% knew where to get SRH services (78). The discriminatory sociocultural and legal environment in the country also inhibits access to SRH services for AYM who are MSM (84).

Although the sexual behaviour of AYMs is influenced by several factors within their environment, they are also aware of the health implications and have identified their SRH needs. In addition to the knowledge gaps on table 3, AYMs including young MSM and those with disabilities listed needs such as counselling, testing and treatment for STIs such as gonorrhoea, syphilis, herpes and HIV/AIDS; treatment for premature ejaculation and decreased libido, condoms to prevent STIs, male infertility and comprehensive clinics with "youthful" and friendly health providers who understand their specific needs (53,83,86).

CHAPTER FOUR: ABILITIES OF ADOLESCENTS AND YOUNG MALES AND DIMENSIONS OF ACCESSIBILITY

This chapter presents findings on the factors associated with or which influence the health seeking behaviour, access and utilisation of SRH services by AYMs in Nigeria. The findings are based on studies conducted in Nigeria and other countries in sub-Saharan Africa; they are presented based on the components of the Levesque et al. (2013) framework.

4.1 Perception of SRH needs and desire for care

The ability to perceive the need for SRH services and approachability of healthcare facilities stimulates the desire for care. Ability to perceive is determined by factors such as health literacy, knowledge and beliefs related to SRH; perceived severity and susceptibility to SRH ill-health. Approachability factors such as awareness about where to get SRH services, characteristics educational materials such as language, terms used and attractiveness; and healthcare providers' attitude influence the desirability of healthcare facilities. The next subsections provides more details about each component.

4.1.1 Ability to perceive

Health literacy, as defined by the Institute of Medicine, is "the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions" (87). Health literacy is said to be dependent on basic literacy (88) and educational attainment, because people with undeveloped writing and reading skills will have less access to health education and also less capacity and skills to make informed decisions about their health (89). No specific studies on health literacy of AYMs in Nigeria was found. Nevertheless, assessing their basic literacy and educational attainment, national statistics show that the literacy level among AYMs in the country is 80.2% (17). However, literacy level is not an automatic guarantee for health literacy, this is due to the different progressive stages of literacy and what can be achieved with the skills at each stage (89). This progression is more associated with educational attainment; and only 1.3% of 15 – 19 year old and 13.3% of 20 – 24 year old males had more than a secondary education (17). Therefore in spite of AYMs' high (basic) literacy level, their low educational attainment limits their health literacy i.e. the ability to critically analyse and use information in different health situations.

In assessing SRH knowledge and beliefs related to sexual ill-health, studies on among AYMs in the South East indicate that SRH information uptake and practises in Nigerian are influenced by factors defined by the sociocultural beliefs (90). A study on parent-child communication on SRH issues in South

West of Nigeria, found that although some parents provided their children with sex education, it was dependent of the age of the child. They did not accept sex education for AYP younger than 15 years (91). That study and another by Izugbara (2008) in the South East found that the common approach for sex education was more on instilling fear, threats and warnings to discourage the AYP from "sexual immoralities" (75,91). Some AYP also disclosed that discussing sexual issues with their parents was seen as being disrespectful (92). This approach to sexuality education is also common among parents in the Northern parts of the country (personal observation).

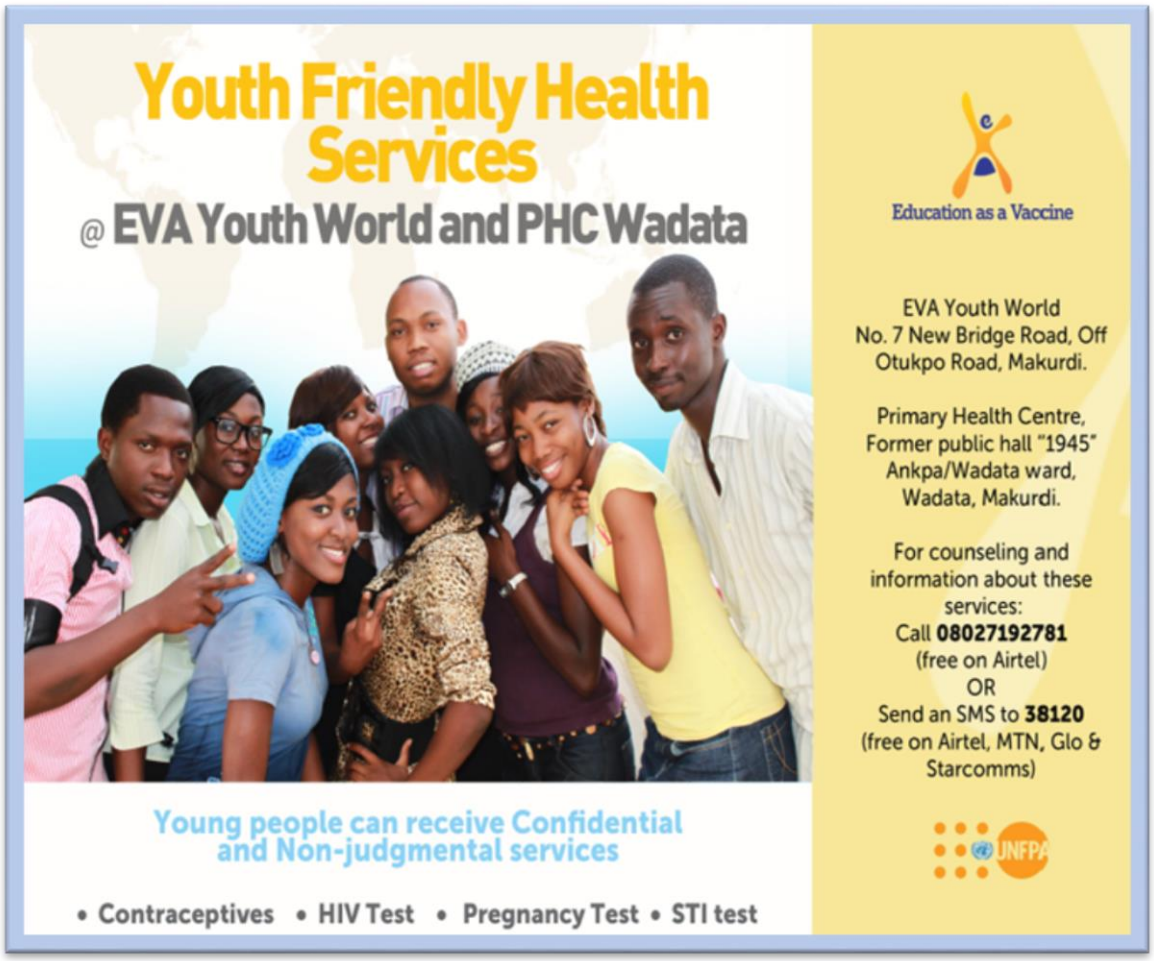
Coverage of comprehensive sexuality education (CSE) is low. The National curriculum based CSE known as Family Life and HIV/AIDS Education (FLHE), is implemented in public schools located mostly in urban areas, this excludes a significant proportion of AYP who reside in rural areas and are out of school (93). This gap has resulted in limited access to accurate information on SRH related issues for AYMs especially those not in schools, risky sexual behaviour and complications. Studies on notions of sex with rural AYMs, reported that their first sexual experience was as a result of the need to proof their "manliness" and also having multiple sexual relationships was a marker of male virility, and a sign of affluence (59,60). The study with disable AYP reported reasons for sexual debut such as experimentation and for money gains (78). Folayan et al. (2015) study reported that beside love, the next reasons for sexual debut was peer pressure for 27.3% of AYMs in rural areas and having fun for 31.8% of AYMs in urban areas (77). This is not favourable, considering results from a study which showed that multiple sexual partners and early sexual debut are associated with STIs among AYMs; AYMs who commenced sexual intercourse before age 16 had a risk of reporting STIs twice as high as that of their peers (5). AYMs' beliefs also limits consciousness of the risk associated with their behaviour, only 1.2% of 15 – 19 year olds and 2.1% of 20 – 24 year olds perceived themselves to have a high chance of getting HIV (94).

Knowledge about safe sex practice is relatively good, NDHS 2013 indicates that about 67.8% of AYMs have knowledge of where to get condoms (17). However, turning knowledge into practice is still poor; consistent use of condoms is low as only 24% of respondents in a study in the South East (60) and 39.9% of respondents a national survey (5) reported using a condom during their most recent sexual activity. Another study among rural AYMs, found that among the participants reporting more than one current sex partner, 76.8% never used condoms with any of their partners (60); and perceived their risk for STIs as less compared to pregnancy. They attributed higher risks to those in urban areas such as sex workers, older men who use money to lure women and wayward women and girls (60).

4.1.2 Approachability

Approachability refers to how AYMs can identify that SRH services exist, reach it and receive the needed care. The Osanyin (2010) report on assessment of health facilities providing YFHS in Nigeria, indicates that the AYP who were also respondents on the assessment indicated that lack of awareness of the existence of some of the youth-friendly facilities was a reason for low utilization (95). However, the assessment also reports that health facility staff used strategies such as conducting outreaches in schools, worship centres and during special events at the community level; and radio and TV to create awareness about SRH services (95). There is a possibility that the strategies used may not have been effective. Another strategy used for creating awareness is information, education and communication (IEC) materials such as leaflets, posters and sign posts. No specific study analysing the content of IEC materials was found. Notwithstanding, from personal observation, most IEC materials targeting AYP are produced by the healthcare facilities including NGOs who serve them. Figure 5 is an example of a poster indicating the types of SRH services provided including the address of the healthcare facilities for AYP. The materials show consideration of both AYMs and AYFs as the audience of focus; and in local languages or youth lingo that they can easily understand. Figure 6 is another example with signposts placed in locations where AYP are commonly found; and posters with AYP lingo.

Figure 5: Poster indicating types of SRH services and location for AYP in Makurdi, Benue State.



Source: (96)

Furthermore, AYMs do not perceive healthcare facilities to be male-friendly due to the organisation. In a study among AYP in Kenya reported that the AYM respondents perceived services at health facilities as designed for women and children, and were uncomfortable to seek services. They specifically indicated that the layout at healthcare facilities, including the waiting area, were designed for women and children and did not feel comfortable sitting in the waiting area, "between women" (97). From personal observation, most healthcare facilities have a very clinical outlook, which may be perceived as gloomy and unappealing by a youthful male audience.

Figure 6: Sign posts and posters targeting AYP on a HIV prevention project in Benue State

Source: (98)

4.2 SRH care seeking

This section is about the ability to seek SRH information and services and the acceptability of the services. The ability to seek describes factors associated with freedom and capacity to choose to seek SRH care, and knowledge about available options for care. While acceptability refers to sociocultural factors defining the acceptance of aspects of services (e.g. sex of provider) and the implied suitability of an individual to seek care (1).

4.2.1 Ability to seek

Factors such as personal and social values, culture and religion; and masculinity will be considered. Personal and social values about sexuality are usually adopted from interaction with peers and family members; as well as cultural and religious beliefs (24,75,99). These values influence one's interpretation of ill-health and choices including the decision to seek SRH care or not.

In most Nigerian communities, values associated with sex and sexuality such as sexual abstinence before marriage, is regarded very highly; AYP are advised to abstain from all forms of sexual activities until marriage (99). On the other hand, there is a contradiction where the norms of the society promotes attainment of the status of "manhood" through sexual conquest such as early sexual debut and in some cases multiple sexual relationships (59,99). More often than not AYMs succumb to the pressure to conform and fulfil these expectations to prove their "manhood". This contradiction makes AYMs reluctant because of the perception that seeking SRH care is equivalent to revealing their sexual activities. A study in Ghana among AYMs reported that they avoid seeking care for fear of being rebuked and judged, by healthcare providers in public hospitals, for failing to uphold cultural standards of sexual abstinence or even report to their parents. A respondent in the study described his experience thus
"like me, if I go to the service and I am looking for a condom, they inform my mother (all participants agree with 'hmm'). But I came there for these reasons and then my mother will do something to me, so I feel shy, I am afraid to go, and rather contact my friends" (53).

