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Knowledge and Access to Sexual and Reproductive Health Services: A Cross-Sectional Study of Youths in Democratic Republic of the Congo

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Abstract

Background: *There is dearth of information on the sexual and reproductive health of youths in the Democratic Republic of the Congo (DRC). Demographic and Health Surveys conducted over the years focused only on maternal and child health issues. This study was conducted to ascertain the barriers for young people seeking access to Sexual and Reproductive Health (SRH) services.*

Methods: *A community-based, cross-sectional survey was conducted among 519 youths, aged 15 to 24 years, using a questionnaire adapted from the Demographic and Health Survey II in the DRC. The questionnaire was uploaded on the software KoBo Collect for data collection. Data collected were transferred, processed and analyzed using Excel 2007 and IBM SPSS 25.0. Descriptive analysis was performed with frequencies, means, standard deviation and proportions while association between variables were determined using chi–square ($\chi 2$) tests, with statistical significance set at $p < 0.05$. Also, binary logistic regression (95%: CI) was used to determine significant predictor variables of knowledge and awareness of SRH among the youths of DRC.*

Results : *The average age of the study participants was 19.38±2.49 years, with those aged 18-20 years being the largest group (39.11%). Only 317 participants (61.1%) reported having ever heard about the term SRH. Majority of the participants interviewed had never participated in any health promotion activity related to SRH issues in their community. A total of 175 participants (35%) reported that SRH services were not geographically accessible to them. The vast majority (82%) indicated they would utilize SRH services if they were located nearby. Additionally, only 155 participants (29.9%) had ever visited a health facility for SRH services. Respondents who were older (> 20 years), male, had at least secondary education, were currently students or were of the Christian faith were more likely to be aware of SRH services ($p<0.05$).*

Limitations: *The study's limitations include its cross-sectional design restricting causal inferences, potential bias from self-selected participants, reliance on self-reported data, and limited regional generalizability. Language, and literacy challenges may have also affected results. These issues highlight the need for further research to better understand barriers to SRH access among youth in the DRC.*

Conclusions: *There is a poor level of access to SRH services among the youth in DRC, which is linked to poor awareness, low participation in health promotion activities and a pessimistic view of care affordability. However, age, gender, education level, and occupation of the youths play a role in their level of awareness of SRH services. Therefore, it is advisable for the DRC to work on improving awareness of young people towards SRH services and*

integrating these services into other routine services. Furthermore, the concept of young people's participation in health promotion activities is crucial and must be put into practical action by associating young people as key stakeholders in any process of making policies since this is about their SRH.

Keywords: Youths, Sexual Health, Reproductive Health, Health Services, Health Promotion, Health Services Accessibility, Democratic Republic of the Congo (DRC), Community Survey.

Plain English Summary

There is a dearth of useful information about the challenges of the youth in accessing sexual and reproductive health services in Democratic Republic of Congo. This study investigated these challenges to ascertain the barriers for young people seeking access to sexual and reproductive health services, to make recommendations for policy and public health practice. Five hundred and nineteen (519) youths from DRC were interviewed using a questionnaire to collect data related to access to sexual and reproductive health services. The respondents have an average age of 19 years, and only 61% have ever heard of the term SRH (including 57.4% (182) aged 20-24 years, 53.6% (170) males, and 91.5% (290) with at least a secondary education level), while only 29.9% have ever accessed SRH services in a health facility, which may be attributed to geographical and financial constraints, as well as cultural barriers that prevent youths from accessing SRH services. Many of them have not benefited from any health promotion activity about SRH in their community and about one-third reported that SRH services are not available in their community, but many (82%) agreed that they would use these services if they were available. Further analysis showed that respondents who are currently students, had at least secondary education, older (> 20years), or are Christians are more likely to be aware of SRH services. This study provides evidence of low access to SRH services in DRC communities especially due to poor awareness on SRH services, low participation in health promotion activities and a pessimistic view of care affordability.

Background

Sexual and Reproductive Health (SRH) is a vital component of young people's overall well-being worldwide, who face numerous challenges such as early and unwanted pregnancies, unsafe abortions and their complications, sexually transmitted infections (STIs) and risky sexual behaviours such as early initiation of sexual activity, multiple sexual partners, intergenerational sexual relationships and inconsistent or incorrect use of condoms and contraceptives that increase the risk of STIs, HIV and early or unwanted pregnancies among young people [1].

Today, there are about 1.8 billion people between the ages of 10 and 24. In many countries, young people up to half of the population. Nearly 90% of the world's young people live in developing countries [2, 3]. In the Democratic Republic of the Congo (DRC), the total population is estimated at 85,281,024 people with 32% of the population aged 10 – 24 years [4]. To thrive, young people need access to sexual and reproductive health care [5]. In Africa, nearly 82% of young women and 91% of young men under the age of 25 are not sufficiently informed about sexual and reproductive health [6]. Those who have the information have it either in a fragmentary way or from questionable sources. Young people often have less access to information, services and resources than those who are older. Health services are rarely designed specifically to meet their needs and health workers only occasionally receive specialized training in issues pertinent to sexual health of the youths. It is perhaps not surprising, therefore, that there are particularly low levels of health-seeking behaviour among young people. Similarly, young people in a variety of contexts have reported that access to contraception and condoms is difficult [7].

