Access to sexual and reproductive health information and services for school-going adolescent girls in Bujumbura, Burundi.

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A thesis submitted in partial fulfilment of the requirement for the degree of

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by

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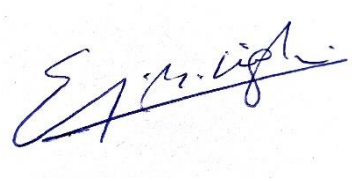
Signature: 

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ABSTRACT

Background

In Burundi, adolescent girls still face barriers to accessing and using sexual and reproductive health information and services. Pregnancies are still high among schoolgirls causing dropouts and other social consequences. This study explored the factors affecting adolescent schoolgirls' access to sexual and reproductive health (SRH) information and services.

Method

This study used a mix method, a literature review complemented by key informant interviews (KII). I searched PubMed, Google Scholar, Google, and the websites of the Ministry of Health and other organizations to find relevant literature. The literature review included studies published in French and English on adolescents 'access to sexual and reproductive health services (SRHS) and not older than 10 years. Fourteen studies and publications were included in the literature review complemented by 11 KII. I used thematic analysis of the data guided by the ecological framework of adolescent access to SRHS.

Results

Findings show that factors affecting schoolgirls' access to SRH information and services operate at different levels and include shame, shyness, misconception, lack of parent-adolescent sex communication, sexuality education not integrated into the school curriculum and non-comprehensive, stigma, social norms, and partial application ASRH policy.

Conclusion

Adolescent schoolgirls in Bujumbura still face barriers to accessing SRH information and services. Initiatives and efforts to improve access are hindered by the socio-cultural norms that consider SRHS to be only for married persons. It is recommended that the Ministry of Education integrate comprehensive sexual education into the school curriculum and empower parents to initiate conversations with their adolescents on sexual matters and to health authorities to make SRH adolescent friendly.

Keywords: Access, adolescent, sexual and reproductive health, schoolgirls, sexuality education.

Word count: 9510

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LIST OF ABBREVIATIONS

ABUBEF:	Association burundaise pour le bien-être familial.
ASRH:	adolescent sexual and reproductive health
CSE:	comprehensive sexuality education
DRC:	Democratic Republic of Congo
EAC:	East African Community
HCP:	health care provider
HIV:	human immunodeficiency virus
ISTEEBU:	Institut des statistiques et d'étude économique du Burundi
KII:	key informant interview
LMIC:	low and middle-income countries
MSF:	Médecins Sans Frontières
NGO:	non-governmental organization
PNSR:	Programme National la de Santé de la Reproduction (Burundi National Reproductive Health programme)
SAA:	Sub-Saharan Africa
SARA:	service availability and readiness assessment
SRH:	sexual and reproductive health
SRHS:	sexual and reproductive health services
STI:	sexually transmitted infection
UNESCO:	United Nations Educational, Scientific and Cultural Organization
UNFPA:	United Nations Population Fund
WHO:	World Health Organization
YFHC:	youth-friendly health centre

GLOSSARY

Adolescent: an individual in the phase of life between childhood and adulthood, from ages 10 to 19(1).

Sexual and reproductive health: “is a state of complete physical, mental and social well-being in all matters relating to the reproductive system. It implies that people are able to have a satisfying and safe sex life, the capability to reproduce and the freedom to decide if, when, and how often to do so”(2).

Sexual and reproductive health services: antenatal and perinatal care, postpartum and newborn care, family planning, including infertility services; safe abortion care; prevention of sexually transmitted infections (STI) including HIV, reproductive tract infections; prevention of cervical cancer and other gynaecological morbidities; and promoting sexual health, preventing and responding to violence against women(3).

Youth-friendly health services: services that offer a conducive environment in an atmosphere that attracts adolescents, they should be accessible, affordable, acceptable, available to adolescents and provided by a personnel skilled in dealing with adolescents(4)

Comprehensive sexuality education: according to UNESCO, it is “a curriculum-based process of teaching and learning about the cognitive, emotional, physical, and social aspects of sexuality. It aims to equip children and young people with knowledge, skills, attitudes, and values that will empower them to: realize their health, well-being, and dignity; develop respectful social and sexual relationships; consider how their choices affect their own well-being and that of others; and understand and ensure the protection of their rights throughout their lives.”(5)

School youth clubs: in Burundi, is sexuality education sessions provided at school by volunteer teachers after school hours.

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INTRODUCTION

Adolescence is defined as the period spanning from 10 to 19 years; those aged 13 to 19 years are referred to as teenagers(6).

Adolescence, the second decade of life, is when an individual undergoes major changes: physical and psychological changes, and changes in social interactions and relationships(7). During this period, adolescents develop a sense of identity and sexual interest; the individual need for intimacy and lovemaking with the opposite gender appears and adolescents explore different ways to express this need. Risk-taking behaviour also develops during adolescence. Those developments are shaped by the sociocultural environment. The parents attitude, peer relationships, cultural and gender norms, and spiritual and moral influence adolescent sexuality learning, development, and attitude(8).

Due to sexual hormones, sexual desire emerges; the beauty of body development and adornment of young girls are perceived as sexual cues by males(9). Cavazos-Rehg et al argue that even though the sociocultural environment plays a determining role in the sexuality of teenagers, the individual character is more determining as at the same age, in the same socio-cultural surroundings, teenagers will sexually behave differently(10). If not accompanied and educated, the adolescent could follow his or her sexual impulse without control, leading to unprotected and unsafe sex and eventually to unintended pregnancy(11,12)

Adolescents form a significant part (1 in 6) of the world population, most of whom live in low and middle-income countries. They face risks related to sexuality because of early initiation of sexual intercourse due to early physical development and peer influence(13). Young people continue to be affected by the consequences of risky sexuality such as the Human immunodeficiency virus (HIV), sexually transmitted infections (STIs) and unwanted pregnancies. Many programmes, activities and studies have been developed to address the sexual and reproductive health needs of adolescents, still, the access and use of sexual and reproductive health services (SRHS) by adolescents to avoid risks linked to their sexual activity are very low in Low and Middle-Income Countries (LMIC) and particularly in Sub Saharan Africa (SSA)(14). According to the World Health Organization (WHO), as of 2019, about 21 million

adolescents aged between 15 and 19 years gave birth each year in LMIC, 50% of them are unintended, and 55% of those unintended pregnancies end in abortion, most of the time unsafe abortion. In SSA, the birth rate of adolescents aged 10 – 14 years was estimated at 4.6 per 1000 women in 2022, four times the global rate(15).

After my nursing studies at the Medical College of Bukavu, east of the Democratic Republic of Congo (DRC), I came to work in Burundi. I began working in a private health centre in Bujumbura, the capital city, before moving to province the province of Ruyigi to work with Médecins Sans Frontières (MSF – Doctors Without Borders). During my two first months of working in Bujumbura, I received four schoolgirls who solicited me to terminate their unwanted pregnancies. I couldn’t help because I had no capacity and abortion is illegal in Burundi. I received other cases of incomplete abortion, with bleeding, one of them was in choc, a near-miss case that I referred to the hospital for blood transfusion. The most striking case was that of a girl in boarding secondary school; she had kept her baby until full term without anyone noticing until she gave birth in the shower. It was her baby's cry that alerted her colleagues, and we received the baby in paediatrics for resuscitation.

During this period there was a high prevalence of HIV in the country and antiretroviral treatment was not yet available. I was wondering why despite the awareness raised through different media about HIV, those teenage girls continued to take such risks of unprotected sexual intercourse. From there came the idea of a study on access to and use of sexual and reproductive health (SRH) information and services for schoolgirls in Bujumbura. The study aims to identify the determinants of access and use of school-going teenage girls in Bujumbura to propose the most suitable strategies to enable access and thus decrease pregnancies among school-going girls.