The respondents also indicated that this influenced their choice of provider. Mmari et al. (2010) for Nigeria reports that among AYMs who reported seeking treatment for STIs, the majority went to a traditional healer (68). Okonta (2007) study on treatment seeking behaviour for STIs cited a study with AYP in Edo state who reported that they seek care from traditional healers, PMVs and private medical clinics. He also cited another from Delta state where 25.8% of the respondents who had an STI went to PMVs for treatment (28). Other reasons for seeking care from informal healthcare providers is the perception about their anonymous and less judgemental attitude (5). And in Ghana, AYMs attributed their choice for seeking help from a herbalist to being shy when asked many personal questions such as partner notification. A respondent disclosed that *"the boys, they feel often shy to go to the doctor, because when you go there they tell you you should go and bring your partner. So, sometimes you feel shy to mention that so you go to the herbalist and do what he prescribes"* (53).

Cultural and religious beliefs about the causes of different health conditions also influence how people deal with ill-health. A review by Asu et al. (2013) quoted other studies (Ojua and Omono, 2012; Obot, 2012) stating that in most African communities "ill-health and other misfortunes, which often times defile scientific and orthodox treatments are explained as spiritual forces directed by witches, wizards, sorcerers, evil spirits or angered ancestors" (100). Specific studies among males in general where this has been validated was not found. However, the respondents of a research on masculinity and religion in Nigeria reported that "religion does not forbid men from seeking medical help"; they rather attributed males' reluctance to seek care to other factors such as "false faith teachings" and

misinterpretations of some verses of the Bible (24). On another note, although there are no direct religious teachings (from the Christian and Islamic faiths) influencing health seeking behaviour, the choice of traditional healers may also be related to traditional religious worship (personal observation).

4.2.2 Acceptability

As quoted by Moyo et al (2016), Kluckhohn and Strodtbeck (1951) and Rokeach (1973) described values as "basic convictions of what individuals or social groups consider right, good or desirable" (101). Values may be personal or professional; the professional values for Nigeria's healthcare providers are derived from the medical ethics and code of conduct as prescribed by regulatory bodies such as the Nursing and Midwifery Council of Nigeria and the Nigerian Medical and Dental Council. The code of conduct for nurses such as to "provide care to all members of the public without prejudice to their age, ethnicity, race, nationality, gender, political inclination" and "provide information that is accurate, truthful, and presented in such a way as to make it easily understood" (102); poses a challenge for nurses in Nigeria where there is a general belief in the community that AYP shouldn't be sexually active or provided with SRH information.

A study was conducted among healthcare providers in the South West on their attitude towards provision of contraceptive to unmarried AYP. Findings showed that although 70.6% thought AYP should be provided with contraceptive counselling before they become sexually active; 57.5% felt that providing contraceptives to unmarried AYP promotes promiscuity and 42.7% felt it should not be provided because the Nigerian culture does not support premarital sex. Another 51.7% felt it was better telling sexually active unmarried AYP to abstain from sex instead of giving them contraceptives when it is requested (103).

Similarly, a study examining the FLHE program in Nigeria reported that teachers found it difficult to overcome strong beliefs about condom use; and therefore omitted delivery of condom related curriculum content (93). On another note, and contrary to popular findings about informal healthcare providers being more accommodative of AYP's SRH needs, results from a study among PMVs and community pharmacists in Abuja Nigeria, found that they also share the same sentiments towards AYP's sexuality. The study reported that they belief AYP's easy access to SRH service, makes them more likely to engage in unprotected sex. A community pharmacist stated that *"although it is good that youths have access to condoms and contraceptives, somehow this makes them careless. They are no longer afraid of pregnancy or things like gonorrhoea. They know where to go for antibiotics or abortion"* (104). Based on this, the authors deduced that some informal healthcare providers such as PMVs share the same beliefs

about AYP's sexuality but mask their sentiments in order to save their profit making business.

The sex of the health provider has also been documented as a barrier for utilisation of services. A study in Kenya reported that AYMs attributed their non-utilisation of SRH services to the fact that the providers were female (97). In Nigeria, table 5 shows that nurses who will most likely serve AYMs are over 90% females. Another study in Ghana re-echoed this feeling, a respondent said *"we prefer males for counselling because we are all men and we all have the same thing"* (53). Although the studies are not in Nigeria, it is also applicable especially in the Northern zones. This is due to the cultural and religious context that does not encourage private and physical contact between unmarried persons of opposite sex. This has been documented as a barrier for women in Northern Nigeria who do not utilise maternal healthcare due to the perception that there were no female healthcare providers (17).

Table 5: Distribution of healthcare providers by sex and cadre

Health Occupational categories/cadres	Total	% female
Physicians (Nigerians)	52,408	22
Physicians (Aliens)	2,968	28.7
Nurses	128,918	94.6
Midwives	90,489	100
Pharmacists	13,199	30.5
Pharmacists Technicians	5,483	0
Medical Lab Scientists	12,703	14.3
Medical Lab Technicians	2,936	0
Medical Lab Assistants	7,044	0

Source: WHO (34)

4.3 SRH care reaching

This section is on the ability to reach SRH care as well as the availability and accommodation of SRH services. The factors associated with these components are discussed in the next subsections.

4.3.1 Ability to reach

Ability to reach relates to the notion of personal mobility and availability of transportation, occupational flexibility that would enable a person to physically reach service providers. This can be influenced by factors such as distance between home and healthcare facility, and personal flexibility

or restrictions (105). Findings from the assessment of health facilities providing YFHS in Nigeria indicated that only 38% of the health facilities assessed operated 24 hours and were mostly secondary or tertiary level facilities, less than half (47%) were open between 8am – 4pm; and only a few who attend to maternal and child health emergencies were open during weekends (95).

Baseline data on youths in Nigeria by the NBS and Federal Ministry of Youth Development (FMYD) reported that the percentage of AYMs aged 15 – 19 and 20 – 24 currently attending school is 55.8% and 59.4% respectively (106). NBS reports on employment also indicated that approximately 20% of AYP are fully employed (13,106). The rest who are not in school or employed, may be engaged in an apprenticeship program. Opening hours clash with school and work hours respectively; AYMs who need SRH services may not be granted permission from school or work to attend a clinic. No study from Nigeria indicated timing as a factor influencing utilisation of SRH services by AYM. However, one from Kenya found that AYMs complained about SRH services not being provided "around the clock" (97). In Zimbabwe, AYP also reported that the healthcare facility in their community was not open after school hours; and the process of getting an approval to attend clinic during school hours wasn't confidential because they had to disclose their health needs to the Principal (107).

Healthcare facilities are disproportionately distributed, a significant proportion of Nigeria's population reside in rural areas (17) however more health facilities are located in urban areas (33). Findings from the national survey of youths indicated that only 26.3% could access a community health center (106). A qualitative study examining how AYP view SRH issues reported that long distance to a healthcare facility was a barrier to accessing SRH services (92). This is also applicable to AYMs in Nigeria, because it has been identified as a barrier to SRH services such as antenatal care for women including AYFs (17,108).

4.3.2 Availability and Accommodation

Availability and accommodation is associated with the fact that SRH services can be physically obtained without much difficulty such as long waiting time. It refers to existence of resources required to deliver healthcare services such as physical structures and personnel; as well as the characteristics of personnel and service organisation (1). It also constitutes the distribution and concentration of these resources relative to the population to be served. Findings from a study conducted by Nwakeze and Kandala (2011) on spatial distribution of health establishments in Nigeria, reported that there are large inequalities in healthcare provision across the states and zones, relative to their population size (109). Their findings are reflected in an analysis of data from the NBS Social Statistics

report on Table 6. It shows the distribution of health facilities per 100, 000 population by zones.

Table 6: Distribution of Health facilities per 100,000 population by zones

Zones	Population	Actual # of health facilities/100,000 population	Ideal # of health facilities/100,000 population	% of actual compared to ideal number of health facilities
North Central	20,395,999	177	198	89%
North East	23,185,106	134	225	60%
North West	38,287,499	100	372	27%
South East	19,684,436	125	191	65%
South South	25,568,068	98	248	39%
South West	33,814,179	149	328	45%

Source: NBS (22)

The table indicates that the North West has the highest population size but only 27% of required healthcare facilities compared to the North Central with 89% but about half the population of the North West. Annex 2 is an analysis by states, it shows that the FCT, Nasarawa and Taraba states have excess of 9, 20 and 12 healthcare facilities respectively compared to Kano State which needs an additional 101 healthcare facilities (22). Furthermore, the instability in the North East due to the terrorist group called Boko Haram, has resulted in the destruction of infrastructure including healthcare facilities; and displacement and migration of people from of these locations including healthcare providers (personal observation).

In addition to the availability of physical structures and their geographic spread, assessment of the availability of healthcare facilities which provide youth-friendly SRH services is essential. The Osanyin (2010) study assessed healthcare providers for their capacity to deliver YFHS using a criteria (table 7). Findings show that only 14% qualified as strong; 29% were moderate and 57% were basic (table 8).

Table 7: Criteria for categorising health facilities providing YFHS

Criteria for categorising YFHS providers	
Indicator	**Description**
Level of Equipment for service provision	Most equipment required for service provision is available in required number and quantity and is functional. Such include basic laboratory equipment, IUD kit, B/P Apparatus, stethoscope, Couch, screen, VCT test kits etc.
Staffing	The clinics have full complement of staff required for service delivery. The staff are trained in youth-friendly services and receiving support to function appropriately. Such staff include counsellors, Nurses, Midwives, Medical Doctors and other support staff
Complement of services	The clinic provides a comprehensive sexual and reproductive health package: family planning including emergency contraceptives, HIV/AIDS testing and treatment, laboratory services, Post-Abortion Care, antenatal care, counselling and PNC services. The quality of service is satisfactory
Access	Clinics are easily accessible and clients are appropriately directed
Hours of operation/Convenience	The clinic operate 24 hours service
Record keeping	Record keeping is satisfactory and available data is being utilized in decision making
Level of utilisation of services	Level of utilization is very satisfactory: above 50 clients per month
IEC material availability	IEC materials are available in the right quantity and quality. There are enough materials for clients to read and take away
Youth involvement	Level of youth involvement is satisfactory. Youth are involved in all aspects including planning, managing, service delivery peer counselling, decision making and outreach activities
Privacy & Confidentiality	Highly satisfactory: The environment is also comfortable and secure and no contact with adult clients
Drugs availability	The clinics have adequate drug and commodity supplies. Drugs are available in the right mix and quality and are available and affordable by clients
Condom availability and uptake	The clinic has enough supplies of male & female condoms and they are available to clients (young people) on demand. There are no barriers to accessing condoms
Space	The clinic has adequate space for all operations including waiting, counselling and treatment
Providers' attitude	The staff in the clinic are accessible, non-judgmental, warm and willing to help young people

Source: (95)

Table 8: Categorisation of health facilities providing YFHS

Category	North Central	North East	North West	South East	South South	South West	Total	%age
Strong	2	1	2	2	3	2	12	14%
Moderate	4	4	4	3	7	3	25	29%
Basic	15	6	12	6	4	6	49	57%

Source: (95)

4.4 Healthcare utilisation

This section is on the ability to pay and the affordability of SRH services. Ability to pay is described as "the capacity to generate economic resources to pay for health services without catastrophic expenditure of resources required for basic necessities" (1). A mix of this ability and affordability which is the capacity to spend their financial resources and time to use services (1), facilitates actualisation of this part of the pathway.

