

Factors Associated with Youth Sexuality in Secondary Schools in the City of Uvira in the Democratic Republic of Congo

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Abstract

Introduction: It is true that the entry into active sexual life of adolescents and young people represents a very decisive but also very difficult step for almost all young people and adolescents. The objective of this study is to determine the factors that are directly associated with the sexuality of young people in secondary schools in the city of Uvira in South Kivu and the related consequences. Methods: This is a cross-sectional, descriptive, and analytical observational study covering the period from January to July 2024. It involved 663 (single) secondary school students in 9 major schools in the city of Uvira in South Kivu, Democratic Republic of Congo. Data were analyzed using STATA 15 software and Kobocollect was used to collect the data. Results: The prevalence of sexually active youth is 73% [69% - 76%]. 86.2% of young people had sexual intercourse with more than one partner, of all contraceptives the pill was most used at 31.89%, followed by the condom at 21.60%. Social networks/Internet occupied the first place with 70.16%, bad company followed with 68.3% and television (films showing nudity) at 29.2% were factors exposing young people to the desire to have sexual intercourse. Because of sexual intercourse, 81.4% of young people could have contracted sexually transmitted diseases (STDs/STIs), 29.2% contracted early and unwanted pregnancies, 13.99% could have resorted to clandestine abortion and 15.64% had been excluded from school. Age, place of origin of students, religion, and the need to dress properly at all costs were factors statistically associated with sexual activity among young people. **Conclusion:** promote sex education among young people in their respective families and in the school environment to enable young people to make thoughtful and responsible decisions regarding their sexual and reproductive health.

Keywords

Sexuality among Young People, Sexual Behaviors, Factors Associated with Sexuality, School Environment, Secondary Schools, Uvira, DR Congo

1. Introduction

Sexual and reproductive health remains a major public health problem [1] [2] while adolescence is characterized by an increase in contact with the opposite sex [3]. Early pregnancies and births in adolescence have harmful consequences on maternal and infant health. They increase the risks of maternal and infant death. Furthermore, the occurrence of early and/or unplanned pregnancies and births jeopardizes the future of adolescent girls in terms of education, work and the economy [4].

It is true that the entry into the active sexual life of adolescents and young people represents a very decisive step but also very difficult for almost all young people and adolescents [3]. Thus, to the sexual awakening of puberty are added the sexual dimensions of love, for some it is the beginning of allosexual relations [5] and on the other hand, unwanted pregnancies in schools which are consequences of unprotected sexual relations, constitute a brake on the development and education of young people [5]. Several scientific and popular discourses affirm that major changes have taken place both in the sexual behavior of young people and in the sexual dimension of their environment [1] [6] [7], while the adolescent population represents more than half of the population in developing countries, particularly in sub-Saharan Africa [1].

Numerous studies have examined the concept of adolescent fertility and have noted an increase in sexual activity among single women [8] and therefore in premarital pregnancies [9].

Sexual activity in general is associated with various risks, including unwanted pregnancy and sexually transmitted diseases, including HIV/AIDS. The risks are higher for young adolescents because they are sexually active [10].

Globally, only 34% of young people have accurate knowledge about the prevention and transmission of HIV and STIs/STDs [11]

In sub-Saharan Africa, premarital sexuality is intense, early, unstable, multipartner, diversely justified, depending on the socio-economic, socio-demographic and socio-cultural characteristics of young people and members of their households [9].

In Ethiopia, in a study conducted by Mulatu *et al.* (2025), 43% of school-aged youth had already had sexual intercourse, including 80.3% before the age of 18. These included students aged 15 to 19 and those who had had multiple sexual partners [12] in 2014, the proportion of young people having intercourse before the age of 15 years was 13.7% among girls and 16.8% among boys, and that of early pregnancies at the age of 17 years was 25.9% in 2011 [13] [14]. In 2020, adolescents accounted for 16% of patients treated for STIs and HIV infection [14] [15].

Statistics from the Democratic Republic of Congo show that the 10 - 24 age group represents 28% of the total population. While 22% of 15-year-olds have already had sexual intercourse. This rate reaches 91% at age 25 [9]. In Kinshasa, nearly 7 out of 10 young people are already sexually active at the age of 18, and the median age at first sexual intercourse is 15.98 years [16].

