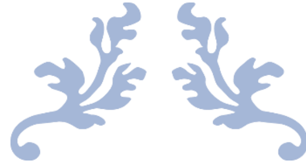

FACTORS INFLUENCING ADOLESCENTS ACCESS AND UTILISATION OF PREVENTIVE SEXUAL AND REPRODUCTIVE HEALTH (PSRH) SERVICES IN KENEMA DISTRICT, EASTERN SIERRA LEONE: A LITERATURE REVIEW

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57th Master of Public Health/International Course in Health Development
14 September 2020 - 03 September 2021

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Factors influencing adolescents access and utilization of Preventive Sexual and Reproductive Health (PSRH) services in Kenema District, Eastern Sierra Leone: A literature review

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

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

The thesis (Factors influencing adolescents access and utilization Preventive Sexual and Reproductive (PSRH) services in Kenema District, Eastern Sierra Leone: A literature review) is my own work

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57th Master of Public Health/International Course in Health Development (MPH/ICHD)
14 September 2020 - 3 September 2021
KIT (Royal Tropical Institute) Vrije Universiteit Amsterdam
Amsterdam, The Netherlands

September 2021

Organized by:
KIT (Royal Tropical Institute)
Amsterdam, The Netherlands

In co-operation with:
Vrije Universiteit Amsterdam (VU)
Amsterdam, The Netherland

Table of Contents

Introduction .... *vii*

CHAPTER ONE .... *- 1 -*

1.1 Administration and Governance .... - 1 -

1.2 Education .... - 2 -

1.3 The Health care system and service delivery .... - 2 -

1.4 Sexual and Reproductive health services .... - 3 -

1.5 Adolescent Sexual and Reproductive Health .... - 4 -

1.6 Adolescents' sexual and reproductive health and rights .... - 4 -

CHAPTER TWO .... *- 6 -*

2.0 Problem statement/Justification .... - 6 -

2.1 Scope .... - 8 -

2.2 Research objective: .... - 8 -

2.3 Specific objectives .... - 8 -

2.4 Methodology .... - 9 -

2.5 Study area .... - 9 -

2.6 Inclusion and exclusion criteria .... - 10 -

2.7 Exclusion criteria .... - 10 -

2.8 Search Strategy .... - 10 -

Table 1: Keywords .... - 10 -

2.9. Conceptual Framework .... - 11 -

2.10 Study limitations .... - 12 -

CHAPTER THREE .... *- 13 -*

3.0 Results .... - 13 -

3.1 Approachability/Ability to perceive .... - 13 -

3.1.1 Approachability .... - 13 -

3.1.2 Ability to perceive .... - 14 -

3.2 Acceptability/ability to seek .... - 16 -

3.2.1 Acceptability .... - 16 -

3.2.2 Ability to seek .... - 17 -

3.3 Availability and accommodation/Ability to reach .... - 18 -

3.3.1 Availability and accommodation .... - 18 -

3.3.2 Ability to reach .... - 20 -

3.4 Affordability/ability to pay .... - 20 -

3.4.1 Affordability .... - 20 -

3.4.2 Ability to pay .... - 21 -

3.5 Appropriateness/Ability to engage .... - 22 -

3.5.1 Appropriateness - 22 -
3.5.2 Ability to engage - 23 -
CHAPTER FOUR - 24 -
4.1 Case studies on Best Practices - 24 -
4.2 Ghana case study - 24 -
4.3 Ethiopia case study - 25 -
4.4 Uganda case study (Randomized controlled Trial) - 26 -
4.5 China intervention case study - 26 -
4.6 Chile intervention case study - 26 -
CHAPTER FIVE - 28 -
5.0 Discussion - 28 -
5.1 Approachability/Ability to perceive - 28 -
5.1.1 Approachability - 28 -
5.1.2 Ability to perceive - 29 -
5.2 Acceptability/ability to seek - 29 -
5.2.1 Acceptability - 29 -
5.2.2 Ability to seek - 30 -
5.3 Availability and accommodation/Ability to reach - 31 -
5.3.1 Availability - 31 -
5.3.2 Ability to reach - 32 -
5.4 Affordability/ability to pay - 32 -
5.4.1 Affordability - 32 -
5.4.2 Ability to pay - 32 -
5.5 Appropriateness/Ability to engage - 33 -
5.5.1 Appropriateness - 33 -
5.5.2 Ability to engage - 33 -
5.6 Reflection on Levesque et al Conceptual framework (2013) - 33 -
5.7 Limitations - 34 -
5.8 Strengths - 34 -
Chapter Six - 35 -
6.1 Conclusion and recommendations - 35 -
6.1.2 Conclusion - 35 -
6.2 Recommendations - 36 -
Annexes - 38 -
7.1 Geography - 38 -
7.2 Demography - 38 -
7.3 Ethnic and religious groups - 38 -
7.4 Health care financing - 38 -
7.5 Health insurance - 39 -
Reference list: - 40 -

List of table

Table 1: Keywords.. - 10 -

List of figures

Figure 1: Map of Sierra Leone with administrative boundaries. (3) ....- 1 -
Figure 2: Conceptual framework of access to health care (Source): Levesque et al. International Journal for Equity in Health 2013, 12:1 (18). .... - 12 -

List of abbreviations

AIDS	Acquired Immune Deficiency Syndrome
APC	All People's Party
ASRH	Adolescent sexual and reproductive health
CRC	Convention on the Right of the Child
CSE	Comprehensive Sexual Education
DHMT	District Health Management Team
DMO	District Medical Officer
EVD	Ebola Virus Disease
FGM	Female Genital Mutilation
FHCI	Free Health Care Initiative
HCW	Health Care Worker
HIV	Human immunodeficiency Virus
ICPD	International Conference on Population and Development
IRC	International Rescue Committee
LMIC	Low-middle-income Countries
MOHS	Ministry of Health and Sanitation
MSI	Marie Stopes International
MSF	Medecins Sans Frontieres
NGO	Nongovernmenta Organization
NHSSP	National Health Sector Strategic Plan
SDG	Sustainable Development Goals
NSRTP	National Strategy for Reduction of Teenage Pregnancy
SRH	Sexual and reproductive health
SSA	Sub-Saharan Africa
SLPP	Sierra Leone People's Party
SLDHS	Sierra Leone Demographic Health Survey
WHO	World Health Organization
CMO	Chief Medical Officer
OOP	Out-of-pocket
PHU	Peripheral Health Unit
POA	Plan of Action

PSRH	Preventive sexual and reproductive health
RMNCAH	Reproductive, Maternal, Newborn, Child and Adolescent Health
STI	Sexually Transmitted Infections
CHC	Community Health Centre
CHP	Community Health Post
MCHP	Maternal and Child Health Post
UNAIDS	United Nations Programme on HIV/AIDS
UNFPA	United Nations Fund Population Fund
UN	United Nations
USD	United States Dollar

Abstract

Background: Adolescents (15-19 years) constitute 24.3% of the national population. Adolescents in Africa are at risk of unintended pregnancy, acquiring sexually transmitted infections (STI), including HIV/AIDS due to various reasons. Kenema district in Siera Leone has the highest teenage pregnancy rate and utilisation of preventive sexual and reproductive health (PSRH) is low.

Objective: The objective of this study is to explore the factors that influence adolescents' access to PSRH services in Siera Leone and specifically Kenema.

Method: A literature review was done using the Levesque et al 2013 conceptual framework to guide data collection and analysis.

Results: Adolescents in Sierra Leone and Kenema district face barriers to access PSRH services from both the supply and demand side. They lack knowledge about where and when to obtain PSRH services and socio-cultural norms fail to recognise their sexual and reproductive rights. On the supply side, there is a shortage of trained healthcare workers and health facilities are not adolescent-friendly, resulting in a lack of privacy and confidentiality, which in turn influences adolescents' access to SRH services. Healthcare workers tend to have negative and discriminating attitudes toward adolescents.

Conclusion: Addressing the barriers at the health system side, including training of health care workers and improving privacy, confidentiality and making the physical environment adolescent-friendly leads to a better attendance of PSRH services by adolescents. The more education adolescents receive, the more autonomy they have in decision making. Investing in health system and the socio-cultural environment in Kenema district is likely to contribute to better utilization of PSRH services by adolescents. Hence, sexual reproductive health policy should pay attention to the needs of adolescents based on evidence.

Keywords:

Adolescents/youth/young people, contraception/contraceptives, HIV/AIDS, sexual and reproductive health, Sierra Leone, sub-Saharan Africa, and low-middle-income countries (LMIC), approachability, acceptability, availability, affordability, and appropriateness.

Word count: 11,015.

Introduction

I am a Sierra Leonean with a Community Health Nursing training and I am also trained in clinical and community medicine. I have more than 10 years of work experience with the Ministry of Health and Sanitation (MOHS) in Sierra Leone. I also have international work experience with Medecins Sans Frontiers (MSF) in a number of African and Asian countries, mostly in humanitarian settings. I'm married with children and I live in Sierra Leone with my family.