4.4.1 Ability to pay

In relation to the SRH of AYMs, ability to pay relates to their ability to exchange money for an SRH service such as condoms or STI treatment. Educational attainment, employment status, and involvement in an income generating activity as well as their parents or guardian's economic status would affect AYM's ability to pay for SRH services. NDHS 2013 indicated that 24.5% males aged 15 – 24 have completed secondary education and only 7.3% have more than a secondary education (17). The NBS Unemployment Watch report for the first quarter of 2016 reported that among the labour workforce aged 15-24 years, 56.1% were either unemployed or underemployed (13). These factors determines AYM's access to disposable income to pay for SRH services. A study examining health-seeking behaviour and barriers to seeking help among University students in South West Nigeria reported that cost of care was the highest barrier to utilising the health facility within the University community (110). The Mmari et al (2010) study which analysed national survey data to determine sex differences in health-seeking behaviours among AYP aged with self-reported STI symptoms, reported that the only factor associated with AYMs' STI treatment-seeking behaviour was economic status; compared with AYM of middle or high status those of low economic status were more likely to have sought treatment from an informal healthcare provider such as a traditional healer rather than from formal healthcare facilities (5). The study further suggested that reasons for the choice of provider was lower cost and payment by instalment with the traditional healer compared to a formal healthcare clinic.

Information for Nigeria on the WHO global health expenditure account shows that OOP expenditure for health in 2014 was 96% of the THE (37). This is not convenient for AYMs given their current economic status; a strategy that can decrease OOP expenditure and prevent catastrophic expenditure is a health insurance scheme. At the moment, only the formal sector of the NHIS is functional and specifically for employees of the federal government (39); and only 2% of men age 15 - 49 years are on the scheme (17). A significant proportion of AYM are excluded because majority are currently unemployed and those employed are not employees of the federal government.

4.4.2 Affordability

Affordability is related to the costs associated with using services; the costs may be direct, indirect or opportunity costs. Direct costs are mainly user fees, i.e. charges levied for healthcare services (39) such as consultation fee, payment for drugs or commodities and bed space. User fees for healthcare was introduced in Nigeria in 1998. This was a follow up to the

adoption of the Bamako initiative by African Ministers of Health in 1987 which sought to increase sustainability and quality of healthcare through cost sharing and community participation (39). However, government allocation and expenditure on health has not been adequate, it has failed to fulfil its commitment to various international agreements including the Abuja declaration of 2001. The 2016 budget appropriation for the FMOH is 4.13% (36) of the national budget, and this is approximately a 3.7% reduction compared to the 2015 budget allocation (see Figure 4 and Annex 1). Furthermore, because health is on the concurrent list, which means that each level of government is allowed to determine the amount of funds it allocates and spends on health; the situation is poorer at the state and LGA levels. For example, the cost of providing contraceptives is shared by all levels of government; it is reported that the federal government fulfils its obligation to procure the commodities. However, out of 36 States, only one (Lagos) officially disbursed funds for distribution of the commodities and consumables. This has led to scarcity of affordable contraceptives at most PHCs which is the responsibility of LGAs (who depend on states for funds); and high fees where available (111).

Aside user fees at the point of service, there are indirect costs associated with accessing SRH services such as transportation; and the opportunity cost of the time spent waiting at a health facility to receive care. Furthermore, the payment method for healthcare also influences the decision to seek care. Formal healthcare providers such as public and private hospitals require full payment compared to informal healthcare providers such as PMVs and traditional healers who are perceived to be flexible and accept instalments (68). Lower cost and possibility for paying in instalments was one of the reasons why AYMs prefer to seek care from informal healthcare providers (68).

4.5 Healthcare outcome

This component is determined by the ability to engage and the appropriateness of SRH services. The ability to engage refers to AYMs motivation and capacity to actively participate in the process of receiving healthcare (1). This is achievable when factors related to appropriateness of SRH services such as timeliness, technical and interpersonal quality of the services provided as well as the male friendliness of the healthcare provider are in place.

4.5.1 Ability to engage

This component relates to the ability of AYMs to take responsibility for the decisions they make in relation to SRH; by applying the knowledge and skills they may have acquired. The application of such knowledge and skills is influenced by health literacy. As discussed previously, a significant

proportion of AYMs in Nigeria have low health literacy capacity due to their low educational attainment. The participation in the process of healthcare delivery is another contributory factor. The healthcare facility assessment reported that only 30% of facilities involved AYP in general management of the youth-friendly health service delivery; specifically they were involved in health talks, outreach to their peers, and peer counselling (95). Peer-to-peer structures, for empowering and providing support structure is common with HIV/AIDS programs as support groups for PLHIV (personal observation) and the anti-AIDS clubs incorporated as co-curricular component of the FLHE program in schools (93). An evaluation of the program in some schools in Edo State indicated that for schools where the co-curricular component was consistently implemented, AYMs were talking more to peer educators about HIV/AIDS and sexual health issues (112). This facilitates their empowerment to achieve positive health outcomes.

4.5.2 Appropriateness

This dimension relates to the fit between services and clients' needs. Specific factors to be considered are the quality of health personnel including their knowledge and attitudes towards adolescent SRH issues; types of services and the manner in which they are provided (youth/male friendliness). Healthcare provider's age, sex and attitude has been identified to influence utilisation of SRH services by AYMs. The assessment conducted to identify health facilities providing YFHS in Nigeria, found that AYP considered the age of a healthcare provider as a determinant for utilisation of services (95). Another in Kenya noted that healthcare providers' unfriendly and judgmental attitude was a reason for not using SRH services (97). In addition, the unclear and sometimes conflicting age of consent makes healthcare providers to provide SRH services to AYMs based on their personal judgement of AYMs age suitability (113). The Nigerian Constitution defines age of consent as 18 years (described as "full age"); some states have placed age of consent at 14 or the Child's right act 2003 at 16 years for research (113). The guidelines for provision of HTC also states that children under 18 years need to get parental consent except they qualify as "mature minors" i.e. married, pregnant, a parent, or sexually active. However, it also adds that a counsellor needs to make an "independent assessment of the minor's maturity to undergo an HIV test (114). This leaves the decision to provide SRH services or not at the discretion of healthcare providers who are most likely biased based on their personal judgement. Furthermore, AYMs who are MSM or identify as homosexual are prone to various forms of discrimination which also affect their ability to seek and access sexual health services (84). The sexual preference of MSM is considered unnatural, highly stigmatized and criminalised in most African countries including Nigeria. The same-sex marriage prohibition law in Nigeria, has significantly increased stigma and discrimination against these group of AYMs and also further decreased their access to health services (84). As a result, AYMs who are MSM hide their

sexual activities and most often pretend to be heterosexual but practice bisexuality in order to avoid harassment and rejection (115,116). This practise leads to higher risk of negative health outcomes.

CHAPTER FIVE: POLICIES IN NIGERIA AND THE SRH OF ADOLESCENTS AND YOUNG MALES

This chapter presents a review of health policies, and ensuing documents such as strategic frameworks and action plans, that have direct or indirect impact on the SRH needs of AYMSs. Each subsection highlights the relevant content(s) of the policies and the mention (or not) of specific intent for SRH issues affecting AYM.

5.1 Revised National Health Policy, 2004

The Revised National Health Policy 2004 defines the Nigerian Health System and its functions; strategic areas of focus for health and also roles and responsibilities of the different stakeholders (31). The policy identifies 13 focus areas for intervention based on specific areas that contribute to the poor health status in the country. Three area on the list which have implications for the SRH of AYMs are reproductive health, adolescent health and HIV (31). The policy intended to set the stage for realisation of policies and programs in the focus areas, and this has been achieved with the development of the HIV/AIDS policy 2009, National Policy on the Health & Development of AYP 2007 and most recently the National Health Act 2014. However, there is no specific mention of intent to address SRH issues affecting AYMs.

5.2 National Reproductive Health Policy, 2001

The National Reproductive Health Policy 2001 is set within the framework of the Revised National Health Policy. Its goal is to "create an enabling environment for appropriate action, and provide the necessary impetus and guidance to national and local initiatives in all areas of Reproductive Health" (117). The policy has no mention of direct intent to address SRH issues of AYM. However, some of its objectives in have indirect implications on the SRH of AYMs. They are on STIs, male involvement, and gender balance for availability of services. Text box 1 highlights these objectives in detail.

Text box 1: Mentions of AYM's SRH issues in the National Reproductive Health Policy (Source: (117)**)**

*To increase the **involvement of men** in reproductive health issues*

*To **reduce gender imbalance** in availability of reproductive health services*

To reduce the incidence and prevalence of sexually transmitted infection including the transmission of HIV infection

*To increase knowledge of reproductive biology and **promote responsible behaviours of adolescents** regarding prevention of unwanted pregnancy and sexually transmitted infections.*

5.3 National Policy on the Health and Development of Adolescents and Young People, 2007

The National Policy on the Health and Development of AYP 2007 was developed in view of the social and economic implications of the challenges AYP face. The policy is multi-sectoral and the development was facilitated by the FMOH, which acts as the secretariat. The issues covered in the policy are all-inclusive and cuts across different aspects of AYP's lives; and highlights 9 key intervention areas, including SRH (118). A strategic framework for the period 2007 – 2011 was developed simultaneously. For SRH issues, there is an intent to provide youth-friendly information and service needs to all AYP. The only objective with a tinge of a gender perspective is the establishment of "youth-friendly gender sensitive" services in public and private health institutions including youth centres (119). Subsequently, an Action Plan for Advancing Young People's Health & Development in Nigeria was developed in 2010. Plans in this document tailored to address the SRH needs of AYP include appointment of dedicated staff known as Adolescent Health and Development (AHD) officers, in the FMOH and other relevant MDAs to facilitate implementation of the policy in their respective domains at national and state levels; setting-up AHD technical working group (TWG) comprising all stakeholders including young people at national and state levels.

The development of this policy and its accompanying strategic framework and action plan involved AYP, representatives from relevant MDAs at national and state levels, indigenous and international youth-led and youth-serving organisations. From the above, these documents cover issues affecting AYP as a whole including SRH. However, there was no mention of intent to specifically address SRH issues AYMs. From personal observation, this policy and its ensuing documents have not been fully implemented due to several factors such as inadequate funds and proper coordination. The strategic framework or action plan has not been reviewed since the implementation span of the ones mentioned above elapsed; and most AHD programs in the country are funded by external donors. The framework was to serve as a guide for actors at the state level to contextualise and develop their action plans, however less than 10% of states have actions plans for AYP. This can be attributed to the rigid policy development process in Nigeria and funding mechanism for health. As at 2015, I am aware of only Benue and Niger states who have developed action plans; with funding from external sources.

5.4 National Policy on HIV/AIDS, 2009

The National policy on HIV/AIDS 2009 also covers the SRH needs of AYMs through the intent to serve all AYP with HIV prevention, treatment care and support services. It also recognises young MSM as a key population to be provided with specific interventions (120). The national strategic framework (NSF) 2010 – 2015 and national strategic plan (NSP) 2010 also

outlined an approach for serving these target groups. The policy intent is to ensure "access to full range of integrated HIV and STI prevention, treatment, care and support" to every Nigerian including AYP and young MSM. However, this conflicts with laws and guidelines such as the age of consent for accessing HCT and the discriminatory law against MSM. The National Guidelines for HIV Counselling and Testing, clearly states that children under 18 who do not qualify as a mature minor must have permission from a parent or legal guardian to undergo an HIV test (114). The policy and law restricts access to HIV prevention and treatment services for AYM who are younger than 18 or are MSM. This negates the intent to cater for a need that specifically affects AYMs.

5.5 National HIV Strategy for Adolescents and Young People, 2016

This strategy was developed to cater for the needs of AYP with respect to HIV/AIDS. The development of the policy was facilitated by the National Agency for the Control of AIDS (NACA) through its Prevention TWG. One of its guiding principles is gender responsive programming, where it suggests that programs targeting AYP "should take into account gender equality concerns and address the needs of males and females in their design, implementation, and evaluation". Of utmost importance is the recognition of age restrictions as regards uptake of HTC by AYP, and a strategic focus for a review of the age of consent (12). Other contents of the strategy that can be associated with AYMs is the identification of vulnerable groups, which are mainly males such as "AYP in the street, AYP on the street, AYP in closed setting (prisons) and AYM who have sex with males" to be reached with specific interventions. Although there is intent to address issues affecting these target groups are mentioned in the document, the specific strategy to be used in reaching them is not clearly defined.