Locally in Uvira, a study conducted by a researcher in secondary education institutions revealed that 79% of young people had already had at least one sexual encounter and that the average age at first sexual intercourse was between 13 and 16 years. It was at this age that the vast majority of students, 72%, had their first sexual experience. However, in extremis, 7% were victims in less than 12 years [17].

In light of this situation, research on youth sexuality has become a priority. Based on this issue, a few questions came to mind:

What factors are associated with sexual behavior among young people in schools in the city of Uvira? What are the consequences of these risky sexual behaviors among young people in schools?

As far as we are concerned and based on daily experience, we dare to believe that the factors that would influence the sexual behavior of young people would be among others: puberty and bodily changes, the type of union of the parents, the poverty of the parents (profession), the media-social networks, age, religion, the internet, bad company, the living environment (origin), the desire to succeed without working too much and probably the desire to dress properly. It would also be possible that unwanted pregnancies, clandestine abortions and dropping out of studies are consequences of risky sexual behavior in the subjects studied.

The objective of this study is to determine the factors that are directly associated with the sexuality of young people in secondary schools in the city of Uvira in South Kivu and the related consequences.

2. Methodology

Type, location and design of the study:

This is a cross-sectional and analytical descriptive observational study covering the period from January to July 2024. It involved (single) secondary school students in several large schools in the city of Uvira in South Kivu, Democratic Republic of Congo.

The students surveyed for this study come from nine (9) major schools in the city of Uvira. These are (1) Kitundu Institute, (2) Heri Institute, (3) Délice Institute, (4) Action Kusaidiya School Complex, (5) Kalambo School Complex, (6) Kalundu Institute, (7) Kakamba Institute, (8) Saint-Joseph Institute and (9) Hekima Institute.

The choice of these schools depends on their size in terms of student numbers, infrastructure and reputation.

Population and sample size:

Of these 9 (nine) schools chosen based on their size in terms of infrastructure, attendance and numbers, the total number of students was 3,883 subjects, thus constituting our study population.

Due to insufficient time and financial resources to allow us to carry out this research with all these students, we opted for a simple random sampling calculated using the Yamane equation [18]: $n = N/1 + N(e)^2$ where n is the required sample size, N is the population size, e = 29% is the desired level of precision. Using the above formula, we obtained a total of 653 participants. A non-response rate of 1.5% (10) was added, which gives a result of 663 students surveyed in this study. **Data Collection:**

Data were collected using a self-administered questionnaire from the selected students (girls and boys). The questionnaire we adapted and used was designed by Mukadi RT *et al.* 2018 [3]. The adapted aspects include the addition of socio-demographic information, the modification of some locally unknown terms, and the addition of several questions related to our theme. Some other questions were deleted because they were not relevant to the local context. After these adjustments, the questionnaire was submitted for validation to the ethics committee of the Higher Institute of Medical Techniques of Uvira.

The questionnaire was pre-tested with 15 students in two schools involved in the study to assess its level of adequacy. This allowed it to be revised and adapted for better understanding by all according to the suggestions made by the participants. The questionnaire mainly included questions related to sociodemographic information, the analysis of factors associated with sexual activity among young people in schools and the consequences that result from these sexual activities among young people.

Selection of respondents: After having proportionally distributed the total of our sample (663) according to the size of each school, we proceeded to the random selection of students. Each class had a specific number to sort according to its size. Therefore, a sampling interval of 3 desks was used (that is to say, after every 3 desks, a respondent was retained on the left side).

Inclusion criteria:

- Any single student regularly enrolled in one of the secondary schools targeted by our study.
- Any student who was randomly selected and who voluntarily agreed to par-

ticipate in the study.

Statistical analyses:

All analyses were performed using Stata 15 software (StataCorp, College Station, TX). The significance level for all analyses was previously set at 5% (p < 0.05).

Means with their standard deviation or median were used to describe quantitative variables and percentages to describe categorical variables.