While global and regional statistics highlight the importance of addressing these issues, there is a notable lack of detailed, context-specific data on the challenges faced by youth in the Democratic Republic of the Congo (DRC). Existing national surveys, such as the Demographic and Health Surveys (DHS) conducted in 2007 and 2013-14, provide only superficial insights into adolescent SRH, primarily focusing on maternal and child health with limited information on young people's access to SRH services, barriers faced, and their knowledge and attitudes [8, 9]. In the realm of reproductive health, they focused on maternal and child health issues, except for some information provided on the rate of HIV/AIDS and pregnancies among young people. These two surveys did not give enough information about access of young people to SRH services, availability and accessibility of the SRH services for the youth, factors facilitating and disabling young people from use, knowledge, attitudes and practices of youth toward SRH services, the views of the youth about existing services and those of the health care providers too. This fragmentation leaves a critical knowledge gap about the unique and specific sociocultural, systemic, and infrastructural obstacles that hinder youth from accessing comprehensive SRH care in the DRC.

The 1994 International Conference on Population Development (ICPD) in Cairo, Egypt, recognized adolescent-friendly reproductive health services as an appropriate and effective strategy to address the sexual and reproductive health needs of adolescents [10]. Adolescence is a period of transition from childhood to adulthood during which adolescents develop biologically and psychologically and move towards independence. Although we may think of adolescents as a healthy group, many die prematurely and unnecessarily through accidents, suicide, violence and pregnancy-related complications. Some of the serious conditions of adulthood, for example, STIs (such as HIV/Aids) and tobacco use have their roots in adolescent behaviour.

Young people often face difficulties in accessing health services. Interventions to improve young people's general and reproductive health, and services to support these, should address the legal, policy, structural and systemic sociocultural barriers that limit their ability to access health care. Very young adolescents, those aged 10 to 14, acquire information, develop attitudes and

adopt behaviours that will affect their present and future well-being. Before young people, regardless of age, become sexually active, they need appropriate information and opportunities to develop skills that support safe and responsible behaviour. Effective sexuality education and easy and facilitated access to sexual and reproductive health services provide young people with age-appropriate, culturally relevant, gender-related and scientifically accurate information.

"It is often said a healthy people is a people with the potential for development". Young people are the future of societies, and their needs should be addressed in order to have healthy and productive citizens. If the nation is to address its rapid population growth, it is crucial to acknowledge the importance of the reproductive health concerns of adolescents and young people, particularly in their decisions related to avoidance of unwanted pregnancy. Since youths are the future of nations in general, and of the DRC in particular, decision makers should focus on improving the health of young people to increase performance in several areas of life in order to enable the country take off, given that the age pyramid of the DRC is typical of developing countries [11].

Previous sub-Saharan Africa Studies in Nigeria and Ethiopia revealed that over 80% of youths in Nigeria and 67.3% in Ethiopia are unaware of any youth-friendly reproductive health services available in their healthcare facilities [12, 13]. Similarly, research indicates that only 38.5% of adolescents in South Africa know about the types of youth-friendly sexual and reproductive health (YFSRH) services offered [14, 15]. These findings are crucial because only youths who are aware of specific reproductive health services are likely to use them. In contrast to these regional studies in sub-Saharan Africa, which reveal low awareness and utilization of youth-friendly SRH services (Nigeria, Ethiopia, and South Africa), there is a lack of detailed, context-specific data for the DRC—particularly at the regional level of Kasai Oriental. The country's rapidly growing youth population, coupled with weak health infrastructure and sociocultural barriers, underscores the urgent need for localized research.

Appropriate sexual and reproductive health information, life experience training and appropriate health services can help young people make healthy choices about sexuality and reproduction. This aimed to fill this critical gap by investigating the barriers preventing young people in Kasai Oriental Province from accessing SRH services. By providing detailed insights into the knowledge, attitudes, practices, and systemic obstacles faced by youth, this research contributes valuable, region-specific evidence to inform policies and programs designed to improve SRH outcomes in the DRC.

Methods

Study Setting

This study was conducted between February 16 and March 10, 2020, in Mbuji-Mayi, Province of Kasai Oriental, in Democratic Republic of the Congo. It covered five of the ten Health Zones (HZs) within the city, specifically those with the largest number of health areas, across the five Local Government Areas that comprise Mbuji-Mayi. Each health zone is subdivided into health areas (HAs) and three health areas have been systematically drawn from each selected health zone. Thus 15 health areas were included in the study [16, 17]. Covering an area of 135.12 km², Mbuji-Mayi has an estimated population of almost 2,500,000 inhabitants [18]. Mbuji-Mayi, the capital of the Province of Kasai Oriental, is considered the oldest of Congolese cities, with origins dating back to 1913, and was properly founded in 1914. It is now the second largest city in the country in terms of population, ahead of Lubumbashi. Mbuji-Mayi is administratively divided into five Local Government Areas: Bipemba, Diulu, Dibindi, Kanshi and Muya.