In summary, most of the documents mention intent to serve AYP in general. They do not provide clear and specific intent to address issues affecting AYMs. The attempt in the Reproductive health policy with the mention of "male involvement" aligns with recommendations from the ICPD Program of Action on male responsibilities and participation (69). However, this isn't specific as compared to strategic documents from International organisations such as UNFPA, IPPF, and Guttmacher institute. Table 9 highlights the detailed descriptions of male involvement as stated in the strategic plans of these organisations.

Table 9: Mention of AYM issues in strategic plans of international organisations

Organisation/Document	Specific mention of males and AYM issues
UNFPA/Strategic plan 2014 – 2017 Source: UNFPA	"The final output stems from the central role that civil society and faith-based organizations play in promoting reproductive rights and gender equality. UNFPA will support civil society so that it can promote accountability on these issues, and also ensure that men and boys are engaged for the promotion of gender equality and to address their unique SRH needs"
Guttmacher Institute Strategic plan; 2016 – 2020	"Men and SRHR: Increasing understanding of men's sexual and reproductive health needs, as well as men's influence on women's behaviours and access to services"
International Planned Parenthood Federation (IPPF); Strategic Framework 2016 - 2022	Priority objective two: Engage women and youth leaders as advocates for change: "…Programmes will promote male involvement in SRHR, and address issues related to masculinity, gender and sexuality"

Sources: (121,122,123)

CHAPTER SIX: EVIDENCE INFORMED INTERVENTIONS

This chapter highlights some interventions that have been successful in meeting the SRH needs of males including AYMs. For the purpose of this thesis, the focus is on strategies and successes related to some of the factors that have been discussed and also have a cross cutting influence on the health seeking behaviour, dimensions of accessibility and utilisation of SRH services by AYMs.

6.1 Interventions Challenging Gender Norms and Masculinity Beliefs

There is evidence showing that socially constructed gender norms and masculinity beliefs influence an individual's decision regarding their sexual health (6,124). Two examples will be presented, these interventions were evaluated by WHO and categorised as effective and gender transformative i.e. "approaches that seek to transform gender roles and promote more gender-equitable relationships between men and women" (6). The interventions are Stepping Stones implemented in South Africa and Program H in Brazil.

6.1.1 Stepping Stones, South Africa

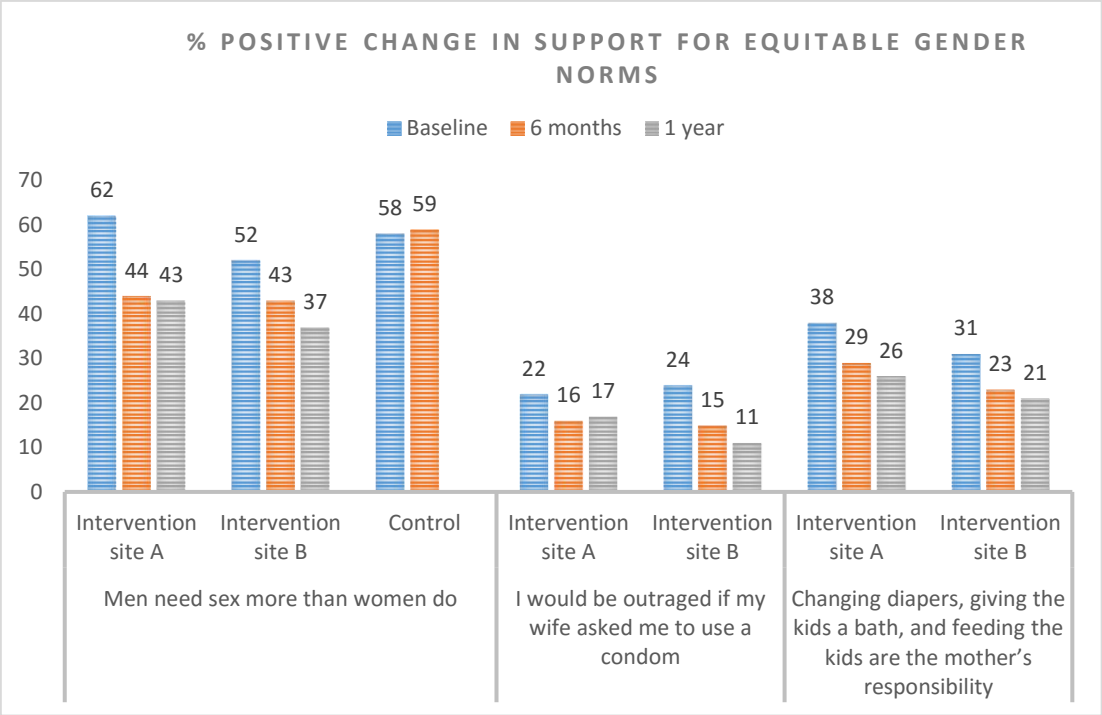
Nigeria is next after South Africa with the highest number of people living with HIV. The Stepping Stones program was a HIV prevention program aimed at improving sexual health by building stronger, more gender-equitable relationships with better communication between sexual partners. The program targeted unmarried young men and women aged 15 – 26 year. Strategies used included participatory learning approaches to build knowledge of sexual health, awareness of risks and the consequences of risk taking and communication skills, and also opportunities for facilitated self-reflection on sexual behaviour (125). The study sought to evaluate the effectiveness of stepping stones approach in comparison to routine sessions on HIV and safer sex (125,126). At the end of the intervention (description in annex 7), results reported show that compared to the control group, men in the Stepping Stones program reported fewer partners since the last interview at both 12 months and 24 months of follow-up; were more likely to report correct condom use at last sex at 12 months and the proportion of men who disclosed perpetrating severe intimate partner violence (defined as more than one episode of physical or sexual intimate partner violence) was lower at 12 and 24 months (125). The gender norms and masculinity beliefs and the sexual behaviour that results from these beliefs are similar to that highlighted in the findings of this study for AYMs in Nigeria.

6.1.2 Program H, Brazil

Program H was implemented among young men aged 14 – 25 years; in-school and out-of-school from 3 low income communities in Rio de Janeiro, Brazil. The program focuses on helping young men question traditional norms related to manhood (details in annex 8). The strategies used for the intervention were (a) A field-tested curriculum that includes a manual and an educational video for promoting attitude and behaviour change among men, and (b) A lifestyle social marketing campaign for promoting changes in community or social norms about what it means to be a man (124). At the end of the program, the significant results include:

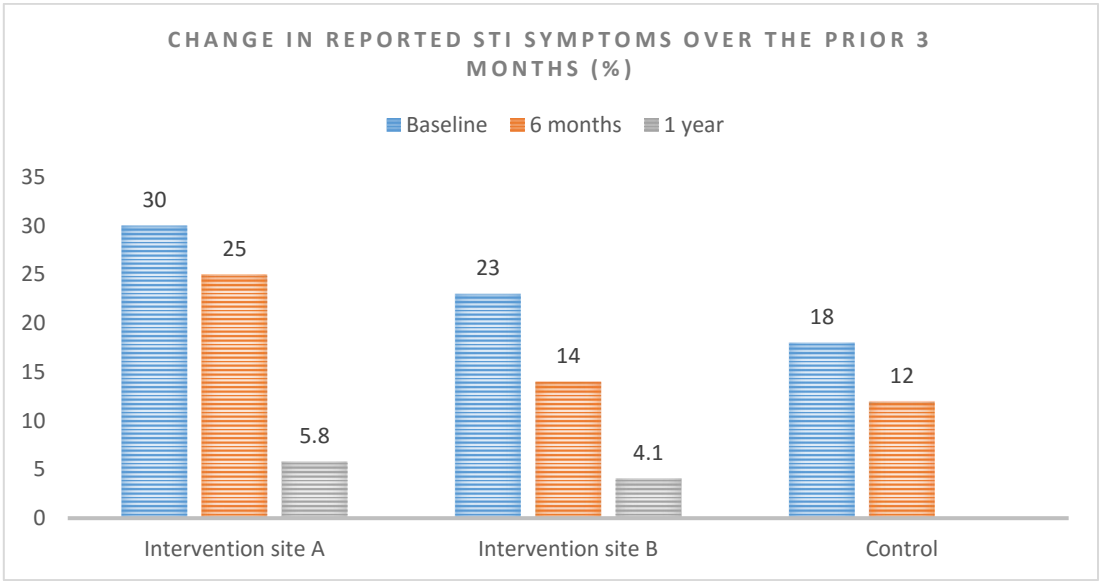
- Reduction in the proportion of respondents who supported inequitable gender norms over time. Graph 3 shows that at 6 months, agreement with inequitable gender norms items significantly decreased in both intervention sites compared to control
- Agreement with more equitable gender norms was associated with changes in HIV/STI risk. For the intervention sites, the evaluation results indicated that a decreased agreement with inequitable gender norms over one year was significantly associated with decreased reports of STI symptoms (124)
- Improvements in key HIV/STI outcomes, with greater changes often found in combined intervention site. Graph 4 indicates that the 2 intervention sites reported a decrease in STI symptoms over the prior 3 months, and the improvements were statistically significant in the site where group educational activities were combined with the lifestyle social marketing
- Decrease in number of sexual partners. In the 2 intervention sites, the proportion of sexually active participants who reported having 2 or more sexual partners over the last month decreased (124).

Graph 3: Change in support for equitable gender norms



Source: (124)

Graph 4: Change in reported STI symptoms on Program H.



Source: (124)

6.2 Interventions Modifying Service Delivery Approach

This section highlights service delivery approaches that resulted in an improved health seeking behaviour and utilisation of SRH services by clients including AYMs. The first intervention was implemented in Nigeria and targeted AYP and private health care providers (127). The systematic review by Denno et al. (2014) classified it as "ready" (15). This classification was based on the WHO 2006 context for systematic reviews of adolescent HIV/AIDS programs. The second intervention was implemented in Bangladesh and targeted men above 15 years and health care providers (128). It was evaluated by WHO and categorised as effective and gender transformative (6).

6.2.1 Expanding access through private healthcare providers, Nigeria

This study evaluated the impact of an intervention on STI treatment-seeking behaviour and STI prevalence among AYP in secondary schools in South South Nigeria. The study was categorised as having evidence that suggests effectiveness, Annex 6 highlights details of the intervention. Community participation, peer education, public lectures, health clubs in the schools, and training of healthcare providers (including informal) on STI diagnosis and treatment were the strategies used. At the end of the intervention, table 10 indicates that there was an increase in utilisation of STI services (for both sexes) and self-reported use of condoms for the males in the control and intervention group; with a statistically significant outcome for the intervention group (127).

Table 10: Change in proportion of sexually active participants who reported some condom use

	Some condom use (%)		Change pre- to post intervention	
	Pre	**Post**	**Crude odds ratio**	**Crude 95% CI**
Group & school				
Intervention				
Male	30.8	40.5	1.5	1.38 - 1.69
Female	30.2	36.5	1.3	1.03 - 1.72
All	30.8	39.1	1.5	1.22-1.79
Control 1				
Male	32.1	36.1	1.2	1.07 - 1.33
Female	32.6	31.8	0.9	0.78 - 1.19
All	32.3	34.5	1.1	1.00 - 1.22
Control 2				
Male	26.6	34.3	1.4	0.90 - 2.32
Female	29.2	25.4	0.8	0.44 - 1.54
All	27.8	29.1	1.1	0.64 - 1.76
Both Controls				
Male	29.4	35.5	1.3	1.04 - 1.66
Female	30.3	27.9	0.9	0.61 - 1.30
All	29.7	31.9	1.1	0.06 - 1.42

Source: (127)

6.2.2 Integrating men's SRH services in healthcare delivery, Bangladesh

This project was borne out of a problem of low utilisation of health services including SRH services. The main strategy was the integration of male reproductive health services within the existing government female-focused health care delivery system. Interventions included training regarding reproductive tract infections (RTI) and sexually transmitted infections (STIs) for healthcare providers, awareness raising about male RTIs and STIs, group discussions, behaviour change communication materials, and RTI and STI services using the syndromic approach (128). At the end of the program, findings indicate

- Substantial increase in male clients in the intervention sites and the number of RTI and STI clients increased from a monthly average of less than one client per clinic prior to the intervention to more than five during the intervention period
- Increased technical knowledge of men's SRH health needs among healthcare providers
- Improved ability for providing counselling about sexual health to male clients.