Bivariate analyses were conducted between our dependent variable, which is being sexually active, and our independent variables. For qualitative variables, the Chi-square test and the Fisher test were used based on the theoretical numbers. The normality analysis of continuous variables was performed using the Shapiro-Wilk test. The distribution of quantitative variables was compared using the Student t-test for variables following a normal distribution and the Man Whitney ttest for variables not following a normal distribution.

Bivariate, multivariate and final model logistic regression models were constructed to estimate the association between the dependent variable and the independent variables.

Limitations: The limitations of this study are related to reporting bias and memorization of reported events.

Variables studied:

The dependent variable:

- Having sex: This refers to having already had protected or unprotected sex with one or more partners.

The independent variables studied in this study are:

Sociodemographic variables (age, sex (male and female), type of union of parents, religion, age, profession of parents, religion, ... age at first sexual intercourse, sexual contact, type of intercourse, context of intercourse, use of contraceptives, contraceptive method used, meeting place and channel of information on sexuality, sexual education, reasons for sexual relations, factors leading to this sexual desire and the consequences of risky sexual relations among the young people surveyed...

3. Results

Sociodemographic information:

It is observable that the vast majority of the young people surveyed had an average age of 18 [15]-[21], with 64.71% of girls, a sex ratio of 1.8 F/M (**Table 1**). The study proves that 55.5% of the young people surveyed lived either with their mother, father or grandparents. Regarding the parents' profession, 20.51% of the parents did not have professional activities while 79.49% did. The private sector profession represented 41.93% and the public sector represented 37.56%.

More than half of the young people came from the municipality of Kalundu with 356/663 young people or 53.70%. Young Protestants represented the majority of respondents with 24.74% followed by Catholics at 23.53%.

There is a statistically significant relationship between our dependent variable (having had sexual intercourse) with age (p = 0.000), sex (p = 0.021), type of union of the parents (p = 0.000) and the profession of the parents (with economic activities or without) (p = 0.019), origin (p = 0.000), religious beliefs (p = 0.000) and the fact that girls want to dress properly whatever the cost (p = 0.000).

Sexual behavior:

Table 1 shows that more than 73% [69% - 76%] of students had already had sexual intercourse.

It was found in this study that 86.2% of young people admitted to having already had sexual intercourse with more than one partner (≥ 2 partners). The age at first sexual intercourse was 15 years [14]-[16].

Characteristics related to sexual activity:

The results of this study prove that sexual intercourse was consensual in 91.56% of cases. A minority of girls still mentioned cases of rape (4.73%) and intercourse under the influence of addicts (3.70%). The context of the report for the majority of cases was personal pleasure at 80.86%. Referring to the use of contraceptives, 10.08% of young people stated that they had never used a contraceptive during sexual intercourse. On the other hand, for the 89.02% who had already used it, the pill was used most (31.89%) followed by the condom (21.60%). The hotel/ house of tolerance (56.17%) and the Partner's House (25.72%) were the meeting places for sexual intercourse most cited by young students.

Several factors that make young people want to have sex (Influencing Factors) were identified in this study. Social media/the Internet ranked first with 70.16%, followed by bad company with 68.3%, and television (films showing nudity) with 29.2%.

Regarding the known consequences of sexual intercourse (**Table 2**), among the most cited by the respondents are unwanted pregnancies (99.5%), sexually transmitted diseases (92%) and dropping out or being excluded from school (23.8%). We tried to identify some of the reasons that push young people to have sexual intercourse. Among others, we identified the desire to gain value as a young person (66%), the desire to do it/the will (53%), having points with teachers among girls (39.71%), the influence of friends (26.13%), and the low average of parents (20.16%).

As a result of sexual intercourse, 81.4% of young people were able to contract sexually transmitted diseases, 142/486 or 29.2% contracted early and unwanted pregnancies. Of this last percentage, 68/142 or 13.99% of the total had resorted to clandestine abortion and of all 76/142 or 15.64% had been expelled from school.

It is disappointing to note that of all sexually active female students, 60.8%, or 199/327 girls, report having had sexual intercourse with at least one teacher at their school. And 63.99% of all sexually active students (or 311/486) report having had sexual intercourse with at least one of their fellow students (girls or boys).