I have been passionate about sexual and reproductive health (SRH) throughout my professional career, and especially working with an international staff. I have learned over the years that in any humanitarian crisis, women, girls, boys, and children are more affected than men. Therefore, my motivation to write a thesis on adolescents' sexual and reproductive health (ASRH) is to enhance my knowledge and understanding of the SRH programming. I consider adolescent sexual and reproductive health (SRH) pivotal in the implementation of SRH services for all age groups.

Adolescence is a period, during which, adolescents transition from childhood to adulthood. During this period, they experience multiple changes at emotional, cognitive, behavioral, and physical level. Adolescence refers to young people from (10-19) years. This is a critical period with challenges and risk behaviors that can result in adverse health outcomes, which is a public health concern (1). Adolescents require well designed and targeted interventions and services to protect and support their present, and future well-being and to protect future generations. I aspire to explore the challenges and solutions to problems in implementing the adolescents' SRHR services in Africa and specifically in Sierra Leone

CHAPTER ONE

1.0 Background

This chapter provides background information on the national geography, the administrative structure, the demographic and health system, and service delivery in Sierra Leone. In addition, it briefly describes the maternal, newborn, child, and adolescents' health policy environment.

1.1 Administration and Governance

The country is divided into four administrative regions; the Eastern, Southern, Northern provinces, and the Western Area where the capital city Freetown, is located. Over 70% of the country's population live in a rural setting in the provinces, while the rest of the population lives in the Western Area, where an increase in urbanisation has been observed in recent times. The provinces are subdivided into 16 Districts, but not evenly distributed. The northern province has the highest number of districts (6 districts), the Eastern province has 3 districts, and the southern province has 3 districts respectively. The Districts are further divided into 152 chiefdoms and the chiefdoms have towns and villages which serve as the lowest administrative levels(2). The country is a democratic country with two major political parties; the Sierra Leone People's Party (SLPP) and the All People's Party (APC). In addition, there are several smaller political parties.

Figure 1: Map of Sierra Leone with administrative boundaries. (3)

1.2 Education

The Sierra Leone Demographic Health Surveys (SLDHS) 2019 report indicates that (4):

- 29% of males and 39% of females above 18 years have no formal education.
- Urban residents are more likely to be educated than the rural residents with 25% of females in an urban area with no education compared to 50% females in the rural area with no education.
- Among the males, 16% of the urban residents have no education compared to 38% of the males in the rural.
- Wealth is also a determinant of education with 10% of women in the highest wealth quintile, having more than secondary education and 18% with no education. And 57% of women in the lowest wealth quintile have no education (4).

The literacy level for young adolescents, 10 years and above, is higher among boys at 59.4% as compared to 43.9% for girls. The overall literacy level in the country is higher among men at 62% as compared to women at 43%. The proportion of women in Kenema District, who completed secondary education or higher, is 7% as compared to the females in the urban area with 24% (4).

1.3 The Health care system and service delivery

The organisation and structure of the MOHS thrives at different levels; nationally with the Minister of Health as the political leader with two deputies. There are two Chief Medical Officers as professional heads, one for primary health care and one for secondary health care, each with a deputy. At the district level, the District Health Management Team (DHMT) is headed by the District Medical Officer (DMO). The DMO is responsible for the management of the district health delivery system, in collaboration with the local council, for efficiency(2). In addition to the public health sector, there are multiple other key players involved in the healthcare service delivery system, such as private-for-profit, private for-non-profit, informal and traditional medicine practices.

Healthcare is delivered at three levels: primary, secondary, and tertiary. The primary level is traditionally referred to as the peripheral health unit (PHU). It is the first level of contact with the health system, serving as gatekeepers, comprising Maternal and Child Health Post (MCHP), Community Health Post (CHP), and the Community Health Centre (CHC) (5). The CHC is the first referral unit at the primary level. The next level is the secondary level with the district hospitals and then the tertiary level at the provincial and national levels. At the national level, there is a specialised tertiary referral hospital.

It is estimated that 50% of the available skilled healthcare workers in the public sector serve only 16% of the population. According to the Basic Essential Package of Health Services (BEPHS), the entire country has 185 doctors in the public sector. 288 midwives are serving 48% of the population in Freetown. The quality of care, therefore, remains a major challenge (6).

The government has no overview of the private sector service delivery and their coverage, as they don't provide data to the health management information system (HMIS). However, the government considers its role in the healthcare system both at secondary and tertiary levels as essential (2).

1.4 Sexual and Reproductive health services

Sierra Leone government is signatory to different global commitments to end maternal, child, newborns, and adolescent deaths and to improve their well-being. It is also signatory to the Sustainable Development Goals (SDG) 2030 and the Maputo call to Action(7). SRH services should be provided at all public health facilities across the country. There are also non-governmental organisations in the country implementing SRH services, which are the United Nations Population Fund (UNFPA), Marie Stopes Internal (MSI), International Rescue Committee (IRC), Plan International, and some private-for-profit institutions.

The country has no stand-alone adolescents health policies addressing adolescents' sexual and reproductive health. The adolescent health policy is included in the existing National Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCAH) Policy/Strategy (2017-2021). The vision of this policy is that there should be zero preventable deaths of women, newborns, children, and adolescents and would have their SRH needs to be met(8). The policy outlines the following strategies to improve adolescents' health and well-being:

- Supporting a comprehensive information package including comprehensive sexuality education and health services.
- Creation of an enabling environment for adolescents to access and utilise SRH information and services including access to contraception and HIV prevention and management of sexually transmitted infections (STIs).
- Promote advocacy to eliminate harmful practices including female genital mutilation (FGM) and early child marriage.

- Strengthen meaningful engagement and the participation of adolescents in designing a program that targets them and strengthens competent healthcare providers to provide adolescents'-friendly health services.

1.5 Adolescent Sexual and Reproductive Health

A peer review report on Demographic Health Surveys in sub-Saharan Africa (SSA) countries, reveals that in Sierra Leone about (11.3%) of adolescent girls and (20.4%) of boys were having multiple sexual partners, respectively. The same study, reports that (93.2%) girls and (84.5%) boys were having unprotected sexual intercourse respectively (9). Comparing the data with other SSA countries, it shows that the proportion of adolescents girls, involved in unprotected sex in Sierra Leone, was (93.2%) as compared to (32.6%) in Gabon. The proportion of condomless sex for boys was (19.8%) in Gabon and (84.5%) in Sierra Leone. The report also indicates that unprotected sex among adolescents was strongly associated with place of residence, household wealth, and years of education. This means that the odds of adolescents residing in an urban area, living in a wealthy household, and with over six years of education having unprotected sex, was significantly lower than their rural poor and less educated counterparts (9).

Box 1. Guttmacher Lancet Commission, The Lancet, 2018. Integrated definition of sexual and reproductive health and rights
Sexual and reproductive health is a state of physical, emotional, mental, and social well-being in relation to all aspects of sexuality and reproduction, not merely the absence of disease, dysfunction, or infirmity. Therefore, a positive approach to sexuality and reproduction should recognize the part played by pleasurable sexual relationships, trust, and communication in the promotion of self-esteem and overall well-being. All individuals have a right to decide to govern their bodies and access services that support that right. Achievement of sexual and reproductive health relies on the realization of sexual and reproductive rights, which are based on the human rights of all individuals to:

- Have their bodily integrity, privacy, and personal autonomy respected
- Freely define their own sexuality, including sexual orientation and gender identity and expression
- Decide whether and when to be sexually active;
- Choose their sexual partner
- have safe and pleasurable sexual experiences;
- Decide whether, when and whom to marry;
- Decide whether, when, and by what means to have a child or children, and how many children to have;
- Have access over their lifetimes to the information, resources, services, and support necessary to achieve all of the above, free from discrimination, coercion, and exploitation and violence.

1.6 Adolescents' sexual and reproductive health and rights

Following the International Conference on Population and Development (ICPD, 1994), the Fourth World Conference on Women in Beijing China supported the ICPD Programme of Action (POA) definition of human rights of adolescents as their right to have control over and decide freely and responsibly on matters relating to their sexuality, free of coercion,

discrimination, and violence. They also recognised and recommended an equal relationship between women and men in all issues, relating to sex and reproduction such as full respect for bodily integrity, and consent, and shared responsibility for sexual behavior and its outcomes. This concept is detailed in Guttmacher Lancet Commission as stated in (Box 1) (10).

Though the sexual and reproductive right of the adolescents allows them to have control over their sexuality and body's integrity, socio-cultural norms, national laws, and policies fail to allow the adolescents to achieve their full rights. In this regard, many countries in SSA continue to refuse to accept the adolescent girls' sexuality and as a result access to sexuality information is low for adolescents (11).

In many SSA countries, ASRH inequalities are enshrined in cultural, social, and economic domains. It influences the adolescents' prospects, decision-making power, and autonomy (12). Gender inequality and harmful gender norms continue to create barriers to achieving adolescents' SRHR. Adolescent girls are expected to conform to certain gender norms and failure to do so exposes them to social pressure and discrimination. Gender inequality is a contributing factor to early pregnancy and gender-based violence as well as high prevalence of HIV among adolescent girls (11).