Chapter 1: BACKGROUND

The Republic of Burundi is a landlocked country located in Central Africa in the Great Lakes region and conterminous to East Africa; it is part of Central Africa and the East African communities and shares culture with them. Burundi borders Rwanda to the north, Tanzania to the south and east, and the DRC to the west. The country covers a surface area of 27 834 square kilometres, its population was estimated at 9.285.139 by the last census of 2008, considering the demographic change, the population is estimated today to be around eleven million. Demographic change control remains a major challenge, as the contraceptive prevalence rate is still only 25.3%, according to the last activity report of the Programme National de la Santé de la Reproduction (PNSR, the national programme of reproductive health). The demographic and health survey of 2010 revealed that the rate of unmet needs was 31%, and the fertility rate was 6.3 children per woman. To respond to that challenge, the Ministry of public health has established sexual and reproductive health services in almost all the public health structures and created alternative solutions to go around the refusal of religion-administered health structures to offer modern contraceptives(16).

1.1. Adolescent population

The Burundian population features an important number of youths. According to data from the 2008 census, 46% of the Burundian population is under 15 years and the median age is 17 years, two-thirds (65.7%) is under 25 years of which the youth between 10 and 24 constitutes 33.9%. Adolescents constitute an important part of the Burundian population, 24.4% among them 12.3% are 10 -14 years and 12.0% are 15 - 19 years(17,18). The proportion of adolescents aged 15 – 19 years who have had sexual intercourse before the age of 15 is estimated at 3.5% for adolescent girls and 9.3% for adolescent boys. Access to sexual and reproductive health services (SRHS) is very low and sexuality education has not yet been introduced in the regular school curriculum(16). The adolescent sexual and reproductive health (ASRH) indicators are far from ideal, as shown in Table 1.

1.2. Socio-cultural situation

Burundian society is patriarchal, and efforts are made towards gender equality, but the way is still far from reaching that goal. Religion plays a central role in Burundian life,

the principal religion is Christianity (95.1%), followed by the African traditional religion (5.7%) and Islam (2.8%). There are a considerable number of health structures and schools are owned by religious denominations which disseminate their values through those structures. Those values are not always favourable to modern contraception and comprehensive sexuality education(16).

1.3. Organization of the health system

The health system in Burundi is pyramidal with three levels: the central level, the intermediate level, and the peripheral level. At the central level, are policy designs, health planning, health strategies, and resource mobilization. The intermediate level is formed by the provincial health offices; those offices are the decentralized ministries of public health at the provincial level. Each provincial office heads at minimum three health districts. The peripheral level is formed by the health district's offices. Each health district supervises a district hospital and a number of health centres.

The health services provision has the same pyramidal aspect: at the top, the university and national hospitals, followed by the provincial hospitals, after the provincial hospitals, the district hospital, and, at the base, there is the primary health care (community health and the health centres)(19). It is at this last level where sexual and reproductive health services are mainly provided. In Bujumbura, there are 39 health structures which are supposed to provide youth-friendly services, 25 are public health structures and 14 are private. Those health structures are sponsored by international organizations and NGOs.

1.4. Education system

The school system in Burundi is structured into four stages: the nursery school from 3 to 6 years, the primary school from 6 to 12 years, the secondary school from 12 to 18 years and the higher education from 18 and above. Most teenagers are in secondary school. At the secondary level, we have two systems, boarding schools and day schools. Among the boarding schools, the public schools under the management of religious denominations are unisex, while the boarding schools under government management are mixed both sexes. In Bujumbura, most secondary schools are day schools.

1.5. Study location

Bujumbura, the capital city of Burundi is located in the west of the country on the northeast coast of Lake Tanganyika, its population was 497 166, according to the last census of 2018 by the ISTEEBU(20). This number may have doubled due to the fast expansion of the city. In Bujumbura, like in all other capital cities, we find all the available assets, facilities, and services of the country. It is divided into 3 administrative communes, Ntahangwa, Muha, and Mukaza. The latter is the commune where most administrative offices, businesses, and high-class quarters are located. Muha and Ntahangwa are peripheral, Ntahangwa being the most populated with old quarters like Kamenge and Kinama, the most school pregnancies in Bujumbura were documented there in the last report of the Ministry of Education 2020.

Table 1. Adolescents' Sexual and reproductive lives: Burundi country profile

INDICATOR	Both sexes	Female		Male	
	10 – 19 years	10 – 14 years	15 – 19 years	10 – 14 years	15 – 19 years
Total population of adolescents (millions) (2020)	2.7	0.8	0.6	0.8	0.6
% of the total population that are adolescents (2020)	22.9	12.5	10.1	12.8	10.3
Completion rate for upper secondary school (2017)	-	-	11.4	-	13.5
% of adolescents that ever had sex	-	No data	14.7	No data	15.8
% of adolescents having had sex by age 15	-	No data	2.6	No data	9.0
% of adolescent girls who have begun childbearing (2016-17)	-	No data	8.3	-	-
Number of births per 1,000 girls, 15-19 years (2019) %	-	No data	51.4		
% of unmarried adolescent girls (aged 15-19) with an unmet need for modern methods of contraception	-	No data	36.3	-	-
% of sexually active unmarried adolescent girls (aged 15-19) who currently use at least one method of modern contraception	-	No data	38.5	-	-

Source: WHO 2020.

Chapter 2: PROBLEM STATEMENT, JUSTIFICATION AND OBJECTIVES

2.1. Problem statement and justification

Teenage pregnancy is a global public health problem inducing risks to young mothers and their children(21), it concerns all countries and mostly low- and middle-income countries (LMIC). As of 2019, 21 million pregnancies were estimated to happen each year in LMICs; 50% are unintended (22). In SSA countries, 14 million pregnancies occur each year, nearly half of them among teenagers between 15 and 19 years (23,24). Unmet contraceptive needs among sexually active girls are acute in Africa, 50% of unmarried 15 – 19 years girls have contraceptive unmet needs, exposing them to unintended pregnancies which can lead to unsafe abortion (25% of all unsafe abortions in Africa)(25). In 2021, the largest number of births among girls 15 – 19 years (6 114 00) occurred in SSA countries(22). Some teenagers by fear of rejection by their family and friends, recourse to abortion, and most of the time unsafe abortion. As in most LMIC, abortion is illegal, abortion is performed by individuals without the required skills and equipment, putting the pregnant teenager's life at risk(12,22,26).

Teenage pregnancy is a sign of unprotected sexual intercourse(27), and it exposes the young girl to many health and social risks: obstetrical complications, dropping out of school, social stigma, and life hardship due to unemployment, poverty and exposure to STIs (24). Teenage pregnancy is one of the main causes of maternal and infantile deaths, 1 million girl teenagers die or suffer from pregnancy complications each year(12,26). Teenage childbearing is associated with physical and mental health problems for adolescent mothers and their offspring, and later, has an impact on their social and economic situation. This makes teenage pregnancy prevention a topic of public health interest and a target of research and intervention(21)

The global population is largely composed of young people, with adolescents making up a significant group, 20% of the global population and 85% of them are from low and middle-income countries (LMIC)(28). They are sexually active at an early age because of the decline of the menarche age, better nutrition of the young generation, poor sexual education and poor socio-economic conditions for young females(29). Adolescent girls in Sub-Saharan Africa (SSA) are particularly vulnerable because of gender inequality, poverty, sexual violence and coercion, less investment in adolescent

girls' human capital, and they are denied the right to make informed decisions for their health. They are susceptible to unintended pregnancy with consequences affecting them and the future generation: poor socio-economic and educational outcomes(30,31).