Religious beliefs:

Clearly shows that sexual activity is more observed among young Muslims (100/120 or 83.33% of sexually active young people), followed by Catholics (128/156 or 82% are sexually active), in third place Jehovah's Witnesses (63/82 or 76.82% of sexually active young people) and Revival Churches (70/93 or 75.2%), young Protestants (107/164 or 65.25%). Other religions and/or those without religions represent only 37.5% of sexual activity (**Table 1**).

To the	m . 1	Have already had sexual intercourse					
Features	Total	Yes (%)	No (%)	p-valu			
Age (median)	18 [15]-[21]	20 [18]-[22]	15 [13]-[17]	0.000			
Age at first sexual intercourse (median)	15 [14]-[16]	15 [14]-[16]					
Sex, n (%)							
Male	234 (35.29)	159 (68.4)	74 (31.6)				
Female	429 (64.71)	327 (76.2)	102 (23.8)				
Type of parents' union							
Life as a couple	295 (44.49)	191 (39.30)	104 (58.76)				
Divorced (Living with Dad)	208 (31.37)	182 (37.45)	26 (14.69)				
Divorced (living with Mom)	91 (13.73)	64 (13.17)	27 (15.25)				
Life with grandparents	69 (10.41)	49 (10.08)	20 (11.30)				
Parents' Profession							
Official	249 (37.56)	178 (36.63)	71 (40.11)				
Private	278 (41.93)	228 (46.91)	50 (28.25)				
Without	136 (20.51)	80 (16.46)	56 (31.64)				
(Origin			0.000			
Kalundu	356 (53.70)	226 (46.50)	130 (73.45)				
Mulongwe	241 (36.35)	200 (41.15)	41 (23.16)				
Kavimvira	66 (9.95)	60 (12.35)	6 (3.39)				
R	eligion			0.000			
Catholic	156 (23.53)	128 (82)	28 (18)				
Protestant	164 (24.74)	107 (65.24)	57 (34.76)				
Revival churches	93 (14.03)	70 (75.2)	23 (24.8)				
Jehovah's witness	82 (12.37)	63 (76.82)	19 (23,18)				
Muslim	120 (18.10)	100 (83.33)	20 (16.67)				
Others	48 (7.24)	18 (37.5)	30 (62.5)				
Need to dress properly no matter what (question for girls)							
Yes	287 (66.8)	255 (88.8)	32 (11.2)				
Not really, just at the parents' means	142 (33.2)	72 (50.7)	70 (49.3)				

Table 1. Analysis of the statistical association between sociodemographic information and sexual activity.
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Variables	Frequency	Percentage	
The consequences of sexuality amo	ng young people in schools	?	
STDs/STIs	610	92	
Unwanted pregnancy	660	99.5	
School dropouts	158	23.8	
Others	0	0.00	
Reasons for having	sex, n = 486		
Sexual desire	151	31	
Low average of parents	98	20.16	
Influence of friends	127	26.13	
Voluntary	258	53	
Building self-esteem as a young person	321	66	
Have points with teachers	193	39.71	
The curiosity to discover	95	19.54	
Early exposure to girl-boy relationships	78	16	
Because of your sexual relations, have you ever experi	enced (Check all statement	s that apply to you)	
Clandestine abortion	68	13.99	
Contracting early and unwanted pregnancies	142	29.2	
Contracting STDs or STIs	396	81.4	
Being kicked out of school	76	15.64	
Have you ever had sex with	one of your teachers?		
Yes	199	60.8	
No	128	37.6	
Have you ever had sex with o	one of your colleagues?		
Yes	311	63.99	
No	175	36.01	

Table 2. Consequences, reasons for having sexual intercourse and sexual intercourse with teachers and fellow students.

In the univariate analysis, age, sex, type of parents' union, parents' profession, origin, religion and the need to dress properly whatever the cost for young girls were factors associated with sexual intercourse among young people in the school environment (Table 3).

In the multivariate analysis (**Table 3**), age, origin, religion and the need to dress properly at all costs for young girls were factors associated with sexual intercourse among young people in school.