Study Healthcare Structure

Within the DRC's healthcare system, the health zone (HZ) serves as the operational unit for implementing the National Health Policy. The HZ is responsible for planning and executing the primary health care strategy, with support from the provincial level (Provincial Health Division and Health District) and adherence to directives set by the central level (Ministry of Health). The HZ is a defined geographical area with a population of at least 100,000 inhabitants, characterized by interdependent health services at two levels: Health Centers at the primary level and a General Reference Hospital (GRH) at the secondary level. Each Health Area - a subset of the HZ - is associated with a Health Centre.

Study Design

This study is a cross-sectional descriptive study which aims to understand youth knowledge and awareness of sexual and reproductive health (SRH) and to examine the relationship between youth characteristics and access to SRH services in the Democratic Republic of Congo. Data was collected using a structured questionnaire that assessed various characteristics, including socio-demographic factors, geographical location, economic status, and participation in health promotion and policy development programs.

Survey Tool and Variables

A self-administered questionnaire was utilized for this survey and some of the survey questions were adapted from the Demographic and Health Survey II implemented in the DRC [19]. It included a series of closed-ended questions developed in French and English; and translated into Tshiluba. Assistance was provided by the study investigators to participants when needed especially related to clarification of a question for better understanding, but they were left to fill the questionnaire according to their views.

The Questionnaire Have Six Sections: 1) study purpose and consent - which explained the reasons for the survey, how the survey data will be used and sought consent from participants; 2) participants' socio-demography; 3) theoretical knowledge and perceptions of sexual and reproductive health, including youth participation in health promotion and policy development programmes on their sexual and reproductive health issues; 4) youth attitudes towards sexual and reproductive health; 5) availability of sexual and reproductive health services in the communities; and 6) youth practices regarding sexual and reproductive health.

The questionnaire was evaluated by experts in the field of sexual and reproductive health, and pre-tested randomly with young people with the same characteristics in the city of Mbuji-Mayi and validated by the research team and external experts. The

pre-testing was performed on 10% of the sample size in the HZs not selected for the study, among a similar set of participants in a similar setting, to ensure relevance, appropriateness and adequacy of all items in the instrument. Some corrections were made before the final instrument was administered. Internal consistency (Cron-bach's alpha of 0.7), test-retest reliability, and inter-rater reliability (Kappa statistic, K = 0.9) were used to test the final questionnaire for consistency before final validation and use.

Study Population and Sample Size

The study population consisted of youths between 15 and 24 years of age, resident in Mbuji-Mayi, who had lived there for more than five years. The representative sample is drawn on the basis of Slovin's formula with a confidence interval of 95%, and 5% margin of error: $n = \frac{N}{1 + Ne^2}$. N = Population size and e = margin of error. Mbuji-Mayi has an estimated population of about 2,500,000 inhabitants. Thus, the minimum calculated sample size for the study is 400 as shown below.

Sample size: $\frac{2500000}{1+2500000\,(0.05)^2} = \frac{2500000}{1+2500000\,(0.0025)} = \frac{2500000}{1+6250} = \frac{2500000}{6251} = 399.94\,(\approx 400)$

To prevent non-respondents, transcription errors and missing responses an attrition factor of 20% was added to the target population, making the sample size be 480.

Sampling Procedures

A multistage sampling technique was used for selecting the participants. In the first stage, five HZs were randomly selected from the ten HZs available in Mbuji-Mayi. Then, three HAs were drawn from each of the five randomly selected HZs, bringing them to 15 HAs included in this study. Using simple random sampling, specific households recruited for the study were identified. The survey questions were addressed to the youths found in the households and able to answer the survey. The investigators started with a randomly selected household and continued the survey with the closest household using a sampling step of 118. The sampling step (survey interval) had been calculated by taking the number of households from each HA divided by the calculated sample size. The sampling step (survey interval) was obtained according to the formula:

Sample step = $\frac{Number\ of\ HZ\ households}{sample\ size} = \frac{56696}{480} = 118.12\,(\approx 118)$

During the collection of data, efforts were made to have an approximately equal sample of males and females when recruiting participants from the households.

Data Collection, Processing, and Analysis

The questionnaire was uploaded on a web-based software - KoBo Collect - for data collection between February and March 2020. They were administered to all consenting young people in the selected households. There were four investigators per HZ (one of them was the team supervisor while each of the other three worked in one of the three selected HAs). Data collected from the software were transferred to Excel 2007, cleaned and analyzed using IBM SPSS Statistics for Windows, version 25 (IBM Corp., Armonk, N.Y., USA). Incomplete responses (missing data) were removed. Descriptive analysis was performed with frequencies, means, standard deviation and proportions while association between variables were determined using chi–square ($\chi 2$) tests, with statistical significance set at $p<0.05$. Also, binary logistic regression was used to determine significant predictor variables of knowledge and awareness of SRH among the youths of DRC. Youth access to SRH services in Mbuji-Mayi, which was dichotomous, was considered the dependent variable for this study, while other variables were considered independent, including age, sex, educational level, religion, culture, family size, occupation, geographic accessibility to SRH services, financial accessibility to SRH services, knowledge and impression about SRH services, and participation in health promotion and policy development programmes on SRH issues.