Burundi, like other LMIC, is not different, 65% of its population is under 25, and among them, adolescents constitute 23%. The sexual debut of young Burundians is early, 39.5% of young respondents in a survey on youth health in 2019 admitted having begun their sexual activity before the age of 15(32). Their sexual activities are largely unsafe resulting in unintended pregnancy and sexually transmitted infections STIs. In Burundi, in 2017, the teenage maternal mortality rate was estimated to be 150 per 1000, higher compared to women of adult age, because of the immaturity of their bodies.(33)

The factors shaping unsafe sexuality are inter alia, early initiation of sexual intercourse, negative attitude towards the use of contraceptives, poor socio-economic situation, low level of education, and lack of family support (33) among them, access to sexual education, contraceptive information and services is crucial.

A demographic and health survey undertaken in 2010 by the Institut de Statistiques et Etudes Economiques du Burundi (ISTEEBU – National Statistical Institute of Burundi) showed that 14% of teenagers between 11 and 14 years old were sexually active and 11% of female teenagers between 15 and 19 have experienced pregnancy. This general situation can be inferred to school girls: a survey by the UNFPA found that between 2009 and 2012, there were 4760 pregnancies among schoolgirls aged between 13 and 19 years attending secondary school in Burundi; another survey conducted by Tungubumwe in 2017 in Bujumbura revealed that only 17% of school teenagers who admitted to having had sex during the month preceding the interview used condom(23).

Another health and population survey conducted by ISTEEBU in 2017 revealed that the population of Burundi is young, 51.3% are under 18, and among them, 8.3% had experienced pregnancy, a decline compared to the findings in the previous survey. Among school teenage girls the trend is at increase opposite to the national one. The report of the Ministry of Education released in July 2020 indicates that pregnancies at school are constantly increasing, by 50% each year, from 2009 to 2012, and from 2010

to 2016, 877 to 2208 pregnancies involving girls between 14 and 18 years old(34). Different studies on adolescent health in Burundi concluded that adolescents are confronted with many challenges such as earlier initiation of sexual activities with a weak rate of contraceptive utilization; only 1.3% of teenagers between 15 and 19 use modern contraceptive methods(19).

In contrast to other countries, teenage pregnancies in Burundi are less associated with child marriage, child rights activists state that most teenage pregnancies occur outside marriage and marriage will be a consequence of pregnancy. The main factors associated with teenage pregnancy in Burundi are diverse, personal, familial, and socio-economic. On the individual level, the risky behaviour of teenagers and their attitude to sexual and reproductive health services (SRHS). A study conducted in 2016 found that teenagers have a negative attitude towards SRHS grounded in a negative perception of service providers, the rumours about the adverse effect of modern contraceptive methods and the belief that those services are only for married adults(6), which is a sign of lack of information. Nibaruta et al (2021) in their study on determinants of childbearing in Burundi found that school is a protective factor against teenage pregnancy, out-of-school teenagers were 3 times higher at risk of getting pregnant than those at school, because of early marriages. At the socioeconomic level, the same study found that teenagers from poor communities were more exposed to pregnancy because of early engagement in sexual intercourse in exchange for money to respond to their needs(33). The low level of SRHS use by teenagers in Burundi is striking, during a study conducted in 2016, only 4.8% reported ever using once the SRHS, the causes of the low rate of use are not known and is unclear how youth-friendly SRHS are in Burundi(6).

Communication on sex matters between the young girl and her parents is always taboo in Burundi like in most countries in Africa, and when some mothers engage with their daughters, it is to value abstinence and virginity(24). Most teenagers learn about sexuality in informal ways, from peers, and nowadays, because of globalization, from all available social media; most of the time those informal ways are misleading.

School constitutes a particular environment for teenagers' development and has an important influence on them through education and peers(21). The sexual activities of schoolgirls teenagers are influenced by different motivations, some want to experience

sexual pleasure, and others use sex to respond to financial or other needs(23). Prevention programs can help decrease the prevalence of school teenage pregnancies. Like other Burundian teenagers, school teenagers face challenges related to SRH due to limited access to reliable and comprehensive SRH information and limited access to and use of youth-friendly services(35). Access to existing pregnancy prevention information and SRHS will help to prevent teenage pregnancies. It is a basis of sexual health and overall well-being and recognized adolescent rights(36).

To address those needs, a consortium of four organizations, UNFPA, Cordaid, CARE and Rudgers implement the programme “Menyumenyeshe” (Know and inform) financed by the embassy of the Kingdom of The Netherlands in Burundi. In secondary schools, the programme introduced the book “le monde commence par moi” (the world begins by Me), an SRH education curriculum validated by the Ministry of Education. It includes among others, lessons on self-esteem, prevention of STIs and unintended pregnancy, and relationships. It is provided in school youth clubs after school hours, which doesn’t favour participation(35). Not all secondary schools organize youth clubs.

To align with the global strategy on women’s, children’s and adolescents’ health 2016 – 2030 and to reach the Sustainable Development Goals, the government of Burundi, through the Ministry of Health, adopted in 2018 a 5-year strategic plan for women’s, children’s and adolescents’ health called ‘Plan stratégique national de la santé de la reproduction, maternelle, néonatale, infantile et de l’adolescent, PSN- SRMNIA 2019 - 2023’(19). Furthermore, national and international stakeholders such, L’Association burundaise de bien-être familial (ABUBEF), Centre Seruka, Nturengeho and Pathfinder International, to name some, support the government efforts to provide school adolescents with sexual education and contraception information and access through after class youth clubs and youth-friendly health centres (centres amis des jeunes in French). Though Burundi is doing better (8.3% of pregnancy among 15 – 19 year girls) than some of its neighbouring countries in the region like Tanzania and Uganda (24.8% both), and the DRC (27.2%), teenage pregnancies remain a worrying phenomenon(6). This is why this study is important to address the question of access to SRH information and services.

There are few studies on adolescent SRH in Burundi addressing mainly teenage pregnancy in the general population and the evaluation of existing prevention programmes, considering all adolescents, married and single; none of them addressed the issue in the school environment or of the access to information and SRHS. This study targets school-going teenage girls because of their particular SRHS and information needs, and the consequences of unsafe sexual behaviour impact most teenage girls. It will attempt to respond to the following questions: 1) What are the personal and environmental determinants of access to and utilization of SRH services and information for school-going teenage girls in Bujumbura? and 2) What strategies can expand access to and use of SRHS by teenagers to prevent pregnancies at school?

2. 2. Study objectives

2.2.1. Main objective:

Identify determinants of access to SRH information and services for school-going adolescent girls in Bujumbura.

2.2.2. Specific objectives:

1. Identify the personal and interpersonal, socio-cultural and policy factors influencing school-going girls' access to and use of SRH information and services.

2. Identify school and health system-related determinants of SRH information and services access.

3. Identify effective strategies to improve access and utilization of the existing information and services to prevent teenage pregnancy at school.

4. Make recommendations to the ministries of education and health on effective strategies to improve access to and use of SRH information and services.

Chapter 3: METHODOLOGY

This study used a mixed method, a literature review of publications addressing adolescent access to SRH information and/or services and key informant interviews (KII). The KII focused mainly on the professional experience of the respondents and not on their personal opinions or views. The study used semi-structured interviews of key informants from the education and health sectors helped to complement and clarify the findings from the literature. Key informants shed light on the professional hindrances to giving the needed SRH information and services to school teenage girls to prevent pregnancy. The qualitative method gives tools to explore the drives in the life of adolescents, it goes beyond the outcome and explores the motivation and context leading to the phenomenon; it helps to inform the service providers how to adapt their interaction to best meet the specific needs of their clients(37).

2.1. Conceptual framework

This study used the ecological framework (Fig 1) to describe factors influencing school-going teenage girls' access to SRH information and services. This framework describes the factors influencing health behaviours and outcomes at different levels, intrapersonal, interpersonal, organizational, community, and public policy. It helps to focus on specific factors influencing specific behaviours and outcomes at each level and to suggest interventions at each level(38).