CHAPTER TWO

This chapter provides information on the problems adolescents encounter as a result of lack of access and utilisation of sexual and reproductive health information and services. It also explains the justification for the thesis topic, describes the study objectives, the methodology, and the selected conceptual framework.

2.0 Problem statement/Justification

It is estimated that about 13 million adolescent girls (15-19) years give birth every year, which is 11% of all births globally, and 95% of these births take place in low- middle-income countries (LMICs) (13). Adolescent childbirth is associated with high health risks for both the child and the mother. Globally, complications of pregnancy and childbirth is the second leading cause of death among adolescent girls. Research indicates that adolescent girls are more likely to die during pregnancy or childbirth than women above 20 years. Babies born to adolescent women are at higher risk of developing neonatal complications and dying than babies born to women of 20 years and older (13).

Early adolescent childbirth costs are high both in terms of maternal and infant mortality and morbidity, as well as the social and economic costs. Teenage pregnancy contributes to adolescent girls dropping out of school, leaving them with low levels of education, and limited future employment opportunities, which result in poverty among young women and their families and promotes gender inequality (13). About 3.2 million adolescents in LMICs undergo unsafe abortion every year, as a result of unintended pregnancies, and unsafe abortion is among the leading causes of maternal death among the adolescent in SSA (1). A study has shown that if the unmet need for modern contraceptives among adolescents could be met, 3.2 million abortions and 5,600 maternal mortalities could be prevented (14). The Sierra Leone Demographic Health Survey 2019 (SLDHS, 2019) estimates that adolescents' pregnancy accounts for 21% of all pregnancies and that about 82.2% of the pregnancies were unintended. In Kenema District the proportion of teenage pregnancy is 27%, which is above the national level. A study in Sierra Leone shows that 25% of all maternal deaths are among adolescent girls (15-19). The adolescent fertility rate in the country is estimated at 102/1000 girls, while the global adolescent fertility rate is 42 births/1000 girls (15,16). In Sierra Leone, the unmet need for modern contraceptives among the adolescent is 28% and the contraceptive prevalence rate is 21%. There is no

disaggregated data for this age group in Kenema District however, the modern contraceptive prevalence rate for women 15-49 years is 19% and the unmet need for contraception is 21%.

The HIV prevalence among adolescent girls of 15-19 years at the national level is 0.5% and in Kenema district the HIV prevalence rate is estimated at 1.2%. Nationwide, only 26.5% of adolescent girls aged 15-19 only about 26.5% have comprehensive knowledge about HIV transmission and prevention nationwide (4).

Adolescents' access to and utilisation of SRH would prevent unintended pregnancies, reduce maternal deaths and morbidity and reduce the need for unsafe abortion and will help keep girls in school, which is a protective factor for their well-being. Additionally, access to and proper use of male and female condoms, would provide dual protection against unwanted pregnancy and STIs including HIV among adolescents (14).

A study has shown that if adolescents have access to the appropriate and accurate reproductive health information and services, which is their fundamental right, they can protect their health and the health of the future generation. Adolescents represent the future parents, educators, workers, and leaders (13).

Sierra Leone is a signatory to the International Conference on Population and Development (ICPD)/Programme of Action (POA) and the Sustainable Development Goals (SDG) and is fully committed, to improve the adolescents' sexual and reproductive health in the country. The country has developed a national RMNCAH policy since 2016, as well as a National Strategy for the Reduction of Adolescent Pregnancy and Child Marriage (2018-2022). However, adolescents face challenges in accessing SRH services, as manifested with a high proportion of unintended pregnancy, high fertility rate and high unmet need for contraception and proportion of adolescents girls' school dropout rate.

To gain a deeper understanding of why adolescents face challenges accessing SHR services in Sierra Leone and specifically in Kenema district, this thesis seeks to explore the access to and utilisation of PSRH from supply and demand sides. The findings of the thesis are intended to inform the Ministry of Health and Sanitation (MOHS) and the DHMT Kenema to provide appropriate, acceptable, and affordable, and quality PSRH services in the district using evidence base best practices.

2.1 Scope

Adolescents are defined as people aged 10-19 years old(1). However, this study focuses on adolescents aged 15-19 years, because the Sierra Leone Demographic Health Surveys (SLDHS) does not interview young adolescents aged (10-14) years on sexual and reproductive health issues.

The preventive sexual and reproductive health (PSRH) services in this study refers to such services as counselling, the provision of sexual and reproductive health information, health education, and family planning services including contraception. It also refers to the integration of HIV testing and diagnosis and management of STIs into the SRH services. The reason for focusing on the preventive aspect of SRH services for adolescents is that preventing unplanned pregnancies, HIV, and STIs helps adolescents to grow up as healthy adults and the intervention seems cost-effective.

The study does not cover comprehensive sexuality education (CSE) though it is one of the key components of the adolescents' SRHR, as this is a new concept in Sierra Leone and is yet to be implemented. It does not cover access to safe abortion and post-abortion care as abortion is illegal in the country. It does not cover, antenatal, delivery, and postnatal care and sexual violence.

2.2 Research objective:

The main objective of this thesis is to explore the factors that influence adolescents‘ access and utilisation of Preventive Sexual and Reproductive Health Services in Kenema District Sierra Leone.

2.3 Specific objectives

1. To explore the status of the preventive sexual and reproductive health services for adolescents in Kenema District, Sierra Leone, with regards to approachability, acceptability, availability, affordability, and appropriateness (supply-side).
2. To explore which individual factors influence adolescents’ access and utilisation of PSRH services (demand-side) in Kenema District, Sierra Leone.
3. Analyse best practices.

4. To inform policy to address barriers influencing adolescents' access and utilisation of PSRH services and to reinforce positive factors to implement evidence-based adolescents PSRH service in Kenema District.

2.4 Methodology

To fulfil the study objectives, I conducted a scientific literature review using Google Scholar, VU Library, PubMed, and Scopus database, Cochrane Library. I reviewed published and unpublished articles and I examined national documents such as the Demographic Health Survey, national census report, and the National Health Sector Strategic Plan 2017-2021. As there was limited literature available on this topic, for Sierra Leone and Kenema district, I included literature from SSA, West and Central Africa countries, and relevant literature from other low-and middle-income countries (LMICs). I also used documents from global health development agencies such as WHO, UNAIDS, and UNFPA, to triangulate the findings. I used the reference list of reviewed papers for Snowball retrieval of texts, to search for more articles until the information became saturated.

2.5 Study area

Kenema district is in the Eastern Province and the city is called Kenema, which is the third-largest city in the country. The district has ethnic diversity with the Mende people making up the largest ethnic group. The district has a population of 440,883 inhabitants and the economic activities include agriculture, which makes Kenema an important agricultural town(17).

The healthcare services are provided by the Ministry of Health and Sanitation(MOHS), private-for-profit, private not-for-profit and non-governmental organisations (NGOs) such as the International Rescue Committee (IRC), Medecins Sans Frontieres (MSF-F) among others. The district has 72 primary care level health facilities, 1 government clinic, 1 NGO clinic, and 3 private clinics. At the secondary and tertiary levels, there is 1 government hospital, and 1 mission hospital. Informal traditional medicine, forms part of the country's primary health care system, which is the same for Kenema district. The education system, like the healthcare system, is consistent with the national system, which requires all children from six years to attend primary school (17).

2.6 Inclusion and exclusion criteria

The inclusion criteria for the literature were:

- Publications in English and published between the years 2010 and 2021 to ensure that most recent publications are included.
- Articles from Sierra Leone and Kenema as well as literature from SSA.
- Publications on the adolescents' access and utilisation of sexual and reproductive health services, including family planning and contraception, STI and HIV/AIDS, as well as adolescent sexual education and access to SRH information and services.

2.7 Exclusion criteria

- Literature from Europe, Central, and South America, and North America were excluded.
- Literature published in languages other than English were excluded from the review.

2.8 Search Strategy

The literature search was done through the VU library, Google Scholar search engines, Scopus, PubMed/Medline, Lancet publications, and from Cochrane library and TRIP database and the references from some of the articles for snowballing for more articles. I used the Sierra Leone government websites to access the national documents.

Table 1: Keywords

Search term	Factor		Country
Adolescents/youth/young people sexual and reproductive health (outreach) OR Sexual and reproductive health provider OR Family Planning OR HIV counseling and testing OR	AND	Approachability AND ability to perceive OR Acceptability AND ability to seek Availability AND ability to reach Affordability AND ability to pay Appropriateness AND ability to engage	Sierra Leone OR SSA Sierra Leone OR Low-middle-income countries (LMIC) Sierra Leone OR Sub-Saharan Africa OR Sierra Leone OR LMIC OR SSA

Sexually transmitted infections OR Contraception/contraceptives			

2.9. Conceptual Framework

The Levesque et al 2013 conceptual framework, on access to health care services, was used to structure this thesis. The framework was selected because it is in alignment with the research objectives and therefore, it guided me through the literature review and supported the identification and organisation of the results/findings.

The linkages and the interaction between supply-side factors and the demand-side factors in the Levesque conceptual framework, made it possible to identify the challenges from the supply side, for providing services to adolescents and link them with the barriers that adolescents experience in reaching the sexual and reproductive health services (demand side).