CHAPTER SEVEN: DISCUSSION, CONCLUSION AND RECOMMENDATIONS

This chapter discusses the findings of this thesis, conclusions and recommendations for action by stakeholders.

7.1 Discussion

The overall objective of this thesis was to explore how health seeking behaviour and access influences the utilisation of SRH services by AYMs in Nigeria. The analysis included 4 parts, (1) SRH needs of AYMs, (2) demand and supply factors associated with health seeking behaviour, access and utilisation of SRH services, (3) analysis of some health and youth focused policies in relation to the SRH of AYMs and (4) evidence informed interventions on SRH for AYMs. The Levesque et al. (2013) contextualised framework was used to analyse the first 2 sections.

Usefulness of the framework: The structure of the framework allowed for the separation of the factors influencing demand and supply. It also aided the identification of similar and dependent factors (e.g. sociocultural beliefs) between the demand and supply sides. All the factors on the framework were useful, but a few were analysed with data from national surveys due to paucity of specific research studies about those factors.

7.1.1 SRH needs of Adolescent and Young males

In addition to studies from Nigeria, the literatures reviewed include studies from other Anglophone sub-Saharan Africa countries such as Ghana, South Africa and Kenya. These countries share comparable sociocultural and socioeconomic context and the findings are relevant for AYMs in Nigeria.

The findings from the review indicate that the major SRH needs of AYMs in Nigeria are access to information, skills such as health seeking behaviour and condom use; and quality healthcare services. Findings show that AYMs had misconceptions about SRH issues and this was attributed to sociocultural factors such as the gender norms and masculinity beliefs associated with sex. This was specifically confirmed in the study with AYMs in South East Nigeria which reported that acquiring sexual experience during adolescence was perceived to be important for male identity (59).

The findings emphasize the persistent denial of the realities regarding AYMs' sexuality through a culture of silence regarding sex education. Most people in a position of authority over AYMs such as parents, healthcare providers and teachers uphold beliefs which prevent open discussions about sex. This was shown to limit their access to accurate SRH information and in turn their ability to make informed decisions regarding their sexual

health. The study also indicates that the misconceptions influenced AYMs perception of SRH needs and desire for care. This is similar to findings of a study in the United States (US) among poor African American young men, who identified factors related to the notions of masculinity as reasons for not utilizing SRH services (52).

A multifaceted approach, such as that used in Stepping Stones and Program H (124,126) that seeks to change the misinformation influenced by sociocultural beliefs is most suitable to meet AYMs' need for accurate information and skills. For example, the Program H intervention was implemented among AYMs with similar socioeconomic context and factors. However, in the Nigerian context, the intervention will need adaptation specifically to provide platforms for engaging with other actors such as adult male leaders who are key influencers of AYMs. This is particularly vital for achieving desired results due to the hierarchical power structure in Nigeria. The young men in this study have similar gender norms and masculinity beliefs and practise similar sexual behaviour as AYMs in Nigeria. Although, Brazil does not compare with Nigeria economically, the study was conducted among young men in low income communities which is comparable with the status of a significant proportion of AYMs in Nigeria.

With regards to healthcare services, the current SRH service delivery approach in Nigeria is indifferent to the needs of AYMs. Policies and programs targeting AYP has a disproportionate attention on AYFs, in spite of the fact that some of the issues in focus such as HIV and other STIs, also affect AYMs. In addition, healthcare providers' approach to service delivery is based on their personal beliefs regarding AYMs' suitability. All of this may be assumed as the right thing to do considering the vulnerability of AYFs compared to AYMs. However, the absence of clear guidelines in a policy such as the Reproductive Health policy is also a contributory factor. In another vein, policy makers and healthcare managers originate from the same society where the beliefs as discussed previously are upheld, and therefore reflected in the quality of policies and interventions.

7.1.2 Abilities of Adolescents and Young Males and Dimensions of Accessibility

In relation to seeking care, the study findings reveal that socio-cultural restrictions on sex such as talking about sex or having sex before marriage was a barrier for both demand and supply. AYMs' decision to seek SRH care was dependent on perception of healthcare providers' reaction to knowledge about their sexual activities; and the desire for privacy regarding their sexual lives. On the other hand, healthcare providers' restricted provision of SRH services based on their personal judgment regarding AYMs' age and right to have sex. This restriction is permissible due to the fact that there's currently no specific and clear policy on the age

of consent for receiving SRH services in Nigeria; laws and policies such as the constitution, HTC guideline and Child's right act have different age limits. This leaves AYMs at the discretion of healthcare providers, who may also not be well informed about the implications of their action. There is need for the FMOH in collaboration with the states to review and arrive at a consensus on a realistic age of consent for accessing SRH services.

The non-availability of skilled healthcare providers and facilities and organisation of services were also identified as barriers to reaching SRH care in Nigeria especially in rural areas and the Northern zones. Specifically, the opening hours of healthcare facilities was also noted as being unfavourable. However, an underlying factor associated with the opening hours such as the ability to get permission without breaching confidentiality was more important for AYMs. This underlying factor is also linked to their privacy and desire to avoid disclosing their sexual activities to their parents and healthcare providers. Furthermore, the design and organisation of healthcare facilities influenced AYMs' ability to reach SRH care. The study indicates that they perceive healthcare facilities as being for women and children only, and lacked privacy. This draws attention to the youth-friendliness of healthcare facilities in Nigeria. This is lacking in many healthcare facilities due to the uncomfortable waiting areas such as having to sit between older women who may know their parents, which prevents privacy and confidentiality; long waiting time, and judgmental healthcare providers. Unfortunately, this is inevitable especially in rural communities due to huge gap in client to healthcare provider ratio and low number of facilities per stipulated population.

The evidence from the interventions in Nigeria and Bangladesh can be replicated to address this gap. An adaptation of both interventions with focus on capacity strengthening for both formal and informal healthcare providers can be explored. For the Nigerian intervention, the debate about the eligibility of informal healthcare providers such as PMVs to provide healthcare is ongoing; however they are still an option given that the findings identified them as a preferred choice for AYMs and strengthening their capacity is necessary to ensure quality of healthcare provided. In addition, there is need for further research to gather specific evidence to support the implementation strategy for each location. The integrated approach to deliver services to men as implemented in Bangladesh is also essential given the present scarcity of healthcare resources in Nigeria. Bangladesh is classified as a lower-middle income economy as Nigeria. The country is predominantly Muslim which is comparable to the Northern zones of Nigeria. The integrated strategy used is significant given the limited healthcare resources available in Nigeria at the moment; this is also a more sustainable approach.

Low economic status of AYMs and cost (direct and indirect) of services prevented utilising SRH services. This was found in all the countries

reviewed and there is no reason to believe this will be different for AYMs in Nigeria. In addition to the cost, the mode of payment was also a significant barrier. Findings show that cost at public healthcare providers was high and payment was demanded in full. This resulted in the choice of informal healthcare providers whose costs where sometimes higher but still preferred because of their flexible payment method. The Nigerian government tasked with the responsibility of providing resources for health has consistently failed in this regard. Federal and state government allocation and expenditure for health has been below commitments made at international level as well as WHO standard. In addition, the NHIS programmes for the informal sector which should benefit AYMs is yet to be operationalised.
A specific intervention with evidence addressing cost related barriers for AYMs was not found. However, some programs using voucher schemes have been implemented for AYFs in low resource settings. Further research will be required to establish the feasibility of such approach for AYMs in Nigeria.

The health and youth related policies reviewed are not responsive to these needs discussed, none of the policies had a clear and strategic mention of intent to address issues related to SRH of AYMs. The lack of clarity or absence of such, permits implementers to make assumptions or ignore the implied intent related to SRH of AYMs. The government at federal and state levels has to rise up to their responsibility to address the gaps in the policies and health system; and with specific attention to the needs of AYMs.

Finally, the study reveals that there are limited male friendly structures to adequately empower AYMs to make healthy decisions regarding their SRH. The poor response to their SRH needs and poor accessibility to SRH healthcare services results in poor health seeking behaviour.

7.2 Conclusion

Sociocultural factors such as misconceptions about sexuality which derive from gender norms and masculinity beliefs has been shown to influence the ability of AYMs to adopt positive SRH choices. These factors as well as the current gaps in the Nigerian health system and sociocultural beliefs related to issues of AYMs' sexuality were also found to influence the delivery of SRH services to AYMs.

Based on the description of the pathway to achieving access which is utilisation of services, it can be concluded that AYMs are misinformed, and therefore their perception of SRH needs is distorted. In addition, the non-responsive policy environment and healthcare delivery system to SRH issues of AYMs makes them less likely to seek, reach and utilise SRH services.

This leads to unhealthy choices such as multiple sexual relationships, non-utilisation of SRH services such as STIs and low condom use. These unhealthy choices increases the risk of undesirable health outcomes among AYMs, and in the long run affect the health of their sexual partners who are most likely AYFs.

7.3 Recommendations

7.3.1 Policies and guidelines

- FMOH in cooperation with NACA and SMOH should review the National Health Policy, Reproductive Health Policy, Policy on the Health and Development of AYP and National Policy on HIV/AIDS to incorporate in clear terms an intent to address the SRH needs of AYMs

- FMOH in collaboration with NACA and SMOH should review and adapt guidelines on SRH service delivery to clearly state specific age of consent in order to prevent unlawful restrictions

- SMOH should support AHD officers and stakeholders at the state level to develop localised action plans on AHD; incorporating gender transformative language and interventions.

7.3.2 Research

- FMOH in collaboration with NACA, SMOH, local and international NGOs should conduct studies to increase understanding on the specific SRH needs of AYMs in Nigeria taking into account variables with regards to geographical location, sociocultural environment and vulnerability

- FMOH in collaboration with NACA, SMOH, local and international NGOs should conduct an assessment of the capacity of healthcare providers' to identify gaps in relation to SRH of AYMs

- FMOH in collaboration with NACA, SMOH, local and international NGOs should conduct studies to explore the how cost barriers impact on AYMs and identify what paying mechanisms are most suitable for them.

7.3.3 Service Delivery

- FMOH in cooperation with SMOH should strengthen capacity of AHD officers, at federal and state levels, for proper coordination and supervision of SRH interventions within their jurisdiction

- FMOH in collaboration with other stakeholders such as Federal Ministry of Education (FME), NACA, SMOH, state Ministries of Education (SMoE) healthcare facilities, schools, Local and International NGOs, Bilateral and Multilateral donors should develop and implement SRH interventions and programs to engage men and boys as clients and not just as partners for women and girls' health. Such programs should seek to change negative and harmful SRH related beliefs and practises at community and healthcare delivery levels. Interventions should also take cognizance of heterogeneity of AYMs

- FMOH in cooperation with FME, NACA, SMOH, SMoE, healthcare facilities, schools, local and international NGOs should strengthen capacity of healthcare providers in the delivery of male friendly SRH services

- FMOH in cooperation with FME, NACA, SMOH, SMoE, healthcare facilities and schools should redesign organisation of SRH service delivery points to accommodate needs of AYMs

- FMOH in collaboration with FME, SMOH and SMoE should review contents of the curriculum in healthcare provider and teacher training schools to include gender transformative messages. Adaptation should also take cognizance of heterogeneity of AYMs.