Fig. 1. Ecological framework showing factors affecting adolescent access to SRH information and services, adapted by Mutea L et al, 2020(39)**.**

At the individual level, the factors that empower adolescents are knowledge, attitude, and skills. At the interpersonal level, relationships are influencing the sexual and reproductive health of adolescents, these are parents, peers, teachers, and health workers. At the organizational level, come health facilities and schools. At the community level, socio-cultural norms such as religion, stigma, misconception, and myths may influence adolescent access to SRH information and services. At the societal level, laws and public policy define the adolescent SRH policy and environment that determine access to information and services.

There are other theoretical and conceptual frameworks for access to services. The Levesque framework on access to services is very broad, it embraces a large range of access aspects which are also relevant to adolescents but less specific as for the ecological framework which was designed for adolescent SRH access(40). Brindis et al present a range of frameworks and model for adolescent SRH interventions, most of which targets one or two aspects of SRHS access and use for adolescents mainly focusing on individual aspects of access among them, the theory of planned behaviour, the PRECEDE framework and the health belief model(41).

2.1. KII Data collection

I wrote letters to the municipality education office and the health office to request access to teachers leading the school youth clubs and nurses in charge of youth-friendly centres in selected health districts. After two weeks of follow-up, the municipality education director referred me to the Ministry of Education for my thesis was from a foreigner university. I addressed my request to the ministry; the secretariat sent it to the general direction of education. at the follow-up time, the General Director was out of the country, and I had to wait for his return. Meanwhile, the school year was approaching its end, and my request was not a priority. The teacher of my son helped me to get in contact with the school clubs' focal point in the municipality education office. The focal person gave me the name and contact information of the teachers in charge of youth clubs in the selected schools. As the school year had ended, I could contact them in private out of school and conduct interviews. I phone-called the teachers to explain the aim of my study, requested their participation, and booked appointments, 6 of them agreed to participate.

For the youth-friendly centres, I directly contacted the health district as each health district director has the power of decision in his area of responsibility. It was easier to

get permission from the health districts, from which I got stamped letters to access youth-friendly centres. I went to see the responsible for each youth-friendly health centre with a stamped letter to explain the study's aim, request participation, and book appointments.

In addition to the municipality education and health offices, I contacted the person in charge of ASRH at the PNSR gave me the list of youth-friendly centres in Bujumbura but declined to participate in the study. I also sent emails to the ASRH officer of the UNFPA and the ABUBEF, but I never received their answer.

The research team used a purposive sampling of schools and youth-friendly centres in which KII were conducted. From the last report on school pregnancies (2020), the commune of Ntahangwa prevailed, with 16 pregnancies out of 21 documented in Bujumbura during the school year 2018 – 2019, Muha reported 5, and Mukaza 0. The research decided to conduct KII in Ntahangwa and Muha, 6 teachers and 6 nurses volunteered to participate in the interviews. Teachers and HCP were recruited from public schools and health centres, except one nurse from a private youth-friendly centre sponsored by the WHO and UNFPA.

Six youth club teachers and five HCP from YFHC agreed to participate in the interviews. Most respondents were females, 8 out of 11 respondents (see table 3), because the SRHS are usually provided by females. The ages of respondents varied between 38 and 57 years, the minimum education level was a secondary school diploma, and the maximum was a bachelor diploma. One of the female nurses refused to be recorded, which reduced the number of considered interviews to 11.

Tab 2. Key informant respondents' profession and sex

Key informants	**Teachers**	**HCP**	**TOTAL**
Male	2	1	3
Female	4	4	8
Total	6	5	11

The research guide was translated into French, the official and educational language in Burundi. The team used semi-structured interviews to collect data, the interviews were recorded in transcribed verbatim in French.

2.2.1. Ethical consideration

This study received a waiver from the Royal Tropical Institute KIT Amsterdam for KII data collection and the permission of health district directors to interview the HCP responsible for youth-friendly health centres in their districts. The objective of the study was explained to all participants, and they gave their written consent to participate. The interview time and venue were agreed upon by each participant and the research team.

2.2.2. Data analysis

We used thematic data analysis following the deductive approach and guided by the ecological ASRH framework. Two teams of two researchers each analyzed separately the French transcripts, at the end of the analysis, the two teams met to discuss their findings, the results were from the consensus of the two teams. The transcripts were analyzed manually. We followed the six steps of thematic analysis described by Braun and Clark (2006): familiarity with the data and noting initial ideas, generating data and collating ideas related to each code, searching for themes and collating codes relating to each them, reviewing themes, defining and naming themes, and producing a report(42). Only the last step, writing the report, was in English.

2.3. Literature review.

The literature search fetched in electronic databases PubMed and Google Scholar; the search extended to other websites Google, the WHO website and websites of other organizations involved in ASRH in Burundi and the website of the Ministry of public health of Burundi to find reports and publications related to ASRH. The search terms were adolescent, teenage, youth, young people, youth-friendly services, access, sexual health, reproductive health, Burundi, and Sub-Saharan Africa. I looked at the bibliography of the found studies to find additional interesting publications.

2.3.1. Inclusion and exclusion criteria

The inclusion criteria of published literature were having as the main subject the access of adolescents to SRH information or services, the country of study being Burundi or East African countries (EAC)- as their sociocultural features are very similar to those of Burundi-, published in English or French, and not older than ten years, as policy and interventions change through time. Reports on adolescent SRH programmes in Burundi dealing with access were included.

Were excluded publications dealing with access to ASRH of particular categories of adolescents such as key people, lesbians, homosexuals, drug injecting, people with disability, etc. Adolescents in those categories may have access barriers which are not common to all other adolescents. Publications on the consequences of adolescent non-access and non-use of SRH, pregnancy, STI and HIV were also excluded because they provide little or no information on access factors. Publications of studies conducted outside the EAC were excluded except for two literature reviews of studies conducted in SSA.

This review included qualitative and quantitative studies, reports and other documents relating to adolescent access to SRH. The search allowed us to find a total of 7 200 publications, after screening titles and abstracts, 96 were selected for full-text screening. After the latter screening, 14 publications and reports were selected for review (see Fig 1). Among the selected publications, 6 from Burundi (one study, 3 ASRH programme evaluation reports, and 2 policy documents from the Ministry of Health), 3 publications from Kenya, 2 from Tanzania, 2 from Rwanda and 2 literature reviews of ASRH access and utilization in SSA (see Tab 3).

2.4. Limitations

There were few published studies on ASHR access from Burundi. Most literature about the country was from grey literature, official reports, policy documents, programme evaluation reports, policy briefs. The KII focused mainly on the experience of respondents in their daily work and not on their opinions or attitudes. In spite of that, KII complemented and clarified the finds of literature review.