The authors of the Levesque framework conceptualised the elements that relate to the supply side of health services as; approachability, acceptability, availability/accommodation, affordability, and appropriateness. All five elements interact with the five corresponding dimensions of the demand side for health care services, which are ability to perceive, ability to seek, ability to reach, ability to pay, and ability to engage. The dimensions from both supply- and demand-side are interdependent and organised in pairs. The five supply side dimensions guided my literature search to identify the health factors that influence the adolescents' access to adolescent-friendly services (objective 1). On the same note, the demand-side elements guided the search to identify the barriers or enabling factors, that influence the adolescents' access and utilisation of the SRH services (objective 2).

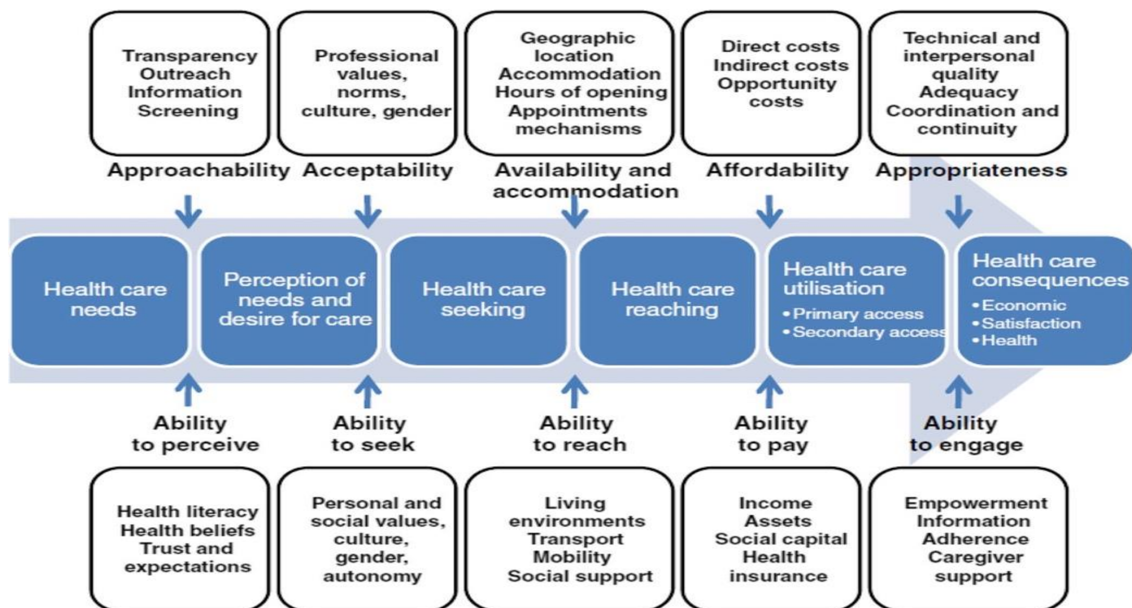

Figure 2: Conceptual framework of access to health care (Source): Levesque et al. International Journal for Equity in Health 2013, 12:1 (18).

2.10 Study limitations

The study was done in one district of the country therefore, I only provided information on adolescents' access to PSRH services in this part of the country, which can't be generalised to the national level. Lack of access to primary and secondary data stripped the study of the reality of the adolescent's direct perception and knowledge of the PSRH service for adolescents in the country. The literature review was limited to articles published in English, which excluded articles published in French, while three-quarters of the West African countries are French-speaking countries. This limited the number of articles and the scope of the study findings in the region. There was no literature on sexual and reproductive health in the district, which led to the use of literature from West Africa and other SSA countries, which was extrapolated to the study area because of the similarity of context.

CHAPTER THREE

3.0 Results

This chapter presents and analyses the study findings from both supply and demand sides barriers and enablers of adolescent access to PSRH services, based on Levesque et al (2013) conceptual framework. The findings are outlined in 5 dimensions of the supply side (approachability, acceptability, availability/accommodation, affordability and appropriateness) and the corresponding dimensions from the demand side (ability to perceive, ability to seek, ability to reach, ability to pay, and ability to engage).

3.1 Approachability/Ability to perceive

3.1.1 Approachability

- This refers to service providers sharing information about the available PSRH services through outreach activities, and other means such as schools, social media, radio or television.
- It also relates to adolescents facing SHR needs can identify that SRH services exist, can be reached and have effect on her health.

A qualitative study in Sierra Leone shows that there is a lack of adolescents' SRH information dissemination through outreach activities(19). The Reproductive, Maternal, Newborn, Child, and Adolescent (RMNCAH) policy does not explicitely state specific strategies and approaches to provide adolescents' SRH services. In my experience, the health care workers (HCWs) do not share SRH information with adolescents or perform outreach activities in Kenema district. The HCWs might not have the capacity to conduct outreach activities, because they lack the appropriate training on adolescents SRH services and knowledge about the adolescents SRH needs (20).

A quantitative study in Nigeria, demonstrates that health education, provided by healthcare workers in schools and outreach, is one of the important approaches to address the adolescents SRH needs and improves their health literacy. However, it reports that such service was missing in the facilities, which reflects the situation in Sierra Leone and Kenema District (21).

A review on SSA states that HCWs were not providing outreach services, health education and information on SRH services to adolescents, because they have knowledge gaps and

misconceptions about the adolescents' SRH service provision. They don't have the appropriate skills to respectfully response to the adolescents needs (22).
A qualitative study in Ghana states an enabling factor, where HCWs were conducting SRH services in communities, where there were no health facilities through outreach. In addition, the HCWs provided health education sessions in schools on SRH services availability (23).
A qualitative study in Nepal states that there were no outreach activities to reach out to the adolescents with SRH information and services, neither in the communities nor in schools. They reported that they only provided services to adolescents, who visit the clinics(20). This situation is consistent with Sierra Leone and Kenema district.
As there were no outreach activities and no information sharing on SRH services, adolescents do not know where and when to obtain SRH services in Kenema district. This is normally the role of the health system, to ensure that the adolescents have the knowledge about where and when to obtain SRH services.
A review of interventions of best practices, states that outreach activities and communication provide information to adolescent about the availability of SRH services and encourage them to use the services (24). This approach is an enabler for adolescents' access and utilisation of SRH services and is among the best practices, as it improves adolescents health literacy, which in turn improves their ability to perceive the need to seek healthcare.

3.1.2 Ability to perceive

- This refers to the ability of the adolescents to identify their needs for SRH care.
- Such ability is determined by the adolescents' beliefs, trust in the services, health literacy and expectations relating to sickness, health and well-being (18).

The National Strategy for the reduction of teenage Pregnancy (NSRTP) national assessment report (2016, P.9), indicates that adolescents in rural communities, lack access to accurate SRH information and services. It states that only about 5.4% of adolescents were found to have knowledge of contraceptives use, among those who became pregnant during the Ebola Disease (EVD) outbreak (2014-2016), and this reflects the situation in Kenema district (15).

A qualitative study in Sierra Leone states, that because of lack of access to SRH information, the adolescents do not understand the consequences of their risky sexual behaviours. As a result, they do not perceive a need to seek SRH services (19).

In addition, a scoping review shows, that adolescents' lack of knowledge, about the existence of SRH services and misconceptions about contraceptives and condom use hinder their access to SRH services, and increase their vulnerability to poor SRH outcomes (25). A qualitative study in Ghana indicates that the adolescents' perception about the adverse effects of contraceptives and service procedures hinders their access to SRH services utilisation (23).

Another factor that influences adolescents' ability to identify their needs for SRH services is age and educational status of adolescent girls, as shown by a mixed method study in Nigeria. This study shows that adolescents with secondary education have better access to SRH services, than others with a lower level of education, as higher education increases their independence. It also shows that older adolescents are more independent to make decisions to access SRH services than the younger adolescents. A systematic review in Ethiopia states that adolescents with only primary school education, were 57% less likely to utilise SRH services, than adolescents with secondary education (26,27).

A review in SSA, states that adolescents have multiple misconceptions about contraceptives and condom use. These misconceptions include the belief that contraceptives cause infertility, excessive bleeding during menstruation, and missing the menstrual period. On the use of condoms, misconceptions include that condoms could be stuck in the vagina and can cause less sexual pleasure, hence they do not perceive the need to seek SRH services (28).

A systematic review in SSA of high-quality studies on knowledge as a barrier to SRH services in Nigeria and Ethiopia found that in Lagos 79.5%, 98.1% in Portharcourt and 67.1% in Ethiopia the primary health care centres of adolescents did not know about adolescent-friendly services availability at their health facilities (29). The same study concluded that inadequate knowledge of SRH services, misconceptions and myths about contraception use among adolescents limit their access to SRH services (29). A similar review however, indicated that about 21.5%, and 38.5% of adolescents in Ethiopia and South Africa respectively, were knowledgeable about SRH services offered at their facilities (30).

A WHO report shows that in LMICs adolescents do not have adequate health literacy to enhance their utilisation of SRH services (31).