ANNEXES

Annex 1: FMoH Budget Trend (2006 – 2016)

FMoH BUDGETS TREND (2006 – 2016)			
Year	Health Budget	National Budget	% Health
2006	106,940,000,000	1,876,302,363,351	5.70
2007	122,399,999,999	2,266,394,423,477	5.40 ↓
2008	138,179,657,132	2,492,076,718,937	5.54 ↑
2009	154,567,493,157	2,870,510,042,680	5.38 ↓
2010	164,914,939,155	4,608,616,278,213	3.58 ↓
2011	235,866,483,244	4,226,191,559,259	5.58 ↑
2012	282,771,771,425	4,749,100,821,171	5.95 ↑
2013	282,501,464,455	4,987,220,425,601	5.66 ↓
2014	264,461,210,950	4,695,190,000,000	5.63 ↓
2015	259,751,742,847	4,493,363,957,157	5.78 ↑
2016	250,062,891,075	6,060,677,358,227	4.13 ↓

Source: (36)

Annex 2: Healthcare facilities per 100,000 population by state

States	Population	# of health facilities	Actual # of health facilities per 100, 000 population	Ideal # of health facilities per 100,000 population	Gap or excess	%age of health facility per 100,000 population
FCT	2,291,413	656	32	23	(9)	140%
Nasarawa	2,188,257	909	42	22	(20)	192%
Benue	4,979,230	1206	24	50	26	48%
Plateau	3,694,849	883	24	37	13	65%
Kwara	2,768,837	740	27	28	1	98%
Kogi	3,879,355	1,077	28	39	11	72%
Adamawa	3,701,733	1,027	28	37	9	76%
Bauchi	5,562,382	1,034	19	56	37	34%
Borno	4,986,233	474	10	50	40	20%
Gombe	2,797,692	531	19	28	9	68%
Taraba	2,672,183	1,045	39	27	(12)	146%
Yobe	2,789,589	517	19	28	9	68%
Kaduna	7,156,349	1,560	22	72	50	31%
Kano	11,179,667	1,183	11	112	101	10%
Katsina	6,791,223	1,496	22	68	46	32%
Kebbi	3,832,110	412	11	38	27	29%
Sokoto	4,334,281	713	16	43	27	37%
Zamfara	3,878,699	697	18	39	21	46%
Abia	3,278,699	615	19	33	14	58%
Anambra	4,839,404	1,485	31	48	17	64%
Ebonyi	2,521,675	567	22	25	3	87%
Enugu	3,825,267	868	23	38	15	60%
Imo	4,646,058	1,337	30	46	16	65%
Akwa Ibom	4,664,601	543	12	47	35	26%
Bayelsa	1,984,825	232	12	20	8	60%
Cross River	3,368,744	734	22	34	12	65%
Delta	4,864,762	908	19	49	30	39%
Edo	3,725,771	924	25	37	12	67%
Rivers	6,214,664	476	8	62	54	13%
Ekiti	2,822,955	459	16	28	12	57%
Lagos	10,780,817	2,253	21	108	87	19%
Ogun	4,460,718	1,520	34	45	11	76%
Ondo	4,051,236	811	20	41	21	49%
Osun	4,042,046	1,095	27	40	13	67%
Oyo	6,671,528	1,237	31	67	36	46%

Source: NBS (22)

Annex 3: Baseline STI risk of study participants

Characteristics	Intervention group	Control 1	Control 2
	(n=643)	(n=649)	(n=604)
Sex	%	%	%
Male	47.6	50.7	56.6
Female	52.5	49.3	41.6
Mean age (years)			
12 - 15 years	17.6	18.3	11.1
16 - 18 years	53.3	48.8	48.2
19 - 25 years	28.3	31.1	39.1
NA	0.8	1.7	1.7
Ever had sex	38.0	34.4	53.0
Condom use			
None	88.5	88.9	85.3
Some	11.5	11.1	14.7
Mostly/all the time	8.6	6.8	7.3
Percentage using condom at last sexual intercourse			
Yes	8.6	9.4	10.3

Source: (127)

Annex 4: Sociodemographic of Program H evaluation study

Characteristics	Community A	Community B	Community C
	n=258	n=250	n=272
Mean age	16.8	17.2	17.3
	%	%	%
> "basic" education	41	46	34
Working	11	34	18
Ethnicity			
Black	38	37	46
Mixed	29	22	28
While	24	30	18

Source: (124)

Annex 5: Gender Equitable Men's Scale

The GEM Scale used for Program H includes issues on 5 key areas related to gender norms: (1) violence (2) sexual relationships (3) reproductive health and disease prevention (4) domestic chores and childcare and (5) homophobia and relationships with other men. Twenty four items were selected to constitute the GEM Scale, 17 items in an "inequitable" subscale and seven items in an "equitable" subscale. For the intervention study with young men, the full GEM Scale was applied in the baseline survey.

Gender Equitable Men's Scale (GEM). Source**: (124)**
Full list of inequitable gender norms items from the GEM Scale
✓ It is the man who decides what type of sex to have ✓ A woman's most important role is to take care of her home and cook for her family. ✓ Men need sex more than women do ✓ You don't talk about sex, you just do it ✓ Women who carry condoms on them are "easy" ✓ A man needs other women, even if things with his wife are fine ✓ There are times when a woman deserves to be beaten ✓ Changing diapers, giving the kids a bath, and feeding the kids are the mother's responsibility ✓ It is a woman's responsibility to avoid getting pregnant ✓ A man should have the final word about decisions in his home ✓ Men are always ready to have sex ✓ A woman should tolerate violence in order to keep her family together ✓ If a woman cheats on a man, it is okay for him to hit her ✓ If someone insults me, I will defend my reputation, with force if I have to ✓ I would be outraged if my wife asked me to use a condom ✓ It is okay for a man to hit his wife if she won't have sex with him ✓ I would never have a gay friend
Examples of Equitable Gender Norms Items from the GEM Scale
✓ A couple should decide together if they want to have children ✓ It is important that a father is present in the lives of his children, even if he is no longer with the mother.

Source: (124)

Annex 6: Details of evidence informed intervention, Nigeria

Primary study aim	Target population & location	Intervention	Design & sample size	Outcome of interest	Results
Improve treatment of STIs among adolescents	14-20 year-olds attending school in Edo State, Nigeria	Training on STI diagnosis & treatment for private providers (practitioners, patent medicine dealers, pharmacists) identified by adolescents as STI treatment providers for youth in the neighbourhood. Private practitioners' clinics were certified as adolescent friendly; the list was provided to peer educators. Education through schools by health professionals, peer educators, films, and organized discussions.	Cluster randomized with one treatment site consisting of STI treatment providers near four schools and two control sites with STI treatment providers near four schools each. Surveys of students were conducted in schools	Percent reported seeking treatment from a private provider for STI symptoms	**Intervention**: before: 17.5%, after: 40.7% **Control 1**: before: 19.0%, after: 29.1% **Control 2**: before: 24.0%, after: 30.4% **Change relative to control 1**: OR, 1.85; 95% CI, 1.06-3.22 **Change relative to control 2**: OR, 2.35; 95% CI, 1.03-5.17
				Percent males reporting some condom use	**Intervention**: before: 30.8%, after: 40.5% **Control 1:** before: 32.1%, after: 36.1% **Control 2**: before: 26.6%, after: 34.3% **Change relative to control 1**: OR, 1.32; 95% CI, 0.97-1.79 **Change relative to control 2**: OR, 1.08; 95% CI, 0.6-1.46
				Percent females reporting some condom use	**Intervention**: before: 30.2%, after: 36.5% **Control 1**: before: 32.6%, after: 31.8% **Control 2**: before: 29.2%, after: 25.4% **Change relative to control 1**: OR, 1.82; 95% CI, 1.28-2.6 **Change relative to control 2**: OR, 1.96; 95% CI, 0.94-4.1

Source: (15,127)

Annex 7: Details of Stepping Stones evaluation study, South Africa

Intervention name/Location	Target population	Type and level of intervention	Gender perspective	Research design quality	Outcome indicators and levels. Knowledge; Behaviour; Attitudes; Relationships; Wider context
Stepping stones (South Africa); was also carried out in Asia and Latin America	Young and adult men and women in single-sex and peer-based groups	Integrated.	Gender transformative	Rigorous	High
		Group Education - thirteen three hour session and three peer group meetings Community and Society - sensitization of traditional and local leaders		Quantitative: Cluster randomised controlled trials	Behaviour: at follow-up, men in Stepping stones arm reported fewer partners and more reported condom use; lower proportion of men who reported severe intimate partner violence
				Survey;	
				Pretesting and after one and two years.	
				Control: traditional three hour session on HIV and safer sex	Biological indicators: 15% fewer women in Stepping Stones acquired HIV infection; men had 28% fewer herpes infections (neither result statistically significant)
				Analysis: statistical significance	
		Stepping Stones, was implemented in 35 communities for 17 sessions (50 hours) over a period of 3–12 weeks. Individuals in the remaining communities served as the control and attended a single session of about 3 hours on HIV and safer sex		Qualitative: Individual interviews	
				n=21 (11 men and 10 men) before intervention and n=18 after	Qualitative findings: improvement in communication of both men and women; increased awareness of violence against women as wrong; increased acceptance of condom use
				Four focus groups (post)	
				Between one and three in-depth interviews with 21 participants (11 men and 10 women) before attending Stepping stones; 18 individual interviews and four group discussions 5-10 months after the intervention ended	

Source: (6,125,126)

Annex 8: Details of Program H evaluation study, Brazil

Intervention name/Location	Target population	Type and level of intervention	Gender perspective	Research design quality	Outcome indicators and levels. Knowledge; Behaviour; Attitudes; Relationships; Wider context
Program H (Brazil)	Low income; urban based men and boys 14 - 25 years old	Focuses on helping young men question traditional norms related to manhood and on promoting the abilities of young men to discuss and reflect on the "costs" of inequitable gender-related views and the advantages of more gender-equitable behaviours	Gender transformative	Rigorous	High. Attitudes: At six months, significant positive changes in 10 of 17 gender attitude items (using Gender-Equitable Men Scale in one community and in 13 of 17 items in second community; no changes in control; changes maintained at one-year follow-up.
		Integrated. Group education - interactive group educational sessions including: overview and framework of the issues; videos; more than 70 activities Community-wide social marketing campaigns		Quantitative: Survey. Quasi-experimental design in three low-income communities. n=780. Assessment before the intervention and 6 and 12 months after. The delayed intervention community served as the control group	Interviews with young women partners confirmed attitude change. Behaviour: Self-reported symptoms of sexually transmitted infections declined from 23% to 4% in one community and from 30% to 6% in another; no statistically significant change in control group; condom use (last sex with primary partner) increased from 58% to 87% in one community (campaign plus group education); no statistically significant change in either control group or the group education only community
		Six month focus group with weekly sessions including 18 exercises and some videos. Community and society: Community-level mass media campaign		Control: one of the communities was delayed intervention. Analysis: chi-square and t-test. Qualitative: Couple and individual interviews. n=18 (6 couples and 6 young men)	

Source: (6,124)

Annex 9: Details of study in Bangladesh on integration of male SRH services

Intervention name/Location	Target population	Type and level of intervention	Gender perspective	Research design quality	Outcome indicators and levels. Knowledge; Behaviour; Attitudes; Relationships; Wider context
Integration of reproductive health services for men in health and family welfare centres	Men and service providers	Integrated Three-part study was conducted at eight intervention health clinics and four control health clinics • Intervention lasted one year	Gender Sensitive	Rigorous Quantitative: Quasi-experimental design	High Knowledge: Increased technical knowledge of men's reproductive health needs among service providers
		Community outreach and mobilization Awareness promotion: • Behaviour change communication materials • Public announcements about the availability of health services • 436 group discussions in communities served by clinics		Pre- (n = 127) and post-intervention (n = 163) surveys with service providers and field workers Exit interviews with 286 male and 300 female clients	Attitudes: Increase in acceptability of male clients seeking services and increase in men's health-seeking behaviour
		Services • Services for sexually transmitted infections and reproductive tract infections included at the clinics • Training for service providers		Clinic service statistics • Control • Analysis: statistical significance Qualitative: Pre and post focus groups with key informants from communities	Behaviour: Increased number of male clients seeking services

Source: (6,128)

REFERENCES

1. Levesque JF, Harris MF, Russell G. Patient-centered access to health care: coneptualising access at the interface of health systems and populations. International Journal for Equity in Health. 2013 March; 12(18): p. 12-18.