Limitations

The study's limitations include its cross-sectional design, which limits causal conclusions; potential sampling bias from self-selected participants (volunteers and consenting participants after been approached) and gender representation; reliance on self-reported data prone to recall and social desirability biases; probable limited generalizability beyond the specific region studied; and possible unmeasured factors like cultural beliefs and community barriers. Additionally, language and literacy issues, and unassessed confounders such as media influence may have affected results. Social and cultural sensitivities could have led to underreporting (participants might under-report or over-report their knowledge and use of SRH services due to social desirability bias or personal stigma related to SRH issues), and the study did not fully evaluate/explore the quality or availability of SRH services, which are important for understanding access. Overall, these factors highlight the need for future research to better capture the diverse experiences and barriers faced by youth in accessing SRH services across the DRC.

Results

Participant Distribution

The Health Zone of Dibindi which is the biggest Health Zone of Mbuji-Mayi, had the largest sample (33.72%) in the study population (Figure 1), while CAMED and AS du CHPM had the largest samples in the health areas (Figure 2).

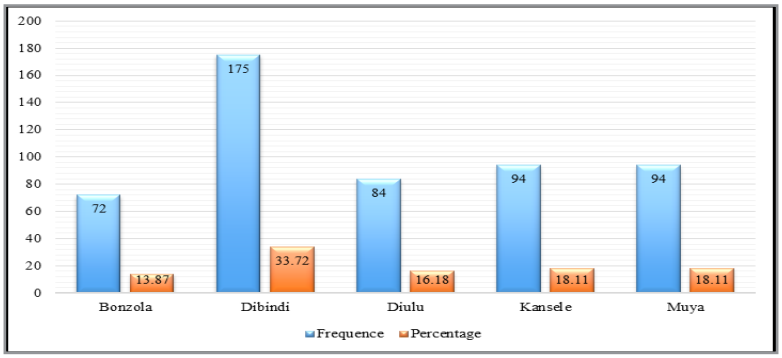

Figure 1: Shows the Distribution and Proportions of the Sample by Health Zones

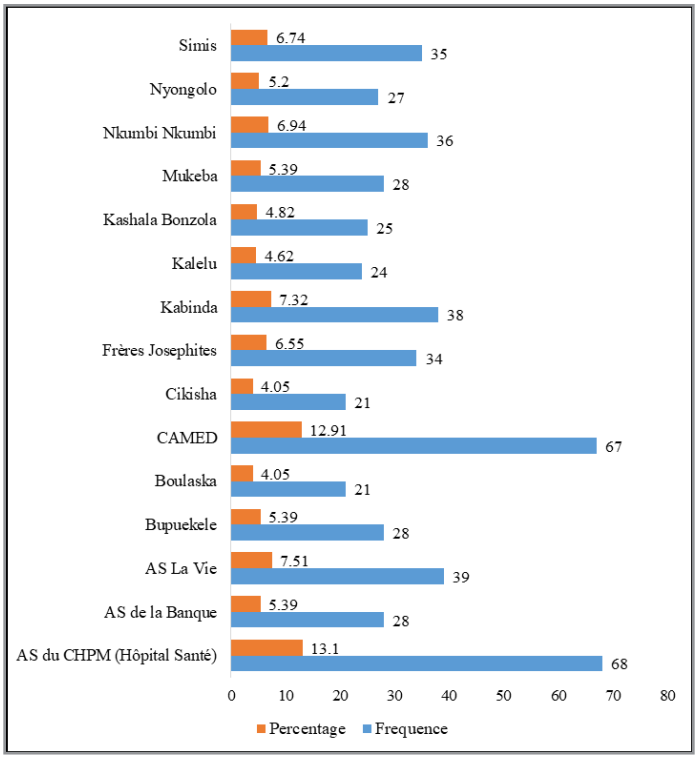

Figure 2: Shows the Distribution and Proportions of the Sample by Health Areas

General Characteristics and Socio-Demography of Participants

The sociodemographic characteristics of the respondents are shown in Table 1, with 51.8% of the 519 participants falling within the 15-19 years' age group, and the mean age being 19.38 years (SD: 2.716); there were 254 (48.9%) males and 265 (51.1%) females, and the majority of those interviewed (364 participants – 70.1%) had at least secondary school education, with 54.1% of these (197 participants) being above 18 years old, less than 20% having a State Diploma (indicating university-level education), and nearly 3% reporting no formal education; females accounted for 32% of those who had reached university level and 71.4% of those without formal education, most participants (> 85%) were unmarried, and regarding parental education, more than 85% of fathers and 65% of mothers had at least a high school education, while 10% of fathers and nearly 20% of mothers had no formal education.

Table 1: Socio-Demographics of the Participants in the 15 Health Areas

Variables	Frequency	Percentage
Age range of participants		
15 - 19	269	51.83
20 - 24	250	48.17
Total	519	100.00
Gender/Sex		
Male	254	48.94
Female	265	51.06
Total	519	100.00
Education level of participants		
Primary	52	10.02
Secondary	364	70.13
Tertiary	89	17.15
None	14	2.70
Total	519	100
Marital status of participants		
Single without kid	448	86.32
Single with kids	16	3.08
Married	54	10.40
Divorced/Widow	1	0.19