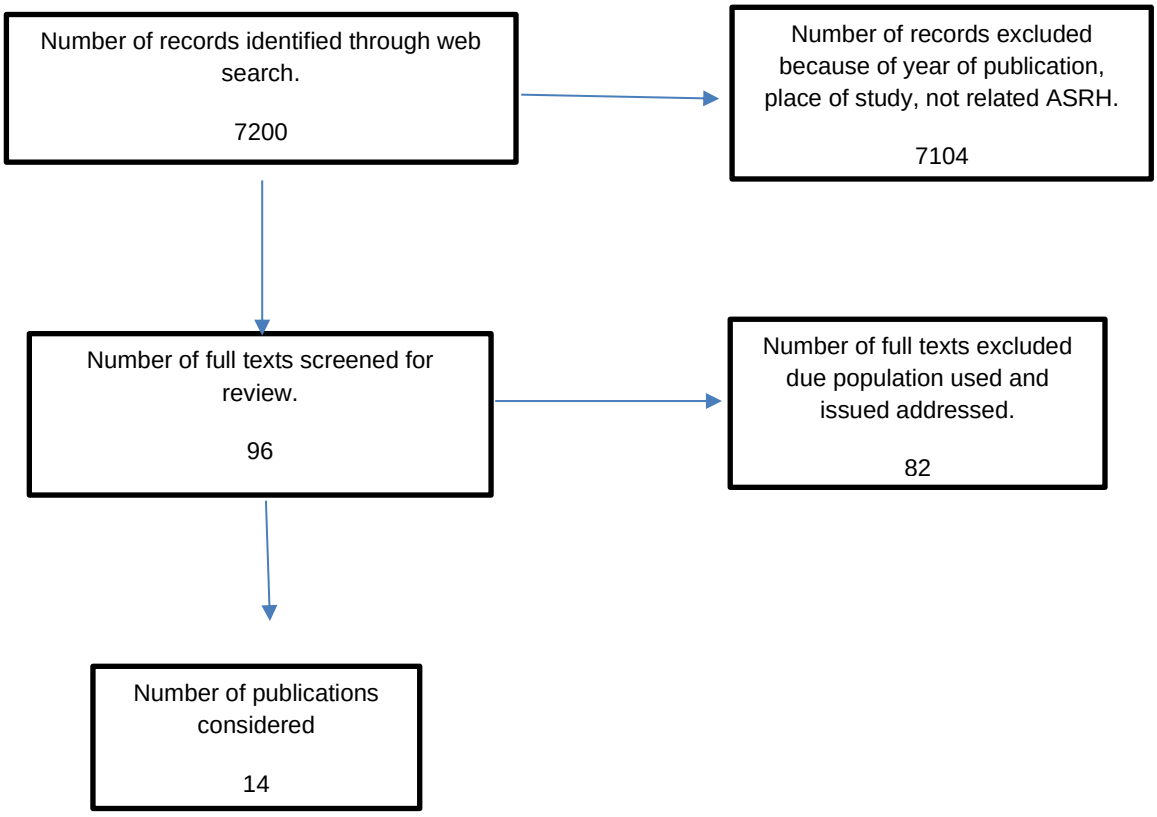

Fig 2. Flowchart of selection of studies included in the literature review.

Chapter 3: RESULTS/FINDINGS

Table 3. Selected studies and documents for literature review.

AUTHORS	TITLE	METHOD	POPULATION	YEAR	COUNTRY
Aline Labat et al	Santé des jeunes de 10 à 24 ans au Burundi, enquête 2019	Mix method	10 -24 years	2021	Burundi
Share-net	Experiences and Perceptions of Mid-adolescents, Parents and Teachers on Comprehensive Sexuality Education: A Multiple Country-based Qualitative Research Study in Bangladesh, Jordan, Burundi. Policy brief – Burundi	Qualitative	15 – 19 years and KII	2021	Burundi
NWO	Effectiveness of sexual and reproductive health in Burundi. Policy Brief	Mix method	10 -19 years, parents, teachers and KII	2020	Burundi
Lilian Mutea et al	Access to information and use of adolescent sexual reproductive health services: Qualitative exploration of barriers and facilitators in Kisumu and Kakamega, Kenya Lilian	Qualitative	15 – 19 years, teachers, parents/KII	2020	Kenya
Harry French	How the “Joint Program” Intervention Should or Might Improve Adolescent Pregnancy in Burundi, How These Potential Effects Could Be Encouraged, and Where Caution Should Be Given.	Literature review	15 – 19 years	2019	Burundi
Zaina Mchome et al	A ‘Mystery Client’ Evaluation of Adolescent Sexual and Reproductive Health Services in Health Facilities from Two Regions in Tanzania	Qualitative	15 – 19 years	2015	Tanzania
Ministère de la Santé publique et de lutte contre le Sida du Burundi	PLAN STRATEGIQUE NATIONAL DE LA SANTE DE LA REPRODUCTION, MATERNELLE, NEONATALE, INFANTILE ET DES ADOLESCENTS	Policy document	Women, children and adolescents	2019	Burundi

Ministère de la Santé publique et de lutte contre le Sida du Burundi	POLITIQUE NATIONALE DE SANTE 2016 - 2025	Policy document	Whole population and all sectors	2016	Burundi
Mbarushimana et al	“Such conversations are not had in the families”: a qualitative study of the determinants of young adolescents’ access to sexual and reproductive health and rights information in Rwanda	Qualitative	KII	2022	Rwanda
Lesley Rose Ninsiima et al	Factors influencing access to and utilisation of youth-friendly sexual and reproductive health services in sub-Saharan Africa: a systematic review	Literature review	10 – 19 years	2021	SSA
Pamela M Godia	Sexual reproductive health service provision to young people in Kenya; health service providers’ experiences	Qualitative	HCP	2013	Kenya
Joyce Kinaro	Perceptions and Barriers to Contraceptive Use among Adolescents Aged 15 - 19 Years in Kenya: A Case Study of Nairobi	Mix method	Adolescents, parents and teachers	2015	Kenya
Abubakari Sulemana	Young people’s experiences in accessing sexual and reproductive health services in sub-Saharan Africa from 1994 to 2019 - A content analysis	Lit review	Adolescents	2020	SSA
Pacifique Ndayishimiye	Availability, accessibility, and quality of adolescent Sexual and Reproductive Health (SRH) services in urban health facilities of Rwanda: A survey among social and Healthcare providers	Mix method	HCP	2020	Rwanda

Source: Author analysis

KII identified as factors affecting adolescents' access to SRH information and services, poverty, misconception, shyness and shame, stigma, social media and peer influence, lack of agency, absence of parents' involvement, early initiation of sexual activity, and ASRH policy pushed by international organizations.

3.1. Barriers and enablers to adolescent access to and use of SRH information and services.

The factors affecting adolescent access and use of SRH information and services operate at five levels, individual, interpersonal, community, organization and structural (laws and policy). Those factors are two kinds: those negatively affecting the access and use of SRH information and services referred to as barriers and ones affecting positively that access, referred to as enablers. Below, I present both enablers and barriers on the five levels of the framework, presenting first the barriers factors, and then the enablers.

3.1.1. Individual level.

At the individual level, barriers are linked to adolescent knowledge of SRH services (existence, where to find needed services), the attitude towards contraceptives (misbeliefs, myths) and skills to seek and use information and services.

Lack of knowledge about SRHS is one of the barriers to access and use of them in Burundi. In a study on youth health in Burundi conducted by Labat et al (2019) involving 1 964 youth 10 - 24 years, only 10.5% of respondents were aware of the existence of youth-friendly health centres where they could seek SRH information and services (32). That lack of knowledge was noticed in other studies among secondary school students, many never heard about youth-friendly health centres or sexual and reproductive health rights (SRHR)(6). Those knowledge gaps are on a range of topics, including correct use of condoms, the most probable period of getting pregnant (some think is during the days following menstruation), body development, contraception, and love and relationship(6,39,43). Some adolescents don't know where to find information, they rely on the lay information they hear from non-professionals and don't seek the correct information(18,39,44). This lack of knowledge can induce a negative attitude towards SRH services.

The lack of agency and low self-efficacy of adolescents constitutes an important barrier. Most adolescents are shy and uncomfortable talking about sexuality, they can't ask for information about their sexual life, and they will not seek healthcare because they fear being seen by other community members(14,39,45,46). Adolescents fear for their reputation, they don't want rumours to be spread about their sexual behaviour. In addition, studies in Burundi and other EAC found some young people have a negative attitude towards contraceptives, they think they are harmful to their health, and some oppose the use of condoms because they feel is not good(32,39,43–46). In Burundi, during the mid-term evaluation of the" Menyeyumeshe" (know and inform) programme, Share-net found that 30% of respondent young people had used a condom during their last sexual intercourse (6,18,43).