2. World Health Organisation. World Health Organisation. [Online].; 2016 [cited 2016 May 25. Available from: http://www.who.int/maternal_child_adolescent/topics/adolescence/dev/en/.

3. United Nations Children's Fund. Adolescence: An Age of Opportunity. The State of the World's Children. Geneva: UNICEF, Communications; 2011. Report No.: 978-92-806-4555-2.

4. United Nations Department of Economic and Social Affairs. Definition of Youth. 2013 January 23. Factsheet.

5. Fatusi A, Wang W. Multiple sexual partnerships mediates the association between early sexual debut and sexually transmitted infection among adolescent and young adult males in Nigeria. The European Journal of Contraception & Reproductive Health Care. 2009 July; 14(2): p. 134 - 143.

6. World Health Organization. Engaging men and boys in changing gender-based inequity in health: Evidence from programme interventions. 2007. Geneva.

7. International Planned Parenthood Federation. Men are Changing. 2016. Case study evidence on work with men and boys to promote gender equality and positive masculinities.

8. World Health Organisation; UNAIDS. Global Standards for Quality Healthcare Services for Adolescents. A Guide to Implement a Standards-driven Approach to Improve the Quality of Healthcare Services for Adolescents. 2015. Volume 1: Standards and Criteria.

9. Cornally N, McCarthy G. Help-seeking behaviour: A concept analysis. International Journal of Nursing Practice. 2011; 17: p. 280 - 288.

10. Odimegwu C, Pallikadavath S, Adedini S. The cost of being a man: social and health consequences of Igbo masculinity. Cultur, health and Sexuality. 2013 February; 15(2): p. 219 - 234.

11. World Health Organisation. Defining sexual health. 2006. Report of a technical consultation on sexual health. 28–31 January 2002, Geneva.

12. National Agency for the Control of AIDS. National HIV Strategy for Adolescents and Young People (2016 - 2020). 2016. NACA.

13. National Bureau of Statistics. Unemployment/Underemployment Watch Q1 2016. 2016. Abuja.

14. World Health Organisation. Monitoring the Building Blocks of Health Systems: A Handbook of Indicators and their Monitoring Strategies. 2010. Health Service Delivery.

15. Denno DM, Hoopes AJ, Chandra-Mouli V. Effective Strategies to Provide Adolescent Sexual and Reproductive Health Services and to Increase Demand and Community Support. Journal of Adolescent Health. 2015 January; 56(1): p. S22 - S41.

16. United Nations Population Fund. The Power of 1.8 billion; Adolescents, Youth and the Transformation of the future. 2014. State of the World Report.

17. National Population Commisssion Nigeria and ICF International. Nigeria Demographic Health Survey 2013. 2014. Abuja, Nigeria, and Rockville, Maryland, USA: NPC and ICF International.

18. National Bureau of Statistics. Demographic Statitics Bulletin. 2013. Demographic Statistics Division.

19. Federal Ministry of Health. National HIV & AIDS and Reproductive Health Survey 2012 (NARHS Plus). 2013. NARHS.

20. The World Bank. Country Overview. 2016. http://www.worldbank.org/en/country/nigeria/overview.

21. Banrungi B, Ogunleye E, Zamba C. Africa Economic Outlook: Nigeria 2015. 2015. Abuja.

22. National Bureau of Statistics. Social Statistics in Nigeria. 2012. Part III: Health, Employment, Public Safety, Population and Vital Registration.

23. National Bureau of Statistics. Annual Abstract of Statistics. 2012. http://www.nigerianstat.gov.ng/nbslibrary/searchdoc.

24. Christian Aid Nigeria; Voices 4 Change; UKaid. Masculinity and Religion in Nigeria: Findings from qualitative research. 2015. Part of Landmark Research Report.

25. Olawoye JE, Omololu FO, Yinka A, Adeyefa I, Adeyemo D, Osotimehin B. Social Constructions of Manhood in Nigeria: Implications for Male Responsibility in Reproductive Health. African Population Studies. 2004 October; 19(2): p. 1 - 20.

26. Uchendu E. Masculinity and Nigeria Youths. Nordic Journal of African Studies. 2007; 16(2): p. 279-297.

27. Voices for Change Nigeria; UKaid. Being a Man in Nigeria: Perceptions and Realities. 2015. A Landmark Research Report by Voices 4 Change Nigeria.

28. Okonta PI. Adolescent Sexual and Reproductive Health in the Niger Delta Region of Nigeria: Issues and Challenges. African Journal of Reproductive Health. 2007; 11(1): p. 113 - 124.

29. Federal Government of Nigeria. National Health Act. 2014. Abuja.

30. Kombe G, Fleisher L, Kariisa E, Arur A, Sanjana P, Paina L, et al. Nigeria Health System Assessment 2008. 2009. USAID.

31. Federal Government of Nigeria. Revised National Health Policy. 2004. Federal Ministry of Health.

32. Federal Ministry of Health. National Strategic Health Development Plan 2010 - 2015. 2010. NSHDP.

33. Omoluabi E. Need Assessment of the Nigerian Health Sector. 2014. International Organisation for Migration (IOM).

34. World Health Organisation. Human Resources for Health Country Profile, Nigeria; Africa Health Workforce Observatory. 2008. http://www.hrh-observatory.afro.who.int/images/Document_Centre/nigeria_country_profile.pdf.

35. World Health Organisation. Abuja Declaration, 10 Years on. 2010. Geneva.

36. Micaiah W. Statisense (Linkedin slideshare). [Online].; 2016 [cited 2016 August 4. Available from: http://www.slideshare.net/statisense.

37. World Health Organisation. Global Health Expenditure Database. [Online].; 2014 [cited 2016 May 12. Available from: http://apps.who.int/nha/database/ViewData/Indicators/en.

38. National Health Insurance Scheme. National Health Insurance Scheme. [Online].; 2016 [cited 2016 July 03. Available from: http://www.nhis.gov.ng/home/#.V3hyybh9600.

39. Olakunde BO. Public health care financing in Nigeria: Which way forward? Annals of Nigerian Medicine. 2012 Jan-June; 6(1).

40. Odeyemi IA. Community-based health insurance programmes and the national health insurance scheme of Nigeria: challenges to uptake and integration. International Journal for Equity in health. 2014 February; 13(20).

41. World Health Organisation. Country Profile: Nigeria. [Online].; 2015 [cited 2016 July 26. Available from: www.who.int/country/nga/en.

42. Federal Ministry of Health. 2010 National Sero-prevalence Sentinel Survey. 2010. Technical Report.

43. UNAIDS. The Gap Report. 2014. HIV/AIDS.

44. National Agency for the Control of AIDS. Global AIDS Response Progress Report, Nigeria. 2014. GARPR.

45. Bell DL, Breland DJ, Ott MA. Adolescent and young adult male health: A review. Paediatrics. 2013 June; 132(3): p. 535-546.

46. Smith JA, Braunack-Mayer A, Wittert G. What do we know about men's help-seeking and health service use? Medical Journal of Australia. 2006 January 16; 184(2): p. 81-83.

47. Ladwig KH, Marten-Mittag B, Formanek B, Dammann G. Gender differences of symptom reporting and medical health care utilization in the German population. European Journal of Epidemiology. 2000; 16: p. 511-518.

48. World Health Organisation. What about boys? A literature review on the health and development of adolescent boys. Geneva: WHO, Child and Adolescent Health and Development; 2000.

49. Skovdal M, Campbell C, Madanhire C, Mupambireyi Z, Nyamukapa C, Gregson S. Masculinity as a barrier to men's use of HIV services in Zimbabwe. Globalization and Health. 2011 May; 7(13).

50. Voices for Change Nigeria; UKaid; Promundo. Nigeria Men and Gender Equality Survey (NiMAGES). 2015. Nigeria Country Report.

51. Dahlback E, Makelele P, Yamba BC, Bergstrom S, Ransjo-Arvidson AB. Zambian male adolescents' perceptions about premarital sexual relationships. African Journal of AIDS Research. 2006 November; 5(3): p. 257-264.

52. Kalmuss D, Austrian K. Real Men do.Real Men Don't: Young Latino and African American Men's Discourses Regarding Sexual Health Care Utilization. American Journal of Men's Health. 2010 September; 4(3): p. 218 - 230.

53. Koster A, Kemp J, Offei A. Utilization of Reproductive Health Services by Adolescent Boys in the Eastern Region of Ghana. African Journal of Reproductive Health. 2001 April; 5(1): p. 40 - 49.

54. Pearson S, Makadzange P. Help-seeking behaviour for sexual-health concerns: a qualitative study of men in Zimbabwe. Culture, Health & Sexuality. 2008 May; 10(4): p. 361-376.

55. Varga CA. The Forgotten Fifty Percent: A Review of Sexual and Reproductive Health Research and Programs Focuesd on Boys and Young Men in Sub-Saharan Africa. African Journal of Reproductive Health. 2001 December; 5(3): p. 175 - 195.

56. Magesa DJ, Mtui LJ, Abdul M, Kayange A, Chiduo R, Leshabari MT, et al. Barriers to men who have sex with men attending HIV related health services in Dar es Salaam, Tanzania. Tanzania Journal of Health Research. 2014 April; 16(2).

57. Rosenstock IM. Why People Use Health Services. The Milbank Quarterly. 2005: p. 1 - 32.

58. Galdas PM, Cheater F, Marshall P. Men and health help-seeking behaviour: literature review. Journal of Advanced Nursing. 2005 March; 49(6): p. 616-623.

59. Izugbara OC. Notions of sex, sexuality and relationships among adolescent boys in rural southeastern Nigeria. 2004 April; 4(1): p. 63-79.

60. Izugbara OC, Modo FN. Risks and benefits of multiple sexual partnerships: Beliefs of rural Nigerian adolescent males. American Jornal of Men’s Health. 2007 September; 1(3): p. 197-207.

61. Oladepo O, Brieger WR. Sexual Attitudes and Behaviour of Male Secondary School Students in Rural and Urban Areas of Oyo State, Nigeria. African Journal of Reproductive Health. 2000 October; 4(2): p. 21-34.

62. Education as a Vaccine. Expanding Youth Friendly Reproductive Health Services for Young People in Akwanga, Nasarawa State. Baseline Report. 2012. Unpublished Report.

63. Education as a Vaccine. Y-Access Project (Benue State): SRH Service Uptake Data from Partner Health Facilities. 2015. Unofficial Unpublished Report.

64. Odimegwu C, Adedini S. Masculinity and Health in Nigeria: Vulnerabilities, Indifference and Options. Gender & Behaviour. 2013 November; 11(2): p. 5707 - 5719.

65. Pearson S. Promoting sexual health services to young men: findings from focus group discussions. Journal of Family Planning and Reproductive Health Care. 2003 March; 29(3): p. 194 - 198.

66. Pathfinder International Tanzania. Integrating Youth-Friendly Sexual and Reproductive Health Services in Public Health Facilities: A Success Story and Lessons Learned in Tanzania. 2015. African Youth Alliance Project, Tanzania.

67. Biddlecom AE, Munthali A, Susheela S, Woog V. Adolescents' views of and preferences for sexual and reproductive health services in Burkina Faso, Ghana, Malawi and Uganda. African Journal of Reproductive Health. 2007 December; 11(3): p. 99-100.

68. Mmari KN, Oseni O, Fatusi AO. STI Treatment Seeking Behaviours among Youth in Nigeria: Are There Gender Differences? International Perspectives on Sexual and Reproductive Health. 2010 June; 36(2): p. 72 - 79.

69. United Nations. Report of the International Conference on Population and Development. In Program of Action; 1995; New York. p. 27 (4.24 - 4.29).

70. Kato-Wallace J, Baker G, Sharafi L, L M, G L. Adolescent boy and Young Men: Engaging them as supporters of Gender Equality and Health and Understanding their Vulnerabilities. Washington DC: Promundo US; UNFPA; 2016.