Total	519	100
Living status		
With both parents	289	55.68
Family members	80	15.41
Alone	29	5.59
Husband/wife	47	9.06
Friends	35	6.74
One of the parents (Father)	11	2.12
One of the parents (Mother)	28	5.39
Total	519	100
Religion of participants		
Christianity	467	89.98
Islam	6	1.16
Others	46	8.86
Total	519	100
Importance of Religion		
Very important	379	73.03
Important	131	25.34
Undecided (I don't know)	9	1.73
Total	519	100
Importance of Tradition		
Very important	254	48.94
Important	188	36.22
Undecided (I don't know)	77	14.84
Total	519	100
Occupation of participants		
Student	316	60.89
Employee/owner	65	12.52
None/unemployed	138	26.59
Total	519	100
Father's education level		
Primary	20	3.85
Secondary	309	59.54
Tertiary	138	26.59
None	52	10.02
Total	519	100
Mother's education level		
Primary	81	15.61
Secondary	307	59.15
Tertiary	33	6.36
None	98	18.88
Total	519	100

Youth Knowledge on SRH Services

Among the respondents, only 61% (317) have heard of the term SRH, including 57.4% (182) aged 20-24 years, 53.6% (170) males, and 91.5% (290) with at least a secondary education level, while 38.9% (202) had never heard of "sexual and reproductive health," with details on their knowledge of SRH services presented in Table 2.

Services such as "Testing, Treatment & Information on STIs, HIV and STDs" and "Information or Classes on Sexuality Matters" were known by more than 70% of youth participants whereas services such as "Pregnancy Test" and "Prenatal and Postnatal Care, Safe Delivery" were known only to about one-third. Only about one in five knew about "Safe Abortion and Post-Abortion Care" (Table 3).

Table 2: Participants' Knowledge of the Term 'Sexual and Reproductive Health (SRH)'

Variables Have you ever heard about Sexual and Reproductive Health?	Frequency							Percentage
	Number of participants	Age		Gender		Education level		Total
		15-19	20-24	F	M	Primary and below	Secondary and above	
Yes	317	135	182	147	170	27	290	61.08
No	202	134	68	118	84	39	163	38.92
Total	519	269	250	265	254	66	453	100.00

Table 3: Knowledge of SRH Services Among the Participants

Variables	Frequency	Percentage
Testing, Treatment & information on STIs, HIV and STDs	430	82.9
Information or classes on Sexuality matters	386	74.4
Information on sexual relationships and premarital preparation	360	69.4
Contraceptives (+condoms) and instruction for use	290	55.9
Counselling and sexual violence and abuse service	278	53.6
Family Planning	251	48.4
Psychosocial care and support	243	46.8
Pregnancy test	191	36.8
Prenatal and postnatal care, safe delivery	182	35.1
Safe abortion and post-abortion care	106	20.4

Table 4: Association Between Socio-Demographic Characteristics of Participants and Their Knowledge of the Term SRH Have Ever Heard About Sexual and Reproductive Health (%)

Variables/categories		No (%)	Yes (%)	Total	$\chi 2$	df	Significance
Age range (years)	15-19	25.82	26.02	51.84	43.34	9	.000
	20-24	13.11	35.05	48.16			
Gender / Sex	Male	16.18	32.76	48.94	7.16	1	.007
	Female	22.74	28.32	51.06			
Educational level	Primary	5.20	4.82	10.03	22.03	3	.000
	Secondary	26.78	43.35	70.13			
	Tertiary	4.62	12.52	17.14			
	None	2.31	0.39	2.70			
Marital status	Single without kid	34.10	52.22	86.32	3.52	3	.319a,b
	Single with kids	0.58	2.50	3.08			
	Married	4.24	6.17	10.41			
	Divorced/widow	0.00	0.19	0.19			
Religion	Christianity	31.97	58.00	89.97	22.35	2	.000b
	Islam	0.77	0.39	1.16			
	Other	6.17	2.70	8.87			
Occupation	Student	21.38	39.50	60.88	16.93	4	.002
	Employee/owner	6.16	6.36	12.52			
	None	11.37	15.22	26.59			

Table 4: shows the relationship between the socio-demographic characteristics of the participants and their knowledge of the term SRH. Male, older youth who had at least secondary education and identified as Christians, especially if they were still students, were more likely to know about SRH.

Binary Logistic Regression Models

The results from the logistic regression analysis (Table 5) indicate that certain factors significantly influence individuals' awareness of Sexual and Reproductive Health (SRH) ($p < 0.001$). For example, each additional year of age increases the odds of being aware of SRH by approximately 29.7%. In prac-

tical terms, this means that older individuals are more likely to have SRH awareness; for instance, a person who is 10 years older has about 13 times higher odds of being aware compared to someone younger, assuming all other factors are constant.

Furthermore, identifying as Christian more than doubles the likelihood of SRH awareness, with an odds ratio of 2.826 (95% confidence interval), compared to those of other religions. Certain occupations, such as being a clerk, trader, businessman, or public servant, are also associated with higher SRH awareness compared to the reference occupation category. On the other hand, gender and highest level of education do not show a significant effect on SRH awareness in this analysis.