Adolescent's lack of health literacy as stated in the WHO report above reduces their agency and ability to challenge the social and cultural factors that influence their access to SRH services.

3.2 Acceptability/ability to seek

3.2.1 Acceptability

- This relates to social and cultural factors influencing the possibility for adolescents to accept the elements of SRH services.
- It also refers to the equitable provision of services among different society groups such as among married and unmarried adolescents (18).

There were no studies found in Sierra Leone on this factor. A qualitative study in Ghana indicates that despite making the effort to provide adolescent-friendly SRH services, the community view is that sexuality issues are only appropriate for adults. Therefore, they consider it inappropriate for unmarried adolescents to utilise SRH services, especially contraception as they are not expected to be sexually active before marriage. This notion creates fear and a general belief among the adolescents that they might be stigmatised or scolded if they utilise the SRH services (23). A systematic review on progress of adolescent sexual and reproductive health following ICPD, indicate that in most part of the world the socio-cultural norms refuse to accept the adolescent's premarital sexuality. As a results adolescents are not expected to access SRH services and information. This reflects in the attitudes of healthcare workers, who refuse to provide SRH services to the adolescents (11). Another systematic review on SSA, indicates that both culture and parents, prohibit adolescents from utilising SRH services. It also reports that in Malawi, parents demonstrate negative views on adolescents utilising family planning services, reiterating that adolescents below 18 years are not old enough to be involved in sexual activities (29). The findings from a systematic review of potential interventions show that the healthcare providers perception is that it is wrong for adolescents to be sexually active until after marriage (22). A review and content analysis, shows that in most SSA countries, there is a general misconception that adolescents are not expected to engage in premarital sexual activity.

This belief caused a stigma around the adolescents' sexuality and hinders them from seeking the needed SRH information and services (28).

3.2.2 Ability to seek

- The ability to seek services refers to adolescent's autonomy and ability to decide to seek care.
- The hindering factors include societal and cultural discrimination against unmarried and very young adolescents seeking SRH services,(18).

The SLDHS 2019 indicates that 70% of adolescent girls need their parents to give them permission and provide them with financial support to obtain healthcare services including SRH services(16). An assessment on UNFPA's supported primary health care facilities in Sierra Leone confirmed that, in some districts, including Kenema District, parents were reluctant to allow their adolescent girls to attend the SRH services,(32). A qualitative study in Ghana indicates that lack of confidentiality and privacy, hinders adolescents from accessing SRH services. It states that the general belief among adolescents is that the health care providers sometimes tell their parents that their daughters are sexually active (23). A qualitative study in Tanzania indicates that the community members consider the adolescents' sexuality as inappropriate, hence it is inappropriate to access and utilise family planning services, which is a hindrance to the adolescents access to SRH services (33,34). A qualitative study in Kenya indicates that religious beliefs prohibit adolescents from accessing SRH services with the church leaders expecting adolescence not to get involve in sex (35). As described in a review in SSA, most countries have restrictive laws, policies, and social and gender norms that do not give the adolescents' right to autonomy over their health and body, which restricts their access to SRH services and information (36).

A qualitative study in Nepal reported that adolescents fear that their personal information could be spread in the community through the HCWs and that this would cause them further stigma, as the community views their sexuality negatively (20).

In most SSA countries, the societal and cultural norms, consider premarital sex among adolescents, as unacceptable practices. This creates considerable resistance for adolescents to access SRH services, such as contraceptives information and services. From my experience, Kenema district has religious beliefs and traditional norms, that restrict the

adolescents' participation in SRH services, especially family planning and especially the unmarried adolescents. A systematic review states that social and cultural norms in SSA do not tolerate unmarried adolescent's sexual activities and disapprove their access to SRH information services (13).

A qualitative study in Kenya indicates that adolescent girls were not comfortable to receive SRH services from HCWs of the opposite sex (35,37). These factors negatively influence the adolescents' autonomy in seeking SRH services.

3.3 Availability and accommodation/Ability to reach

3.3.1 Availability and accommodation

- This relates to the presence of the physical structure, resources (commodities, equipment, and trained healthcare providers) that could be reached physically and in a timely manner.
- It also concerns inequitable distribution of resources; such as urban versus rural or where more resources are allocated to secondary care at the expense of primary care (18).

The Sierra Leone National Health Sector Strategic Plan NHSSP (2017-2021) states that assessment of health facilities shows that only 58% of health facilities, have basic equipment, and only 31% have essential drugs (2). Kenema District, like the rest of the country, has a decentralised health care system and has 122 primary health care facilities and one government hospital(2,38,39). The Sierra Leone National Reproductive, Maternal Newborn, Child, and Adolescents Strategy, highlights the challenge, with the lack of adequate number of skilled healthcare workers and maldistribution of the available skilled providers. This is a factor, that contributes not only to the issue of access and utilisation of SRH, but also to poor quality of health care. The health worker ratio is reported at two trained health care providers (physician, midwife/nurse) per 10,000 population while the WHO recommendation is 23:10,000 (40). About 40% of the country's midwives work in Freetown, which is about one midwife per 9,200 population while in the districts it is only one midwife per 53,000 inhabitants, which is similar to Kenema District.

Midwives are key providers of SRH services to adolescents and therefore the inadequate number of midwives, especially in rural communities, affects the adolescents' access and utilisation of SRH services (40). In Sierra Leone, among the 30 UNFPA supported public health facilities, of which one is in Kenema, only 10 facilities (33.3%) have available space that could be converted to adolescently-friendly services. All SRH services provided at the UNFPA supported health facilities are free for adolescents for all services (32). UNFPA also faces a lack of trained health care workers to provide the SRH services. There is also a shortage of information, education, and communication materials, appropriate for adolescents services (32). A qualitative study in Nigeria indicates that the health care workers were poorly trained in providing adolescent-friendly services. The finding states that only about 7% of healthcare workers were trained in SRH services (21).
A quantitative study conducted in Nigeria indicates that many health facilities are not designed for adolescents. In this study there were no health facilities that met an adolescently-friendly standard with regards to privacy. The waiting room and examination rooms were the same for adults and adolescent clients and this made the health facilities unfriendly for their access (21). A qualitative study in Tanzania indicates that among 38 health facilities assessed, none was designed for adolescent friendly-services, as the services provided were adult centered and there was a lack of trained healthcare providers with adolescent SRH skills (33).
A qualitative study in Tanzania, reports that commodities such as contraceptives, and antiretroviral (ARV) were not always available at the facilities and adolescents were requested to buy it from the pharmacy (41). A content analysis on adolescents’ experiences, in accessing SRH service in SSA, indicates that adolescents reported being discriminated for being unmarried and seeking SRH services and that the HCWs refused them services and did not give them enough attention (28).
A review in SSA states that most health facilities structures do not provide the adolescents the privacy they would like to have, while seeking SRH services. There is also frequent stock-out of the essential commodities at the health facilities, which are all factors that influence adolescents' access to and utilisation of SRH services (28). A systematic review of DHS in LMIC reports that a sporadic supply of commodities and cost and the unfriendly attitudes of the health care providers hinder the adolescents' utilisation of SRH services (34). A review in

SSA support the finding in Sierra Leone that the limited number of trained healthcare workers to provide SRH was a barrier to the adolescents, access to SRH services (30).
Lack of adequate trained healthcare workers and supplies of equipment and commodities, contribute to the adolescents' poor utilisation of SRH services and influence their ability to seek services.

3.3.2 Ability to reach

- This refers to the factors that would enable the adolescent to physically reach the healthcare provider such as mobility and availability of transport.
- This also refers to the ability of the adolescent to be absent from a casual paid-work or her domestic chores to access SRH services(18).

The NHSSP (2017-2021, P.31) states that distance to health facilities in rural communities and lack of transport, creates barriers to access health care services, including sexual and reproductive health services (2). A qualitative study in Tanzania, indicates that long distances in rural areas and the lack of transport hinder adolescents' access to SRH services. Adolescents also reported long waiting hours in long queues when they reach the health facilities and reported that the SRH services, available at the facilities, are not friendly. A similar study in Kenya supports the challenge of long distance to health facilities and availability of transport (35,41).
Studies have shown, that in most LMIC countries, adolescents lack independence, to decide to access SRH services. They often face opposition from their parents or other family members and also feel embarrassed to seek services as they are not expected to be sexually active (22).

3.4 Affordability/ability to pay

3.4.1 Affordability

- Affordability represents the economic capacity of the adolescent to spend time and resources to use quality and appropriate SRH services. This could be the direct or indirect cost of the services and opportunity cost connected to it (18).

In Sierra Leone, the SRH services, including contraceptives commodities and HIV counseling, testing, and treatment, are available for free at the public health facilities. Therefore, the direct costs of SRH services can't be a barrier to service utilisation for adolescents. However, adolescents seeking for STI treatment are required to pay for treatment available at the health facility or referred to buy from the pharmacy. The Free Health Care Initiative (FHI) in Sierra Leone does not cover adolescents, unless they are pregnant or lactating mothers. A systematic review in SSA indicates that some of the main barriers to the adolescents' access to SRH services were the inconvenient opening hours, lack of transportation and high service costs (30).