71. Darroch JE, Singh S, Woog V, Bankole A. Research Gaps in Adolescent Sexual and Reproductive Health. 2016. Guttmacher Institute, New York.

72. Hausmann-Muela S, Ribera JM, Toomer E, Grietens KP. The PASS-model: a model for guiding health-seeking behavior and access to care research. Malaria Reports. 2012 December; 2(e3).

73. Andersen R. Revisiting the Behavioral Model and Access to Medical Care: Does it Matter? Journal of Health and Social Behavior. 1995 March; 36(1): p. 1-10.

74. Godswill J. Adolescents' Sexual and Reproductive Health Challenges in Northern Nigeria: Road map to effective interventions. International Letters of Social and Humanistic Sciences. 2014 March; 24(1): p. 1 - 11.

75. Izugbara OC. Home-based Sexuality Education: Nigerian parents discussing sex with their children. Youth & Society. 2008 June; 39(4): p. 575 - 600.

76. Oyediran KA, Feyisetan OI, Akpan T. Predictors of Condon-use among Young Never-married males in Nigeria. Journal of Health, Population and Nutrition. 2011 June; 29(3): p. 273 - 285.

77. Folayan MO, Adebajo S, Adeyemi A, Ogungbemei KM. Differences in Sexual Practices, Sexual Behaviour and HIV Risk Profile between Adolescents and Young Persons in Rural and Urban Nigeria. PLoS ONE. 2015 July; 10(7).

78. Olaleye AO, Anoemuah OO, Ladipo OA, Delano GE, Idowu GF. Sexual behaviours and reproductive health knowledge among in-school young people with disabilities in Ibadan, Nigeria. Health Education. 2007; 107(2): p. 208 - 218.

79. Folayan MO, Odetoyinbo M, Brown B, Harrison A. Differences in sexual behaviour and sexual practices of adolescents in Nigeria based on sex and self-reported HIV status. Reproductive Health. 2014 December; 11(83).

80. Fatusi AO, Blum RW. Predictors of early sexual initiation among a nationally representative sample of Nigerian adolescents. BMC Public Health. 2008 April; 8(136).

81. Federal Ministry of Health. Nigeria Integrated Biological and Behavioural Surveillance Survey 2010. 2010. IBBSS.

82. Esmail S, Darry K, Walter A, Heidi K. Attitudes and perceptions towards disability and sexuality. Disability and Rehabilitation. 2010 February; 32(12): p. 1148-1155.

83. Sabin L, Beard J, Agyarko-Poku T, DeSilva MB, Green KWS, Esang M, et al. Exploring the beliefs, attitudes and behaviours of MSM engaged in substance use and transactional sex in Ghana. Research. Boston: Boston University, Center for Global Health and Development; 2013. Report No.: GHH-I-00-07-00023-00.

84. Sekoni AO, Ayoola OO, Somefun EO. Experiences of social oppression among men who have sex with men in a cosmopolitan city in Nigeria. HIV/AIDS - Research and Palliative Care. 2015 January; 7.

85. Maart S, Jelsma J. The sexual behaviour of physically disabled adolescents. Disability and Rehabilitation. 2010 July; 32(6): p. 438 - 443.

86. Atuyambe LM, Kibira SPS, Bukenya J, Muhumuza C, Apolot E. Understanding sexual and Reproductive Health Needs of adolescents: evidence from a formative evaluation in Wakiso district, Uganda. Reproductive Health. 2015 April; 12(35).

87. Institute of Medicine. Health Literacy: A Prescription to End Confusion Washington, DC: National Academies Press; 2004.

88. Onotai LO. Impact of Health Literacy Status on Health Outcomes. The Nigerian Health Journal. 2008 July - December; 8(3 - 4): p. 32-38.

89. Nutbeam D. Health Literacy as a public health goal: a challenge for contemporary health education and communication strategies in the 21st century. Health Promotion International. 2000; 15(3): p. 259 - 267.

90. Izugbara OC. The Socio-Cultural context of Adolescents' notions of sex and sexuality in Rural South-Eastern Nigeria. Sexuality. 2005; 8(5).

91. Ojo O, Arasiola J, Fatusi A, Akintomide A. Pattern and socio-demographic correlates of parent-child communication on sexual and reproductive health issues in South West Nigeria: a mixed method study. The African Symposium (online Journal of African Educational Research Network). 2011 December; 11(2).

92. Amuyunzu-Nyamongo M, Biddlecom AE, Ouedraogo C, Woog V. Qualitative Evidence on Adolescents' views on Sexual and Reproductive Health in Sub-Saharan Africa. Occasional Report. New York: The Alan Guttmacher Institute; 2005. Report No.: 16.

93. Huaynoca S, Chandra-Mouli V, Yaqub NJ, Denno DM. Scaling up comprehensive sexuality education in Nigeria: from national policy to nationwide application. Sex Education. 2014; 14(2): p. 191 - 209.

94. Federal Ministry of Health. National HIV & AIDS and Reproductive Health Survey 2012 (NARHS Plus). 2013. NARHS.

95. Osanyin Y, OneWorldUK. Report on Assessment of Facilities Providing Youth Freindly Health Services in Nigeria. Health Facility Assessment. One World UK; 2010.

96. Education as a Vaccine, UNFPA Nigeria. Expanding Access to Sexual and Reproductive Health Services for Young People in Cross River and Benue States. 2014. Unpublished Report.

97. Godia PM, Olenja JM, Hofman JJ, Van den Broek N. Young people's perception of sexual and reproductive health services in Kenya. BioMed Health Services Research. 2014 April; 14(172).

98. Education as a Vaccine, Benue State Agency for AIDS Control, UNICEF Nigeria. Comprehensive HIV Service Delivery for Adolescents and Young People in Benue State Project. 2015. Unpublished Report.

99. Izugbara OC. Masculinity scripts and abstinence-related beliefs of rural Nigerian male youth. The Journal of Sex Research. 2008 August; 45(3): p. 262 - 276.

100. Asu OT, Gever ID, Joshua NP. African cultural practices and health implications for Nigeria rural development. International review of management and business research. 2013 March; 2(1).

101. Moyo M, Goodyear-Smith FA, Weller J, Gillian R, Shulruf B. Healthcare practitioners' personal and professional values. Advances in Health Sciences Education. 2016 May; 21(2): p. 257 - 286.

102. White Ribbon Alliance. Respectful Maternity Care: A nIgeria-focused Health Workers' Training Guide. 2015. Washington, DC: Futures Group, Health Policy Project.

103. Ahanonu EL. Attitudes of Healthcare Providers towards Providing Contraceptives for Unmarried Adolescents in Ibadan, Nigeria. Journal of Family and Reproductive Health. 2014 March; 8(1).

104. Okonkwo AD, Okonkwo UP. Patent medicine vendors, community pharmacists and STI management in Abuja Nigeria. African Health Sciences. 2010; 10(3): p. 253 - 265.

105. Amaghionyeodiwe LA. Determinants of the choice of health care provider in Nigeria. Health Care Manage Sci. 2008 October; 11: p. 215-227.

106. National Bureau of Statistics; Federal Ministry of Youth Development. 2012 National Baseline Youth Survey. 2013. Final Report.

107. Langhaug LF, Cowan FM, Nyamurra T, Power R. Improving young people's access to Reporductive Health Care in rural Zimbabwe (on Behalf Of The Regai Dzive Shiri Study Group). AIDS Care. 2003; 15(2): p. 147 - 157.

108. Fagbamigbe AF, Idemudia ES. Barriers to antenatal care use in Nigeria: evidences from non-users and implications for maternal health programming. BMC Pregnancy and Childbirth. 2015 April; 15(95).

109. Nwakeze NM, Kandala NB. The spatial distribution of health establishments in Nigeria. African Population Studies. 2011; 25(2).

110. Afolabi M, Daropale V, Irinoye A, Adegoke A. Health-seeking behaviour and student perception of health care services in a University community in Nigeria. Health. 2013 April; 5(5): p. 817-824.

111. Federal Ministry of Health. Nigeria Family Planning Blueprint. 2014. Scale-up Plan.

112. Arnold R, Maticka-Tyndale E, Tenkorang E, Holland D, Gaspard A, Luginaah I, et al. Evaluation of School- and Community-Based HIV Prevention Interventions with Junior Secondary School Students in Edo State Nigeria. African Journal of Reproductive Health. 2012 June (Special Edition); 16(2): p. 103 - 125.

113. Federal Ministry of Health. Guidelines for Young Persons' Participation in Research and Access to Sexual and Reproductive Health Services in Nigeria. 2014. Consensus Document.

114. Lane J, Wolf T, Sanford S, Hagopian A, Aniekwu N, Katz A. Age of Consent for HIV Testing and Counselling in Nigeria. 2015. AIDS Law Brief.

115. Allman D, Adebajo S, Myers T, Odumuye O, Ogunsola S. Challenges for the sexual health and social acceptance of men who have sex with men in Nigeria. Culture, Health & Sexuality. 2007 February; 9(2): p. 153-168.

116. Sheehy M, Tun W, Vu L, Adebajo S, Otibho O, Andrew K. High levels of bisexual behavior and factors associated with bisexual behavior among men having sex with men (MSM) in Nigeria. AIDS Care. 2014 January; 26(1): p. 116 - 122.

117. Federal Ministry of Health. National Reproductive Health Policy and Strategy to achieve Quality Reproductive and Sexual health for all Nigerian. Abuja:; 2001.

118. Federal Ministry of Health. National Policy on the Health and Development of Adolescents & Young People in Nigeria. 2007. Abuja.

119. Federal Ministry of Health. National Strategic Framework on the Health and Development of Adolescents and Young People 2007 - 2011. Abuja:; 2007.

120. Government of Nigeria. National Policy on HIV/AIDS. 2009. National Agency for the Control of AIDS (NACA).

121. Guttmacher Institute. Guttmacher Institute. [Online].; 2016 [cited 2016 June 30. Available from: https://www.guttmacher.org/sites/default/files/report_pdf/guttmacherstrategicplan2016.pdf.

122. International Planned Parenthood Federation (IPPF). http://www.ippf.org/sites/default/files/ippf_strategicframework.pdf. [Online].; 2016 [cited 2016 July 30. Available from: http://www.ippf.org/sites/default/files/ippf_strategicframework.pdf.

123. UNFPA. UNFPA. [Online].; 2014 [cited 2016 July 30. Available from: http://www.unfpa.org/sites/default/files/resource-pdf/Strategic%20Plan%2C%202014-2017.pdf.

124. Pulerwitz J, Baker G, Segundo M, Nascimento M. Promoting more gender-equitable norms and behaviours among young men as an HIV/AIDS prevention strategy. 2006. Horizons Final Report. Washington, DC: Population Council.

125. Jewkes R, Nduna M, Levin J, Jama N, Dunkle K, Wood K, et al. Evaluation of Stepping Stones: A gender transformative HIV prevention intervention. 2007 March. Gender & Health Research Unit, Medical Research Council. Pretoria, South Africa.

126. Jewkes R, Nduna M, Levin J, Jama N, Dunkle K, Khuzwayo N, et al. A cluster randomized-controlled trial to determine the effectiveness of Stepping Stones in preventing HIV infections and promoting safer sexual behaviours amongst youths in the rural Eastern Cape, South Africa: trial design, methods and baseline findings. Tropical Medicine & International Health. 2006 January; 11(1): p. 3 - 16.

127. Okonfua FE, Coplan P, Collins S, Oronsaye F, Ogunsakin D, Ogonor JT, et al. Impact of an intervention to improve treatment-seeking behavior and prevent sexually transmitted diseases among Nigerian youths. International Journal of Infectious Disease. 2003 March; 7(1): p. 61-73.

128. Al-Sabir A, Alam MA, Hossain MI, Rob U, Khan M. Integration of reproductive health services for men in health and welfare centers in Bangladesh. 2004. Population Council/Frontiers Washington DC.