Table 5: Logistic Regression Analysis: Predictors of SRH Awareness

		B	Wald	Df	Sig.	Exp(B)
Step 1a	2. How old are you?	0.259	29.713	1	.000	1.296
	3. Gender? (1)	-0.339	2.752	1	.097	.712
	4. What is your highest level of education?		6.670	3	.083	
	4. What is your highest level of education? (1)	-0.973	1.068	1	.301	.378
	4. What is your highest level of education? (2)	0.389	.562	1	.454	1.475
	4. What is your highest level of education? (3)	0.695	2.709	1	.100	2.003
	7. What religion are you?		9.467	2	.009	
	7. What religion are you? (1)	1.039	7.501	1	.006	2.826
	7. What religion are you? (2)	-.354	.129	1	.719	.702
	10. What is your current main occupation?		14.717	4	.005	
	10. What is your current main occupation? (1)	-1.448	8.290	1	.004	.235
	10. What is your current main occupation? (2)	-2.029	7.517	1	.006	.131
	10. What is your current main occupation? (3)	-.535	1.209	1	.271	.585
	10. What is your current main occupation? (4)	-.831	3.172	1	.075	.436
	Constant	-5.112	20.656	1	.000	.006
		Frequency	Parameter coding			
			(1)	(2)	(3)	(4)
What is your current main occupation?	Clerk/trader/businessman/public servant	50	1.000	.000	.000	.000
	Other	15	.000	1.000	.000	.000
	Secondary school student	236	.000	.000	1.000	.000
	Unemployed	138	.000	.000	.000	1.000
	University or Higher Institute Student	80	.000	.000	.000	.000
What is your highest level of education?	No formal education	14	1.000	.000	.000	
	Primary	52	.000	1.000	.000	
	Secondary	364	.000	.000	1.000	
	University	89	.000	.000	.000	
What religion are you?	Christianity	467	1.000	.000		
	Islam	6	.000	1.000		
	Other	46	.000	.000		
Gender?	Female	265	1.000			
	Male	254	.000			

Categorical variables coding

Youth Participation in Health Promotion and Development Program

Table 6: shows the level of participation of the youth in health promotion and policy development programmes. More than 80% (430) had attended school classes on SRH and relationships between boys and girls. About 55% of them thought that more classes on these topics should be provided. Majority (84%) of the participants interviewed reported that they had never participated in any health promotion activity involving policy development on youth SRH issues in their community, but approximately two-thirds of these young people were keenly interested in participating in such programmes.

Table 6: Youth Participation in Health Promotion and Policy Development Programmes

Variables	Frequency	Percentage
Have you ever attended school classes on SRH and Systems and relationships between boys and girls?		
Yes	430	82.85
No	89	17.15
Total	519	100.00
Have you ever been involved in a sexual health promotion programme in your community?		
Yes	83	15.99
No	436	84.01
Total	519	100.00
Are youths involved in policy development programmes on adolescent and youth SRH issues in your community?		
Yes	104	20.04
No	415	79.96
Total	519	100.00
Do you think youth opinions value when developing health promotion policy and programmes on youth SRH problems?		
Yes	349	67.24
No	170	32.76
Total	519	100.00
How do you think young people should be involved in these programmes?		
At concept level (first level of brainstorming)	104	20.04
During discussions on SRH issues	116	22.35
At implementation level (programmes implementation)	55	10.60
At All levels	207	39.88
None	37	07.13
Total	519	100.00
Do you think that young people should be involved and listened to in that kind of discussions?		
Yes	393	75.72
No	126	24.28
Total	519	100.00

Youth Access to SRH Services

The distribution of participants according to the accessibility of SRH Services for young people shows that out of 519 participants interviewed, approximatively 35% reported that in their community, SRH services are not easily geographically accessible. However, they also reported that they would use SRH services if they are close to them (82%). Again, more than 55% of the participants reported that these services are not affordable in terms of the cost they have to pay. But if affordable for them, they would use them (75%) (Table 7).

Table 7: Accessibility to Sexual and Reproductive Health Services for Young People

Variables	Frequency	Percentage
Are SRH Services geographically accessible? (distance from your home to SRH Services)		
Yes	344	66.28
No	113	21.77
Undecided	62	11.95
Total	519	100.00

If SRH services were close by in the community, would youth use them?		
Yes	429	82.66
No	53	10.21
Undecided	37	7.13
Total	519	100.00
Are SRH Services affordable? (cost of SRH services)		
Yes	215	41.43
No	180	34.68
Undecided	124	23.89
Total	519	100.00
If SRH services were affordable in the community, would youth use them? (cost of SRH services)		
Yes	389	74.95
No	73	14.07
Undecided	57	10.98
Total	519	100.00
Are SRH services culturally or socially accessible? (judgement of others on the use of SRH services by youth)		
Yes	308	59.34
No	108	20.81
Undecided	103	19.85
Total	519	100.00

Youth Impression After Visiting or Using SRH Services

The study revealed that 29.9% of respondents have used SRH services in their community (data not shown), which may be attributed to geographical and financial constraints, as well as cultural barriers (such as customs and traditions, religion, and societal perceptions(age) that prevent youths from accessing SRH services. 65% (102 respondents) reported that they were comfortable enough to ask and answer questions while 73% (114 respondents) said they were satisfied and that the consultation went well. The study also revealed that 65% (337 respondents) of the participants agreed that health care providers were available to listen, consult, and counsel youth on SRH issues when they visited the health facilities. Also, the willingness to use the SRH services in the community is very high, almost 90% of the respondents said they are willing to use SRH Services (Table 8).