A qualitative research in Kenya shows that the most common barriers for adolescents to access SRH services, was lack of money. The adolescents reported problems such as transport cost, consultation and cost of medicines for the treatment of STIs. The direct and indirect cost of SRH services determine the adolescent's ability to pay.

3.4.2 Ability to pay

- The ability to pay for services is a concept that describes the ability of the adolescent to generate money, to pay for health care services, without a catastrophic expenditure of resources.

While access to SRH services are free at the public health facilities in Sierra Leone, there are still indirect costs such as transport fare and expenditures for medicines (22). The costs of other services, such as treatment of STIs and other conditions, not related to SRH services, can also create a barrier for the adolescent utilisation of SRH services (36). A study in Kenya indicates that a lack of money to pay for consultations and medicines, causes a barrier for adolescents to access and utilise SRH services. It indicates that adolescents do not receive free healthcare, so they need fare and money to pay for prescriptions, outside the public health facilities(35). A review indicates, that among the barriers adolescents face, in access and utilising SRH service, was paying for the direct and indirect cost of the services (42).

3.5 Appropriateness/Ability to engage

3.5.1 Appropriateness

- Appropriateness relates to the fit between SRH services and the adolescents' need, timeliness, amount of care in assessing SRH problems and deciding the right treatment (technical and interpersonal quality of the service provided; guidelines and policies).
- It requires a trained provider to provide appropriate services to adolescents with involvement of the adolescents, in the process of understanding and willingness to receive the services, quality matters here(18).

The NHSSP (2017-2021) describes the quality of health care services across the country as poor due to factors such as lack of standard guidelines, and jobs aid, poor supervision, and mentorship. It also mentions lack of performance evaluation of healthcare workers (2). A quantitative study in Nigeria states that were no guidelines for SRH services delivery at the primary health facilities and mentions that about 68.3% of the health facilities refer adolescents to secondary care facilities (21). The study also finds that the available healthcare workers were not adequately trained to provide quality adolescents' SRH services. As the health care providers were not trained, they lacked the knowledge on maintaining confidentiality and providing patient-centered care (36,41).
Studies in sub-Saharan Africa countries have highlighted common barriers that hinder the adolescents' access to PSRH services. The barriers include a lack of trained health care workers to provide quality and needed PSRH services (12,13).
Studies from LMICs demonstrate, that to meet the sexual and reproductive health needs of adolescents, provision of comprehensive adolescent-friendly SRH service at the health facility is critical. Studies in Nigeria and India show, that when health facilities do not provide the needed SRH services, adolescents do self-medicate or obtain services from unqualified HCWs. Such practices put their health and lives at risk (21).

3.5.2 Ability to engage

- Ability to engage in SRH services refers to the adolescent participation and complete involvement in the treatment plan and decision-making process. This depends on the adolescents' ability and motivation to participate in the process of care, which depends on their agency and health literacy and self-efficacy (18).

Earlier cited studies (21,30) already revealed that health care providers do not have the appropriate training in adolescent-friendly SRH services and have a judgmental attitude towards adolescents visiting the SRH service. Adolescents expressed a lack of confidence in the healthcare providers, also reported fear of stigmatization, if the healthcare provider spreads their contraceptives use in the community. So in order for adolescents to actively engage in the SRH services, health care workers need to receive more training in counseling adolescents.

CHAPTER FOUR

4.1 Case studies on Best Practices

This chapter presents a number of adolescents' sexual and reproductive health interventions, that proved effective, based on evidence and are considered best practices. The findings described in this section are obtained from reviews and studies of interventions from Ghana, Ethiopia, Uganda, Chile and China.

Although adolescents are a heterogeneous group, they all need to be treated with respect and their and privacy respected and protected, as expressed by different adolescent groups from different regions (43).

4.2 Ghana case study

This case study shows the results of a randomized control trial (RCT) to establish effective adolescent sexual and reproductive interventions on the basis that SRH service utilization among adolescents. In the intervention sites they involved school-based adolescents' SRH services, outreach activities, generate demand in the community to support adolescent SRH services, and trained HCWs in adolescent-friendly services. In the comparison sites, they included community mobilization and training of healthcare workers, in adolescent-friendly health services only. The expected outcomes were the usage of STIs management, HIV counselling and testing, antenatal services or perinatal/postnatal care and clients' reported satisfaction'. The target group were adolescents aged (15-17), and the intervention lasted three years. Retrospective data was collected at baseline and compared with end-line results(44).

The STIs service usage increased from 3% at baseline to 17% at end-line among intervention adolescents, versus an increase from 5% at baseline to 8% at end-line in the comparison group. This finding indicates that adolescents in the intervention sites were two times more likely to use STIs services, than adolescents in the comparison sites (OR 2.47). The result on HIV counselling and testing showed an increase of service usage from 3% to 13% in the intervention sites versus 4% to 11% in the comparison sites. This indicates that the service usage was lower in the intervention at baseline, but slightly higher at the end-line, but not significant between the groups (OR 1.16).

The antenatal services usage increased from 3% to 12% among the intervention adolescents compared to an increase from 3% to 9% among the comparison group. The perinatal

services usage, increased from 3% to 15% in the intervention group versus an increase from 3% to 9% among the comparison group. The adolescents in the intervention sites had a 89% higher odds of using perinatal/postnatal services than the adolescents in the comparison sites (OR1.89).

The study concluded that no appreciable differences, in the SRH service utilization between intervention sites and comparision site, among adolescents, by educational attendance and this was because there were less than 7% of adolescents not attending school in Ghana.

The adolescents in the intervention group expressed more service satisfaction than the adolescents in the comparision sites. In both groups the major recommendation to improve the services was an adequate availability of commodities.

The study points towards positive results in improving SRH services for adolescents when investing in all the elements of the Levesque et al framework: approachability of the services, the ability to perceive, and ability to seek, availability and ability reach and affordability and ability to pay respectively. The services were delivered close to where the adolescent lived, eliminating transport cost.

4.3 Ethiopia case study

The Ethiopia Ministry of Health (MOH) aimed at reducing maternal and childhood mortality in line with the Millennium Development Goals (MDG). The MOH launched the Health Extension health Programme to implement health education and basic health services, including a provision of a range of contraceptives in the community and linking community with health facilities. The main intervention area were the rural communities hosting about 80% of the population (22).

They recruited and trained about 35,000 community health workers (CHWs) and deployed in the community over five years to deliver health services at the door-step and referral where necessary. The CHWs also engaged in community dialogue to challenge socio-cultural norms, contributing to low service utilization. The middle-level health workers were also recruited and trained, to back up the CHWs, to provide contraceptives, midwifery and childcare. The MOH led the process but other partners such as NGO's, Educational institutions and technical experts supported the process.

The results, in relation to adolescent contraceptives utilization, shows a 29% increase among adolescent girls aged 15-19, a 38% increase in postpartum contraceptive usage (2005-2016), and a 3.8% drop in teenage pregnancy (22).

The Levesque et al factors, that influenced the services utilization, among the adolescent were approachability, and ability to perceive, acceptability, and availability and ability to reach, affordability.

4.4 Uganda case study (Randomized controlled Trial)

The RCT review in Uganda examined the impact of the health facility reorganization into an adolescent-friendly state, training of different levels of HCWs and building the capcity of the district health team, for training and supervision. Adolescents were engaged at various stages of the project. The result shows a twofold increase use of SRH services such as family planning and STIs services, among adolescents in the intervention area, as compared to the controlled group(44). Here the used framework factors were availability and ability to seek through the engagement of the adolescents at various stages of the programme.

4.5 China intervention case study

A systematic review shows that SRH interventions, that included dissemination of information and outreach, and awareness-raising, among unmarried adolescents in China and free distribution of contraceptives, yielded a 14-fold increased odds of contraceptives and condom use among the intervention group as compared to the controlled group (45).

4.6 Chile intervention case study

To improve the health system's responsiveness and reduce the adolescents' fertility rate the intervention instituted a five-pronged approached.

Provide training for healthcare workers, creating an enabling environment for adolescent-friendly services at the health facilities, improving on outreach and referrals, and improving on school retention and re-entry for pregnant girls and adolescent mothers.

The issue of third party, for parental consent, was removed and the adolescents' autonomy was recognised and other stakeholders, such as NGOs and women's advocates, were involved with a well-defined role. Data was requested to be disaggregated for proper analysis and planning. A ten-year strategy, guaranteed government, sustained human and financial supports.

The results show; a decrease in the adolescent's fertility rate from 55.1 births/1000 adolescents to 41.1births/1000 adolescents in 10 years. There was a reduction of 51% in the proportion of births of adolescent aged below 19 years. And there was a 30% increase in contraceptive use among adolescents (22).

In this intervention, the Levesgue et al, improving factors were, availability, ability to seek, and acceptability, and approachability.

Research reveals that for information and interventions to have effect on the beliefs, knowledge, and behavior of adolescents, must effectively reach them either through outreach or other appropriate means. One of the effective approaches is through dedicated outreach activities, targeting vulnerable adolescents (younger adolescents, sexually active unmarried adolescents) (24).