The negative attitude will affect the adolescent skills, self-efficacy and agency to seek and use SRH information and services. The above-mentioned report stated that school adolescents could not take the initiative to ask about their sexuality and could not make informed decisions about their sexuality; school teenage girls in Burundi could not negotiate the use of contraceptives including the use of condoms(18,35).

For individual enabling factors influencing access to ASRH, Kinaro et al (2015) found that knowledge of and positive attitude towards contraceptives favour the seeking and using of SRH information and services(46)

The qualitative narratives support the literature findings on the adolescent lack of agency and self-efficacy.

KII participants shared that adolescent girls initiate sexual activities before acquiring any sexual education and information about their bodies, because of the early development of their body and early menarche.

"Those young girls start too early when there at primary school even, let's between 6th and 7th form, when they start seeing their period and the breasts point in the chest, they think they are adults; there is no sexual education in those classes, they know nothing" A male youth club teacher.

KII indicated that young girls were shy to seek SRHS because they were not married and those services were supposed to be for married women, they feel ashamed to ask for contraception and mainly condom. Using a condom is perceived as a sign of

promiscuity, and many think that the initiative of using a condom should come from the boy because, in general beliefs, only sex workers buy and carry condoms with them.

"*Do you imagine a young girl carrying with her a condom? This is for prostitutes because for them it is a tool for their work, like a hoe for a farmer…and that's what we tell the boys (in school youth clubs), it is to you to prepare for a condom because you are the one who provokes the girls to have sex*" A female youth club teacher.

"They come (adolescent girls), they turn around, if they see people in the health centre, they will not dare to get in because they ashamed of what they came to do, sometimes, they will go back without receiving the services they wanted" a female nurse in YFHC.

Some adolescent girls have misconceptions about contraceptives, they fear sterility in the future when they will need children.

"They [adolescent girls] always ask: 'if I use contraceptives now, it will not cause me to be sterile, because I always hear people say it'? and I have to reassure them. Those who dare to ask, who knows how many don't come because of this fear." A female YFHC midwife.

The source of information will influence access and use of SRH, there are many popular narratives about contraceptives, and adolescent girls may rely on that information instead of looking for an accurate one. Others will look for information on social media, mainly YouTube, whose information is not always right.

"Young girls deceive each other by information obtained in popular beliefs, some think that if they take a double dose of quinine after having sex, they will not get pregnant; others say that if they wash their vagina after sex, they will not get pregnant, this not true, but you will hear those stories in the city" a female nurse in YFHC.

"Those smartphones are un problem for our youth, YouTube, the YouTube! Every information they want, they will go there, and some of the information they get there is not true and will mislead them" a female teacher of the youth club.

3.1.2. Interpersonal level

Aside from the barriers related to the individual, interpersonal factors can negatively impact ASRH. The factors can be from parents, schoolteachers, health care providers (HCP) or peers. Many studies conducted in EAC and reports of ASRH programmes in Burundi reported a lack of communication on SRH matters between children and their parents. Share-net in an evaluation report of the comprehensive sexual education programme in secondary schools in Burundi, showed that parents felt discomfort talking about sexual matters with their children, they believed sexuality education was sexually permissive and will induce promiscuity in their children(18). Mutea et al (2020) in a study on adolescent access to information and use of SRHS in Kenya found that SRH was rarely discussed at home because this topic is to be discussed among adults while adolescents are considered children. It is not culturally acceptable to discuss sexuality with one's children. This parents' attitude makes adolescents fear discussing their SRH problems with their parents, and that lack of communication between adolescents and their parents constitutes a barrier to information and the use of SRHS(39).

The interaction between health care providers (HCP)and adolescents seeking SRH information and service is determinant of adolescents' SRHS seeking behaviour. In a mystery client study in Tanzania, many HCP showed negative attitudes towards adolescents seeking SRH, they were not welcoming, some were rude to adolescents, and some played the role of parents instead of empathic HCP, considering SRH is for married and not for single adolescents(47).

In Burundi, teachers of CSE in secondary schools put the cap on parents, delivering fear-based and moralizing messages instead of empowering adolescents navigating through the societal norms and their sexuality and SRH needs(18). This has a negative impact on adolescents, it increases anxiety, does allow them to make informed decisions and leads adolescents to avoid contact with friends of the opposite sex rather than correctly dealing with certain situations(35)

As adolescents lack a proper source of information, they recourse to peers to quench their information thirst; information from peers can be incomplete and sometimes misleading. Peers can draw their friends into risky behaviour including alcohol and drug abuse, and unprotected sexual intercourse to affirm themselves towards their peers(18,39).

On interpersonal enablers, the share-net report on school CSE in Burundi showed that peer education and support increased the self-esteem of adolescents and felt valued in their community. This allowed access and use of information impact of which was observed in the decrease in school pregnancy(6). Adolescents from families where SRH matter is discussed are more likely to use SRHS than those who don't discuss it with their parents, it has been proved that parental approval allows adolescents to use contraceptives. Supportive HCP encourage adolescents to use SRHS when they need them(39,46)

The KII finds are consistent with the literature on the lack of parent-adolescent communication.

Key informants mentioned the lack of involvement of parents has a negative influence on young girls' access to information and use of ASRH. Because of cultural norms, parents are ashamed to talk about sexuality with their children, others lack time to give ordinary education to their children.

"they're not there [the parents]. In these working-class neighbourhoods, people are struggling to get by, trying to get their children to go to school, get something to eat, and so on, but they don't have the time to sit down together with their children, give advice and so on". A female youth club teacher.

3.1.3. Organizational level

Organizational barriers are at two levels, school system and health system organizations. The PNSR and other stakeholders intervening in school adolescent SRH information and services in Burundi reported gaps in CSE in schools. Teachers are not equipped enough to deliver CSE information, because of a lack of proper training on CSE and appropriate materials(19,43). CSE is neglected in schools, there is no session of sexuality education during class hours and many teachers are not interested in CSE. During its annual activity evaluation of 2018, the PNSR noticed limited SRH information and services in secondary schools and universities(18,19,35).

The service availability and readiness assessment (SARA) commended by the Ministry of Health of Burundi in 2017 found that ASRH were available in all provinces of the country but with few staff members trained in ASRH provision, only 34% of health facilities could provide ASRH among them 17% had the required technical capacities. Bujumbura, the capital city, presented the fewest proportion of health structures

providing ASRH services as it hosts many private health facilities which don't provide ASRH(48). And in those health facilities providing ASRH services missed staff dedicated entirely to ASRH, working on that as an extra task. Therefore, adolescents are confronted with long queues and waiting times(39).

Adolescents hesitate to seek SRH because they complain about the lack of privacy for ASRH in most health facilities, everybody can notice an adolescent seeking SRHS, and people can hear the conversation between the adolescent and HCP due to the disposition of the infrastructure. And the opening hours are not favourable to school adolescents, because services open during school hours when adolescents leave the school the ASHR service is closed(47).

School sexuality education is an enabling factor for SRH information access, as it compensates for the lack of communication on sexual matters in the family and helps adolescents to acquire accurate information about their body development(35,44).

At the organization level, KII supported findings in the literature and explained that the HCP are overwhelmed by workload and the ASRH is considered an extra task for them. The teachers in charge of youth clubs have to stay after work hours to run sessions and this extra time is not paid.

"If I see an adolescent girl in school uniform, I have to leave what I am doing to attend to her, but if I am not there, other colleagues will finish first what they have to do, and the girl will feel embarrassed to wait so long and may leave without receiving the needed service" a female nurse in YFHC.

"It's extra work, but there's really nothing, even if it's the Ministry that set it up, no motivation, no motivation on their part, other than the fact that during training courses, they pay us travel expenses. You understand that it's a lot of work." A female youth club teacher

The results also show that sexual education in school youth clubs is still shaped by social norms, teachers focus mainly on abstinence and give little time to condom use and modern contraceptives.