Table 8: Youth Impression After Visiting/Using SRH Services Available at Health Facilities in the Community

Variables	Frequency	Percentage
Did you feel comfortable enough to ask and answer questions?		
Yes, totally	102	65.81
Yes, somehow	43	27.74
Not at all	10	6.45
Were you satisfied with the answers to your questions during the consultation?		
Yes, totally	114	73.54
Yes, somehow	36	23.23
Not at all	5	3.23
Are service providers available to listen, consult, and counsel youth about SRH issues in health facilities?		
Yes, they are available	337	64.93
I am undecided / I don't know	96	18.5
No, they are not available	86	16.57
Are you willing to use the SRH services available in your community or not?		
Yes	466	89.76
No	53	10.21
Would you like to take courses/education on Sexual and Reproductive Health (CSE and reproductive health literacy)?		
Yes	497	95.76

No	11	2.12
I don't know / it depends	11	2.12

Discussion

Our study provided several insights into factors that are associated with access to SRH Services for young people in DRC. The findings supported that the majority of young people were more likely to have poor access to SRH Services since they had poor knowledge of SRH term and related services, had low participation in health promotion activities and policy development programmes, and were more pessimistic view of care affordability (financial and geographical accessibility). However, those who had the chance to visit the services self-reported receiving adequate professional support and information to manage their conditions and that care providers were available for them. To address the knowledge gap and low participation, the government should implement Comprehensive Sexuality Education (CSE) programs in schools and community settings, ensuring young people are equipped with accurate SRH information. Establishing school-based or community outreach programs can also increase participation in health promotion activities and foster better understanding of SRH services.

In line with this finding, several studies done in different areas have revealed similar findings [20, 21]. A survey conducted among social and healthcare providers in Rwanda reported that health facilities are providing information to adolescents on SRH services that were available and at a low cost. This survey emphasized that SRH services seemed to be only fairly accessible to adolescents with insufficient quality as adolescents themselves do not get to be fully involved in service provision among other aspects of quality SRH as stated by the World Health Organization. However, in this study, some of respondents mentioned that adolescents were involved in designing the feedback mechanisms at their facilities. Improving service quality and youth involvement can be achieved by creating adolescent-friendly clinics and involving youth in service design and feedback mechanisms, ensuring that services are responsive to their needs and preferences.

A school based cross-sectional study done in Ethiopia in 2016 showed that discussions with health providers, previous history of perceived STIs symptoms, being ever sexually experienced and exposure to information from schoolteachers were associated with SRH services utilization among secondary school youths. Inconvenient times, culture, religion, lack of privacy, and fear of their parent were also cited as barriers to SRH service uptake by the school youths [22]. However, the findings of our study revealed that there is a significant association between age, gender, education level and occupation with the knowledge of the participants and their access to SRH Services. To overcome barriers like inconvenient hours, privacy concerns, and cultural restrictions, policies should promote adolescent-friendly services with flexible hours and private, confidential settings. Engaging community and religious leaders in awareness campaigns can also help mitigate cultural barriers.

The study also revealed that five out of the ten services in the SRH package available are less known by youths. According to the proportion of knowledge among respondents, knowledge in the population was weighted as "good" for services such as "Testing, Treatment & information on STIs, HIV and STDs", "Information or classes on Sexuality matters", "Information on sexual relationships and premarital preparation", "Contraceptives and instruction for use" and "Counselling and sexual violence and abuse service" while it was weighted as "low" or "bad" for the remaining service. These rates show how dangerously young people are exposed to consequences for not having access to all SRH services available. Our study showed that participants who are 20-24 years old, male, single without kid, and went at least at secondary school have good knowledge of the SRH term. Further analysis reveals that age, gender, education level and occupation are significantly associated with knowledge about SRH. Logistic regression analysis show that age, religion, and current occupation are significant predictors of individuals' awareness of Sexual and Reproductive Health (SRH) ($p < 0.001$). Specifically, each additional year of age increases the odds of being aware of SRH by approximately 29.6%. In practical terms, this means that older individuals are more likely to have SRH awareness. Identifying as Christian significantly increases the likelihood of SRH awareness by a factor of 2.826 compared to other religious affiliations. Certain occupations, such as being a clerk, trader, businessman, or public servant, are also associated with higher SRH awareness compared to the reference occupation category.

To enhance knowledge across all age groups and backgrounds, policies should expand targeted outreach and education programs, especially focusing on younger adolescents, females, and less educated groups. Additionally, training healthcare providers to deliver tailored SRH information can help bridge knowledge gaps. In this study, majority of the participants reported that they never participated in any health promotion activity involving policy development programmes on youth SRH issues in their community, but approximately two-thirds of these young people were keenly interested in participating in such programmes. Almost 40% of participants have reported they never heard of the term "Sexual and Reproductive Health". This highlights the lack of information on comprehensive sexuality education among young people.

Hence, interventions to avert this situation need to be intensified. As stated in the article on 'ensuring youth's right to participation and promotion of youth leadership in the development of SRH policies and programmes, more research and documentation as well as the adoption of innovative practices for involving youth in SRH programs are needed [23]. Youth participation in program and policy development should still be a priority. This allows for a sense of ownership and understanding of the programmes, since their own views on SRH will be captured. Therefore, a commitment to young people's participation in activities related to health promotion, policy making and programmes development are greatly needed, polices should institutionalize youth participation in SRH policy development, such as establishing youth advisory councils and participatory planning processes [24].