> The interventions considered successful are the ones that make efforts to train HCWs, make health facilities acceptable for adolescents, and create demand for services through the community, the media and schools, and engaging adolescents at all stages of programme development. Also engaging community and parents to accept and support adolescent SRH services (46,49).

CHAPTER FIVE

5.0 Discussion

This chapter presents and discusses the key findings on the factors influencing the adolescents' access to and utilisation of PSRH services from both the supply and demand sides.
The main factors influencing the adolescents' access to and utilization of SRH services, were lack of outreach activities including SRH information and services directed at adolescents. Another prominent factor that this literature review identified was the healthcare workers negative, discriminatory, and judgmental attitudes towards adolescents was found to, hinders their access to SRH services. In addition, the shortage of trained healthcare workers and maldistribution of available HCWs across the regions was a limiting factor. Many health facilities were found not to be adolescent-friendly because of lack of privacy and confidentiality. There was a frequent stock out of contraceptive commodities at health facilities. Also, restrictive laws and policies, as well as societal and cultural norms that do not support adolescent's premarital sexuality, seem to deprive adolescents of their right to autonomy over their sexuality and restricting them from accessing SRH services and information. There was lack of community and parental support for the adolescents use of SRH services. Many adolescents lack knowledge about SRH services, they have misconceptions about contraceptives and use of condoms, and they lack trust in the service providers.

5.1 Approachability/Ability to perceive

5.1.1 Approachability

The finding indicates that in Sierra Leone, healthcare workers do not provide outreach activities to reach out to the adolescents with sexual and reproductive health services and information and this also applies to Kenema district. A study in Nigeria shows that outreach and health education in schools, is one of the effective approaches to address adolescents' SRH problems and needs and can improve their health literacy. The finding from a review shows that for interventions and information to have a positive effect on adolescents' knowledge, behaviour and beliefs, it must reach them and one of the approaches is through outreach activities(24). It was demonstrated in the case study in Ethiopia, that taking SRH services to the doorsteps of adolescents will increase their service uptake. Outreach services

also reduce barriers of transport and long-distance challenges. There is also evidence from Ghana that shows an enabling approach, where healthcare workers were providing outreach activities in communities and health education in schools, to disseminate the adolescents' SRH information, which enabled adolescents to perceive the need for SRH services utilisation. However, the community perception negatively influenced the health system efforts, in providing SRH services, hindering the adolescent access to the services. All the five case studies on interventions of best practice, included approachability factor and resulted in improvement of SRH services utilsation among the adolescents.

5.1.2 Ability to perceive

The finding shows that adolescents in Kenema district were not reached with sexual and reproductive health information and services through outreach activities. This was one of the hindering factors for adolescents to obtain SRH services. SRH information and services must effectively reach the adolescents, to have impact on their beliefs, perception, knowledge, and behaviour. The evidence of best practices from the case studies support that outreach improve affordability and increase effectiveness of interventions to delivery adolescents SRH services. The adolescents need to know when and where to obtain SRH services and the impact of the services on their health and that through having access to SRH services. The adolescents' health literacy, is crucial to ensure that they are knowledgeable about their health and wellbeing. Adolescent health literacy and self-efficacy can address their misconceptions about contraceptives and condom use and their access and utilisation of SRH services. It can also build their capacity to challenge the cultural norms that hinders their utilisation of SRH services.

5.2 Acceptability/ability to seek

5.2.1 Acceptability

While there were no specific studies on acceptability of SRH needs in Sierra Leone, the findings in this thesis indicate that social and cultural norms (in many SSA countries) do not support adolescents' sexuality and utilisation of SRH services before marriage. The community perceptions and the socio-cultural norms have a strong influence on adolescents' access and utilisation of SRH services. The finding indicates that these perceptions and norms cause fear among adolescents, and negatively impact their access and use of SRH services, as they do not want to be stigmatised for using the SRH services,

which the community perceived as inappropriate. The finding shows that the socio-cultural norms equally influence the healthcare workers as well as the health seeking behaviour of the adolescents. The adolescents have the general believe, that if they access the SRH service, the HCWs will tell their parents and people in the community and as a result they do not trust the HCWs. The finding of the best practice in Ethiopia, shows that community support, for adolescent use of sexual and reproductive services, can improve their utilisation of the services as a result of the interventions in Ethiopia and Ghana, where the interventions engaged the communities to accept the adolescent use of the SRH services. The finding indicates that fear of stigmatisation, resulting from the socio-cultural norms, hinders adolescents from seeking SRH. The finding also shows that adolescents need parental permission to seek SRH services as they lack independence.

5.2.2 Ability to seek

The findings show that adolescents in Sierra Leone, do not have the independence in accessing health services. They need their parents or caretakers/guidance support to be able to reach and obtain health services, especially unmarried adolescents. Even the married adolescents need their partner's permission and support to obtain SRH services. This was confirmed in the Malawi study that found that parents do not accept adolescents below 18 years to access and utilise SRH services. The UNFPA assessment report on their health facilities in various districts in Sierra Leone, underlined the parental control over adolescent access to SRH services; the finding stated that parents do not allow their adolescent girls to access SRH services.

However, the findings of the thesis also indicate that adolescents with secondary or higher education have more autonomy to access and utilise services than those with only primary or no education. Therefore, education is an enabling factor for adolescents to access SRH service. The findings also show that older adolescents have more autonomy than the younger adolescents. Age is another enabling factor for accessing SRH services. In Sierra Leone, from my experience, adolescents in secondary schools, have more autonomy as some even stay in towns without their parents. This is consistent with the adolescents in Kenema District. The intervention in Chile was effective because the parental authorisation was removed, and the adolescent's autonomy was recognised. In addition, the intervention also included training of healthcare workers and reorganised health facilities to make it

adolescent-friendly. This greatly improved the services utilisation among the adolescents. the factors applied from the framework were availability and ability to seek health services.

5.3 Availability and accommodation/Ability to reach

5.3.1 Availability

The finding indicates that a general lack of trained HCWs, to provide adolescent-friendly SRH service in Sierra Leone, was one of the main barriers. Healthcare workers require the technical competence and skills, to be able to provide adolescent-friendly SRH services, to adolescents. The appropriate technical competence of HCWs can improve their perception about the adolescent sexuality, and improve their approaches, such as judgmental and discriminating attitudes toward adolescents. The interventions, in the case studies of best practice in Ethiopia, Ugand and Chile, included healthcare workers training to improve their technical competence in providing adolescent-friendly SRH services. The results were effective with improved utilisation of SRH services among the adolescents. The finding in the Uganda intervention, indicates that even the district health team was training to provide supervision and mentoring for the health facility staff.

The finding also states that in Sierra Leone, there was maldistribution of trained healthcare workers, with about 40% of the midwives serving the population in the city, which made that the rural districts, including Kenema, had inadequate trained HCWs. The finding also states that frequent stock out of essential SRH commodities at the health facilities occur, which hinders the adolescents access to SRH services. A study in Tanzania supports this finding, indicating frequent stock out of contraceptives and antiretroviral (ARV) drugs at health facilities, which hinders adolescent's access to SRH services. It states that if the facilities run out of these essential commodities, HCWs might ask the adolescents to buy the commodities from the pharmacies, which might create an access barrier.

The best practice case study in Ghana states that the adolescents, in both intervention and control group of the study, state a lack of commodities as a major problem. This can result in adolescents seeking cheaper services from untrained service providers, which puts their health at risk. Providing adolescents' SRH services requires adequate supplies of commodities, equipment, and health education material. The interventions in China and Ethiopia included free distribution of contraceptive and that improved the SRH service utilisation.

The finding indicates challenges of privacy and confidentiality at the health facilities. One of the best approaches, for adolescent-friendly SRH services, is that the health facility needs to maintain privacy and confidentiality and should have adequate supplies and equipment (46). It also suggests that the opening hours have to be flexible to accommodate adolescents at a convenient time. The Chile intervention included improvement of the facilities, to provide adolescent-friendly SRH services, which improved the service utilisation

5.3.2 Ability to reach

The ability to reach an SRH service, depends on the adolescent knowledge and availability of transport and the ability of the adolescent to be away from home. The outreach activity and engagement of adolescent have been proved to improve the adolescent ability to reach services. This was demonstrated in the case studies of effective intervention in Ethiopia, Ghana, and Chile case studies. In all the interventions where the SRH services were provide through outreach making it possible for the adolescents to access the SRH services. The results of those interventions show improvement in in the utilization of the SRH services among the adolescent.

5.4 Affordability/ability to pay

5.4.1 Affordability

The affordability is determined by the direct and indirect cost of the sexual and reproductive health services. Interventions in the case studies in China, Ethiopia and Chile included free provision of contraceptives through outreach approaches, which made the services affordable for the adolescents and improve services utilization among the adolescents.

5.4.2 Ability to pay

Adolescents are dependent on their parents/caregiver for obtaining health care services and in many instances in Sierra Leone, parents/caregiver disapprove the adolescent’s use of SRH services as finding from studies show that the adolescent require parental approval to access health services. If the health system can engage the communities and parent to approve and support adolescent SRH services and remove parental authorisation and institute free provision of SRH services for the adolescent the utilization would improve among the adolescent. The case study in Ethiopia with free provision of SRH services improved SRH service utilization among the adolescent.