"We insist on abstinence, on good education, it is not easy to tell children to go and use the methods of adults" A male school youth club teacher.

The presence of youth clubs and YFHC improved adolescent schoolgirls' access to and use of SRH information and services. Those attending the youth clubs learn about their body development, and they can speak freely and ask questions.

"Since the start of this programme of school club, I noticed a decrease in school dropout among girls" A male school club teacher.

"Yes, they [girls] can speak the same ways as boys; during the club sessions, they speak openly, they ask questions about friendship and love" A male school club teacher.

"We tell them about all, look here is the book we use, you see here is body development, menstruation, relationship, contraceptives, we tell them about all these, even contraceptives even though they [contraceptives] are not for children" A female school club teacher.

Nurses in YFHC indicated that young girls can receive needed information and contraceptives without a problem when they visit the centre.

"From those training, I know how to receive those young girls, I give them the need information and they chose the [contraceptive] method they want, except the intra-uterine device, we don't put it to those who never delivered" A female nurse of YFHC.

3.1.4. Community level

The community and the social norms can hinder adolescent access to SRH information and services in Burundi. In Burundian society like other EAC, it is taboo talking about sexual matters including sexuality education, using SRHS is associated with bad manners and promiscuity(18,39). Religious leaders want adolescents to abstain from sex until marriage, some religions consider using contraceptives as going against the natural functioning of the body God created. French (2019) mentioned an ambivalent attitude of religious leaders in Burundi, while they recognize the problem linked to the non-use of SRHS, they are very critical of contraceptives, and they oppose the use of condoms(6). The community spreads misconceptions about contraceptives and condoms, contraceptives cause severe side effects and cause infertility, and condom diminishes pleasure and can stuck in the vagina(14).

Key informants' statements showed other social norms hindering adolescent access and use of SRHS.

Key informants mentioned stigma as a barrier to ASRH, contraceptives are supposed to be for the only married women and those who already had delivered a baby; a young girl who seeks contraceptives is perceived as a prostitute. Adolescents hide from people who may know them when they need contraceptives, and others have to travel to other quarters far from their homes. The cultural constraints lead teachers to skip some topics of sexuality education, they skim over the subject of contraceptives, focusing on the abstinence-only message.

"It is difficult to advise a child to practice the [contraceptive] methods of adults, it is not permitted in our customs, we insist on abstinence but tell them they exist." A male youth club teacher

"Here we receive young girls from other quarters, they come here because service is available and mostly because is out of sight of people who may know them, you know people think contraception is for married women only and not for young girls" A YFHC nurse.

3.1.5. Policy level

There are enabling policies for ASRH in Burundi. The Ministry of Health with the support of its partners through the PNSR has designed policies and programmes targeting ASRH, those policies are reflected in different documents like "la stratégie nationale de la santé de l'adolescent, 2015" (the national strategy for Adolescent Health). In Burundi, in public health facilities, condoms and other contraceptives are provided for free(19). However, some HCP who are to apply those policies on the field don't, either because of ignorance or personal beliefs and/or social norms. Adapted CSE is still not included in the school curriculum, it is a marginal subject after school hours taught in some schools. The condom use demonstration is not permitted in school sessions(16,18,35)

The KII finds were in opposition to the official narratives.

Respondents of KII think the ASRH policy was imposed on the government by international organizations because they are the ones who initiated and following the programme. When asked about the legal age at which adolescents don't need parental approval for contraceptives, most respondents didn't know, they didn't know what the adolescent SRH rights are either. Every stakeholder of the ASRH acts according to his or her conscience and beliefs.

"I think all this is from outside organizations because it is not our custom to encourage such behaviour for young girls, but it is my job to give them what they need. I don't know what the policy about ASRH is, everyone will do according to his conscience" A YFHC male nurse.

"The programme is good, but I think it is not from our government because since they stopped coming to schools, there are no more refresh trainings for teachers". A school youth club male teacher.

3.2. Strategies to improve adolescent access to SRH information and services.

Evaluations of programmes targeting ASRH in Burundi found areas where improvements were needed: empowering adolescents by giving them accurate information about their sexuality and agency to navigate the dilemma of social norms and love needs. The authorities in charge should advertise the adolescent health policies to those who have to apply them and make sure they are appropriately in place, like introducing CSE in the school curriculum(18,35).

KII proposed to improve communication about ASRH to raise awareness in the community and mainly to involve adolescent parents. Parents with schoolgirls from the 6th form should be trained to talk with their children about their sexuality.

"Here we talk to those children, we show them the good behaviour they should adopt to avoid pregnancy. If at home their mothers don't do the same, we will be working for nothing. It is good to organize training for parents with schoolgirls in 6th, 7th till 9th grade, those trainings should be mandatory; I think this could help if all mothers could educate their children." A school youth club female teacher.

Chapter 4: DISCUSSION

The objective of this study was to identify personal and ecological factors influencing adolescent schoolgirls' access to SRH information and services. To reach this objective, a literature review was conducted complemented by KII of professionals involved in ASRH from the health and education sectors. The study used thematic analysis of findings from the literature review and KII data through the ecological framework on ASRH; barriers and enablers were at all levels of the framework.

The study showed that schoolgirls face different challenges to access SRH information and services at the individual level including shyness, shame, and the inability to seek SRH information and services. Those barriers are shaped by the social norms that consider SRH to be for only married people as sexual activities should be. In Burundi sexual intercourse is called the "duty of married people (amabanga y'abubatse). Thus, adolescents, mainly girls, know that it is a shame to have sex before marriage, they have no right to SRHS as to sex; they hide to seek contraceptives because the use of SRHS is a sign of sexual activity. Pandey et al (2019) found the same factors in a qualitative study on factors impacting access to SRHS provided by youth-friendly centres in Nepal and by Shariati et al (2014) in Iran(49–51). Respondents mentioned the earlier sexual debut of adolescent girls as a determinant of risky sexuality because, at early adolescence, most of the children in Burundi had not received any sexual education and cannot seek information or SRHS.

Relationships between parents and their adolescents and peer influence were identified by both the literature review and KII as determinants of adolescent access to SRH information and services. Literature and KII mentioned that most parents are embarrassed to talk about sexuality with their children, and the latter will seek information from other sources, which may be misleading. KII revealed that due to poverty and life worries, other parents don't spend time with their children, after toil, they are tired, and all they'll need is rest. Parents should initiate conversations about the sexual development of their children; if adolescents are encouraged to talk, they will ask questions to their parents and receive accurate information. However, some parents, though willing to inform their children about their sexual life, miss the accurate information, here is the need for parent capacity building. This implies training parents to understand the need for sexual education of their adolescents and learn to

communicate with them and train and equip teachers involved in youth clubs to give appropriate CSE. The lack of adolescent-parent communication as a barrier to SRHS access was invoked to be a barrier to SRHS access in a qualitative study by Kipp et al (2007) on adolescent access to SRHS in Uganda(52). However, the adolescent-parent discussion was not independently associated with SRHS utilization by Tilahun et al (2021) in a mixed-method study on access and utilization of SRHS by adolescents and youth in Ethiopia(53). The authors explained that this is because adolescent access to SRHS is multi-factor dependent. Peer support among adolescents was revealed to empower shy adolescents to express themselves and to seek information and support(6,18). Such opportunities of peer support should be encouraged and expanded.

Moreover, sexual education after working hours is perceived as an extra workload, as the support of international organizations is decreasing, motivation does the same. The Ministry of Education is hesitant to introduce in school curriculum the CSE probably due to social pressure, while teachers declared that school youth clubs helped to decrease adolescent pregnancies and dropouts. Sexual education in early adolescence (10 – 14 years), could reduce sexual risky behaviour because of early sexual debut. Respondents reported also that school is the only reliable source of information for many adolescents as parents don't dare talk about sexuality with their children or lack time for that. This is in opposition to the findings of Nwalo and Anasi (2012) in Nigeria, where parents were among the principal sources of SRH information(36). Whereas YFHC have been implemented with the support of international organizations, few of them are effectively functioning. This could make difficult access for adolescents willing to use those services. Also, some HCP consider ASRHS as extra work, as they have to leave their regular tasks, which may make them unfriendly to adolescents.