The ICPD and ICPD+5 emphasize involving young people in programme design and implementation as a way to increase the

relevance and effectiveness of programme interventions. The concept of young people's participation has tremendous potential if concrete ways are devised to put it into practical action. Obstacles to young people's involvement can assume various forms. Cultural norms may favour hierarchical relationships between adults and young people. Young people may be considered as recipients of services and not active partners. Adult stakeholders, like parents and teachers, and policymakers may have biases and fears about working with young people (and vice versa). To overcome these barriers, policies should support capacity-building initiatives for youth participation, promote adult-youth collaboration, and sensitize stakeholders on the importance of youth involvement in SRH decision-making processes.

The study's findings showed that health care providers are available to listen, consult, and counsel youth on SRH issues when they visit health facilities; and that the willingness to use the SRH services in the community was very high. The youth's impression on service providers and SRH services at health facilities were quite good. On the policy level, as recommended in other studies; prioritization of adolescent-friendly SRH services requires attention: providing dedicates spaces, training providers on youth-centered care, and ensuring confidentiality and respectful treatment [25].

To the question of accessibility and cost of SRH care services, the findings show that these services are not easily geographically accessible for young people. However, it's reported that young people would like to use SRH services if they are closed to them. It was also reported that the cost to pay for these services is not easy to cover for many of participants. These results emphasize the evidence why young people don't really use or visit SRH Services even though they may be available in their community. This finding was supported by other studies done in Ethiopia and Kenya where young people who their nearby health facilities were health centers were more likely to utilize SRH services [26, 27].

Conversely, a study conducted in Enugu state, Nigeria on the SRH services for adolescents reported that the services were generally physically available [28]. We found that the SRH services were available in the community but were geographically and financially not accessible to young people. This may be because these services were not specifically for the adolescents and therefore, may hinder their access as well as utilization. Previous studies also reported low utilization of SRH services among young people [29, 30]. We suggest that adolescent-friendly SRH services (corners and spaces) should be made available and accessible within existing healthcare centers/facilities, subsidize or eliminate fees for youth-specific services, and expand outreach through mobile clincs and community-based services to reach youth in remote areas. The utilization of SRH services among young people is essential to reduce the prevalence of SRH problems [31, 32]. Determining the factors that make young people use or not to use SRH services remains very important in designing interventions to promote young people's SRH service utilization.

Conclusion & Recommendation

The study reveals major limitations in access to sexual and reproductive health (SRH) services for young people in the Democratic Republic of Congo (DRC). The study highlights that service awareness remains limited while health promotion and policy development participation remains low because young people believe services are too expensive and difficult to reach. The research shows that SRH (services) knowledge and awareness among youth are associated with their age and gender as well as their education level and religious beliefs and employment status.

Therefore, to address these challenges, the DRC needs to establish comprehensive strategies which focus on delivering SRH awareness through specific educational programs and outreach services to communities. The implementation of adolescent-friendly SRH services within routine healthcare facilities through dedicated (accessible affordable acceptable0 youth-centered clinics will enhance service utilization. The involvement of young people as active stakeholders in policy development and program design remains essential because it leads to SRH initiatives that are relevant and acceptable and effective. The implementation of these measures will be crucial for improving SRH access, empowering young people, and ultimately advancing their health and well-being in the DRC.

Declarations

Ethical Approval

Ethical clearance was obtained from the Research Ethics Committee of the University of Ibadan/University College Hospital with an IRB approval number: UI/EC/20/0010. A support letter was equally obtained from the Director of PAULESI to the Mayor of Mbuji-Mayi City and health authorities in charge of health facilities to allow the investigators access to the study area.

Human Ethics and Consent to Participate Declarations

This study was conducted in accordance with the Declaration of Helsinki and received approval from the relevant ethics committee. Informed consent was obtained from all participants involved in the research:

- Written consent was obtained from each eligible study participant and/or parent or guardian of participants below the age of 18 years.
- All the necessary information regarding the study (objectives, requirements of the participants and duration of the study) were given to the prospective study participants on an information sheet in French version, and explained in Tshiluba translation for those who were not able to read or understand French.
- Ethical notions such as discretion, confidentiality, free consent of the interviewees as well as beneficence and non-maleficence to participants were scrupulously respected.
- Identifying information were not included in the questionnaire to ensure privacy and confidentiality.
- The right of an individual not to participate in the study was also respected.

Consent for Publication

Not applicable.

Clinical Trial Number

Not applicable.

Availability of Data and Materials

The data sets used and analyzed during the current study are available from the corresponding author on reasonable request.

Competing Interests

The authors declare that they have no competing interests.

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Authors' Contributions

CPKK was involved in conceptualization, literature review, study design, data collection, investigation, methodology, project administration, supervision, analysis, interpretation, writing—original draft, and writing—review and editing. MJB was involved in study design, methodology, supervision of data collection. AO and AOA were involved in conceptualization, methodology, supervision, manuscript review and editing. All authors read and approved the final manuscript. MJB is now deceased.

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