5.5 Appropriateness/Ability to engage

5.5.1 Appropriateness

The finding shows that in Sierra Leone the quality of health care at health facilities is poor, that there is no availability of guidelines or job aid. It also shows that there is lack of supervision and mentorship for staff and this finding is consistent with Kenema district. The finding indicate that the health facilities in the country do not meet the standard of appropriateness as described by Levesques et al. Previous finding also has illustrated that the healthcare workers are not trained to provided adolescent-friendly health services. The health system needs to improve on the quality of care, improve on the physical structure of the health facilities to make them adolescent-friendly and train healthcare workers in adolescent-friendly SRH services.

5.5.2 Ability to engage

As the findings show that the healthcare workers lack the appropriate training to deliver adolescent-friendly services, it will be necessary for the healthcare workers to be trained in providing adolescent-friendly services and be able to engage the adolescents. The finding also states that the adolescents have misconceptions and myths and lack of trust in health workers and that that they lack health literacy. To be able to engage in the decision making about their SRH services they need the appropriate SRH information to build their health literacy, self-efficacy and autonomy to accept the SRH services. The adolescents need to know when and where to obtain SRH services without discrimination.

5.6 Reflection on Levesque et al Conceptual framework (2013)

I found the conceptual framework appropriate for the study, as it addresses the dimensions of both health and social factors, in accessing healthcare services. It takes cognisance of the health system factors as well as individual and context factors that influence access to services. The framework is organised around the dimension of supply-side and demand-side and shows how they are interrelated. The framework includes a pathway to access healthcare, from the identification of needs for care, to perception of needs and seeking for services, up to health outcomes. It took me through the process of identifying the adolescents' problems, in accessing sexual and reproductive health information and services. I used the framework, in setting the objectives and it guided me through the literature review. I found it like a stepwise process where the supply side process has to

be fulfilled before the demand side happens. And even from the supply side the first process has to be completed, before the second process starts.

I realised that the framework shows a dimension of availability intersecting with the demand-side dimension of ability to reach when the physical structure and health care provider characteristics are not fulfilled the adolescents might not reach the services. Another issue is that when the first three factors at the supply-side are not fulfilled the last two factors become redundant.

5.7 Limitations

The model did not explicitly include how the health system operates along the private sector, as the private sector is one of the options that the population prefers when the public sector has access challenges. A more general limitation of this thesis is that there was no disaggregated data on sexual and reproductive health services by districts from national reports available. This information could help understand the baseline adolescents' access to SRH in the district for comparison. However, I was able to obtain some data from the SLDHS on adolescents.

5.8 Strengths

The review of the case studies provided me with the evidence on what works in interventions to be effective. This supported me in achieving the third objectives of the study.

Chapter Six

This chapter presents the main important findings from the study and provides recommendations to best practice to improve on adolescents sexual and reproductive health services in Kenema district.

6.1 Conclusion and recommendations

6.1.2 Conclusion

The main finding is that the adolescents face many challenges and barriers, that hinder their access and utilisation, of preventive sexual and reproductive health services. The barriers are from both the supply-side and demand side of access to services.
The supply-side factors influencing adolescents' access to SRH services include inadequate dissemination of sexual and reproductive health information services through outreach activities and shortage of trained healthcare workers. There is frequent stock out of essential commodities at the health facilities. The health facilities are not designed for adolescent-friendly SRH services; privacy and confidentiality are lacking. The health worker have a discriminatinating and judgmental attitude towards the adolescents.
On the demand-side, the finding shows low health literacy of adolescents, misconceptions and myths, among the adolescent, about contraceptive and condom use and lack of adolescent autonomy and self-efficacy and lack of parental support for their use of SRH services. Long distance to health facility is one of the barriers hindering adolescents from obtaining SRH services and the adolescent have mistrust in the service providers.
The socio-cultural factors: The socio-cultural norms do not support the adolescents sexuality and use of SRH services for unmarried adolescents. The community stigmatises and discriminates the adolescents for engaging in premarital sexual activities.
The findings from SRH intervention best practices, show the following approaches effective in providing SRH services: dissemination of information, outreach activities, free provision of contraceptives, training of providers, reorganising the health facilities to adolescent-friendly service, engaging adolescent in SRH planning, evaluation and removal of parental consent and recognising adolescent autonomy, improves SRH services utilisation among adolescents.

6.2 Recommendations

I. The Ministry of Health and Sanitation (MOHS) in Sierra Leone has a currently existing policy on Reproductive Maternal, Newborn, Child, and Adolescent Health (RMNCAH). They also have a National Strategy for the Reduction of Teenage Pregnancy and Child Marriage (NSRTP). It is recommended for the Ministry to review and evaluate the policy and strategies, to determine progress and systematically identify gaps in the provision of adolescent SRH services. Also, these strategies have been implemented since 2017 and 2018 respectively and adaptations would be timely. The Ministry of Health should ensure adolescents participation; the adolescents should be involved in the planning, monitoring, and evaluation of adolescents' sexual reproductive health services, and in the decision regarding their own health and other appropriate health services.

II. The MOHS to update the health facilities to adolescent-friendly service level, with flexible and convenient opening hours, that ensure privacy and confidentiality, regular supplies of commodities, and appropriate equipment and health education material.

III. The MOHS should ensure that policy and strategies embrace comprehensive sexuality education (CSE) and collaborate with the Ministry of Basic and Senior Secondary Education (MBSSE) to integrate CSE into the teachers' training curriculum and to also include it in the Senior Secondary Education curriculum, so that adolescents will be able to acquire age-appropriate sexuality education. Outreach has been identified as one of the effective approaches to delivery SRH services to adolescents, therefore, the services should be provided at health facilities and through outreach activities and in schools. This will require more trained healthcare workers, a regular and sustained supply of materials and commodities.

IV. The interventions should have a stronger focus on generating community support for adolescent SRH services as this was identified as a major barrier for adolescents. The health service system should consider to perform advocacy, to garner community support for adolescent SRH service utilsation. This should include parents, caretakers, religious leaders and other community members and civil society organisations. This will create an enabling environment for adolescent-friendly SRH services.

V. The MOHS should provide and improve on pre-, and in-service training for healthcare workers on adolescent-friendly services and to employ adequate health care workers to address the shortage of service providers. Improving the competence of providers will improve provider perception and approaches towards the adolescent and make SRH services more adolescent-friendly, which in turn will improve the uptake of the services as adolescents feel respected.

VI. It will be necessary to conduct a qualitative study at the field level in Kenema district to fully analyse the barriers that influence access to SRH services to complement the findings of the literature review and to give more depth to the perspective of adolescents themselves.

Annexes

7.1 Geography

The Republic of Sierra Leone is a West African country, bordering Guinea in the north and Liberia in the south-east. It has a Coastline of about 400km, overlooking the North Atlantic Ocean. It is approximately 71,740 sq. km of the land area. It has a tropical climate, humid and hot with two seasons; the rainy season between May and October and the dry season from November to April. Its capital city is called Freetown, in commemoration of the end of the slave trade, with a Cotton Tree as a landmark of the return of the free slaves. It is famous for its white-sand beaches along the peninsula (6). The country's official language is English, and the commonly spoken language is Krio originating from the former free slaves.

7.2 Demography

According to the Sierra Leone 2015 National Census, the country has a population of approximately 7.1 million people of whom 24.3% are adolescents age (10 – 19) years (47). The sex distribution among the adolescents is reported as 51.1% males and 48.9% females. The female population of reproductive age (15 – 49 years) forms 51.0% of the total female population. The country's male-female sex ratio at birth is almost of equal distribution with 101 boys per 100 girls. Kenema district the study area has almost the same adolescents population as the national level with a slight difference of 24.7% of the total district population of 609,891 (47).

7.3 Ethnic and religious groups

The 2015 National Census states that15 ethnic groups make up the population in Sierra Leone, with the Mende and the Temne forming the major ethnic groups with 31.9% and 31.4% respectively. It also indicates that there are two predominant religious groups; Muslims forming 77% and Christians 21.9% and the rest are other traditional religions (47). It has been observed that there is great harmony among the Muslims and Christians and intra-religious marriages are common. Muslims and Christians do celebrate religious festivities together.

7.4 Health care financing

The National Health System Strategic plan (NHSSP, 2017-2021) indicates that the total health expenditure per capita is USD 95 on annual basis. The Government's total health expenditure remains below 15% of the annual budget as stated in the 2015 Abuja pledge. It is also reported that (2), 61% of the health expenditure is out-of-pocket (OOP). However, the Free Health Care Initiative (FHCI) established in 2010 has been one of the significant reforms to cover pregnant women, lactating mothers, and children under five years to reduce the OOP expenditure for these categories.

7.5 Health insurance

Health insurance is available for a small proportion of the population. National surveys show that 96% of females and 97% of males aged 15 -49 years have no form of health insurance. The report indicated that about 14% of females and 12% of males with tertiary education has some kind of insurance (48).

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