This study revealed the importance of the community influence on ASRH in Burundi. Social norms shape the actions of the stakeholders of ASRH, during sexuality education, teachers focus on abstinence and some HCP may feel uncomfortable providing contraceptive to an adolescent girl. Adolescents fear seeking SRH information and services because of stigma. In Burundian society, sexual activities are for married, an unmarried girl who uses SRH is a sign of promiscuity and lack of education. Talking about sexual matters including sexual education is taboo in

Burundi, it is embarrassing to pronounce genital organs in Kirundi for natives, they will use alternative words for this. It is easier to pronounce genital organs in foreign languages such as French, that why is easier for teachers to give sexual education. teachers have to adapt their message to social norms, focusing on abstinence, and the demonstration of condom use is not allowed at school. The promotion of ASRH is considered a decline in social values by community and religious leaders. They expect adolescent girls to abstain until marriage and value virginity. Other studies on ASRH in LMC found the same negative influence of social norms on adolescent girls' access and use of SRH(51,54) Those norms are surrounded by ostrich policy, most adults know that many young girls initiate their sexual activity early before marriage, and they know the danger of not using SRH by sexually active girls, but still, they resist the promotion of ASRH. It said that even in ancient Burundian society, some unmarried girls could be sexually active, which is why mothers practised the traditional contraceptive: "kumanikira" (suspend for someone). The practice consisted in hanging a piece of cloth containing a sample of the girl's menarche on the roof of the house without her knowledge, to prevent her from becoming pregnant.

This study found that the State of Burundi has enabling policies for ASRH. However, it is perceived that those policies are only on paper, social norms tend to prevail over them. I found also that some people who are to apply those policies don't know them. Moreover, ASRH doesn't benefit from the same advertisement as for married SRH, birth spacing, antenatal consultation attendance, etc. which targets the wide general population. This gives the impression that the authorities are ambiguous in their discourse, they want to improve ASRH and reduce adolescent pregnancy, but still, some officials claim contraceptives are only for married women.

Moreover, some key informants feel that the ASRH policies were pushed to the government by foreign organizations, which may create mistrust and reluctance to apply them. When policy implementers are not convinced of their relevance, they be reluctant to apply them. As result, the HCP will have a negative attitude towards ASRH, making the services non-adolescent-friendly; sexual education teachers will select topics, making sexuality education non-comprehensive.

From literature and KII emerged some propositions for improving ASRH in Burundi. The authorities should take ownership of the ASRH, although support may come from

non-governmental organizations, to deliver a clear and univocal discourse on ASRH policies advertise them and make them known to all stakeholders. The parents need empowerment to openly talk about sexual education with their adolescents, to give them the appropriate information about their sexual development, create trust to allow their children to bring their SRH concerns to them. This approach has proven effective in other countries(55) Introduce CSE in schools adapted to each adolescent development level, this CSE should be administered by a specialized sexual health educator.

Limitations of the study

This study used literature review and KII. The literature review was not systematic and included studies from the region. Though the culture and social norms in the region share many similarities there may be differences and the countries' policies may differ on ASRH issues. KII explored teachers and HCP experience in their work with schoolgirl adolescents. It would be better to hear from the latter about the barriers they are facing in accessing SRH information and services and their opinion about them. Further studies on ASRH involving schoolgirls and more ASRH stakeholders are needed to have a full picture of factors influencing the access to SRH information and services to inform policy makers.

Strengths and limitations of the framework

The ecological framework used to analyze the results of the study is deemed relevant to ASRH studies. It targets the principal 5 levels of factors associated with adolescent access and use of SRH. It helps to focus on specific factors influencing specific adolescent attitude towards seeking and using information SRH information and services at each level. The framework, however, didn't include an important determinant, the socio-economic situation, it influences all other factors at each level.

Chapter 5: CONCLUSION AND RECOMMENDATIONS

5.1. Conclusion

Adolescents in Burundi are sexually active at early age, lack of access to evidence-based information and services exposes them to unsafe sexual practices and their consequences. Therefore, action is needed to address those needs. From the literature review and KII, it emerged that despite some progress following the introduction of youth clubs in schools and youth-friendly centres, adolescent schoolgirls are still facing barriers to accessing SRH information and services. The factors influencing schoolgirls' access to SRH information and services operate at different levels: personal, interpersonal, organizational and policy.

The lack of agency leads adolescent girls to feel shame and shyness; the lack of accurate information is source of misconception about contraceptives. Because of earlier sexual debut, young girls engage in sexual activities without proper information on their sexuality at home and school, course that covers body development is at high grades while some young girls can initiate sexual activities at primary school. Interpersonal relation factors are related to the lack of parent-adolescent conversation, parents feel uncomfortable talking about sexual matters with their children as for them such conversations are for adults. At the organizational level, school youth clubs are organized after school hours making it extra workload and the message they deliver is mainly abstinence-only based. YFHC exist but not all of them are well functioning, activities related to ASRH are perceived as extra tasks by HCP. At the community level, adolescent girls still face the stigma associated with the use of SRH by unmarried girls. The latter are supposed not to engage in sexual activities and so don’t need to use SRHS. The use of SRH by unmarried girls is associated with bad education and prostitution by society. ASRH policy exists in Burundi but is not known by all the stakeholders, most national stakeholders think the ASRH initiatives are pushed to the government by foreign organizations.

Thus, different factors, lack of information, misconception, shame, shyness, stigma, non-comprehensive sexuality education, lack of parent-adolescent communication, poverty, and non-application of ASRH policy, all shaped by the sociocultural norms constitute barriers to schoolgirls adolescents’ access and use of SRH information and services. The concerned authorities must go one step further to overcome the barriers

and provide appropriate information through comprehensive sex education at school to enable teenage girls to make an informed choice about their sexual health. Primary health centres ought to be adolescent friendly to allow access and use of SRHS.

5.2. Recommendations

In light of the above results, I recommend:

a) To the Ministry of Education:
    1. Introduce into the education curriculum, from the 6th of primary school an adapted sexual education provided by a person specialized in youth sexual education. As adolescent girls can initiate sexual activity from 6th grade, it would be better to start sexual education at that stage to prevent them engaging in risky sexual behaviour. Moreover, youth will be more open to an external skilled person than their teacher to ask questions.
    2. To build the capacity of adolescent parents to help them overcome the embarrassment of engaging their children in sexual matters. The sexual education received at school will be more effective if echoed in the family by parents. A trimestral one-hour training meeting with parents of girls in early adolescence with a skilled sexual educator could empower parents, especially mothers to initiate a conversation with their adolescents on sexual-related matters.

b) To the Ministry of Health:
    1. To advertise the ASRH policies to stakeholders, schoolteachers, HCP, parents, and the wide community. If the ASRH was advertised the same way as the general SRH, this could help to end stigma and encourage youth to seek and use SRH information and services without shame or fear.
    2. To take ownership of the activities of YFHC initiated by NGOs for sustainability and make SRH youth-friendly in all primary health centres all over the country. Therefore, HCP will need information on the national ASRH policies and training on youth-friendly attitudes towards adolescents seeking SRHS.

c) To NGOs intervening in ASRH:
    1. To design evidence-based programmes aiming to empower economically schoolgirls to respond to basic needs, such as menstrual pads, etc.

d) For research:
    1. Conduct further studies on factors affecting adolescent access to and use of SRH information and services.
    2. Conduct studies on interventions that can address the adolescents' risky behaviour and factors affecting their access to and use of SRH information and services.

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