In the final model (**Table 3**), some variables associated with our independent variable were statistically identified as those of risk. These are Age: the age group of 12 - 15 years OR = 18.59 CI 95% [0.76 - 45.08], the place of origin of the students: Kalundu OR = 3.70 CI 95% [1.73 - 7.92], the Protestant religion OR = 2.56 CI 95% [0.97 - 6.73], the No religious beliefs OR = 6.71 CI 95% [1.89 - 23.83], the

Need to dress properly whatever the cost: Yes OR = 5.97 CI 95% [3.11 - 11.49] On the other hand, certain variables were statistically identified as protective factors, such as age 16 - 20 years OR = 0.08 95% CI [0.03 - 0.19], 21 - 25 years OR = 0.009 95% CI [0.00 - 0.03] and origin: Mulongwe OR = 0.32 95% CI [0.14 - 0.74].

Table 3. Factors associated with sexual activity among single young people in school.

77 . 11	Bivariate analysis			Multivariate analysis				Final model	
Variables	GOLD	95% CI	p-value	GOLD	95% CI	p-value	GOLD	95% CI	p-value
			Age g	group					
12 - 15 years old	37.21	[20.56 - 67.33]	0.000	17.53	[6.97 - 44.06]	0.000	18.59	[0.76 - 45.08]	0.000
16 - 20 years old	0.042	[0.023 - 0.0774]	0.000	0.901	[0.035 - 0.23]	0.000	0.083	[0.03 - 0.19]	0.000
21 - 25 years old	0.006	[0.0026 - 0.015]	0.000	0.009	[0.002 - 0.03]	0.000	0.009	[0.00 - 0.03]	0.000
26 years and older	Ref			Ref			Ref		
			Sex. 1	n (%)					
Male	Ref			Ref					
Female	0.66	[0.464 - 0.941]	0.022	Omitted	l				
		Ty	pe of par	ents' un	ion				
Life as a couple	Ref			Ref					
Divorced (Living with Dad)	0.26	[0.163 - 0.422]	0.000	0.99	[0.40 - 2.45]	0.997			
Divorced (living with Mom)	0.774	[0.465 - 1.289]	0.326	1.19	[0.37 - 3.78]	0.760			
Life with grandparents	0.749	[0.422 - 1.328]	0.324	0.77	[0.24 - 2.41]	0.663			
		P	'arents' F	Professio	n				
Official	Ref			Ref					
Private	0.54	[0.364 - 0.829]	0.004	0.697	[0.33 - 1.46]	0.34			
Without	1.39	[1.131 - 2.720]	0.012	1.360	[0.54 - 3.36]	0.50			
Origin									
Kalundu	3.18	[2.179 - 4.644]	0.000	3.73	[1.71 - 8.13]	0.001	3.70	[1.73 - 7.92]	0.001
Mulongwe	0.35	[0.239 - 0.531]	0.000	0.342	[0.14 - 0.79]	0.012	0.327	[0.14 - 0.74]	0.007
Kavimvira	Ref			Ref			Ref		
			Reli	gion					
Catholic	Ref			Ref			Ref		
Protestant	2.435	[1.447 - 4.096]	0.001	2.65	[0.99 - 7.07]	0.05	2.56	[0.97 - 6.73]	0.05
Revival churches	1.502	[0.804 - 2.802]	0.201	1.78	[0.53 - 5.90]	0.34	1.780	[0.54 - 5.85]	0.342
Jehovah's witness	1.378	[0.715 - 2.656]	0.337	1.91	[0.58 - 6.30]	0.28	1.876	[0.57 - 6.08]	0.295
Muslim	0.914	[0.486 - 1.717]	0.781	1.21	[0.39 - 3.77]	0.73	1.176	[0.38 - 3.60]	0.776
Without religious beliefs	7.619	[3.73 - 15.54]	0.000	6.97	[1.93 - 25.22]	0.003	6.715	[1.89 - 23.83]	0.003
		Need to dress p	oroperly	no matte	er what the co	st			
Yes	7.973	[4.808 - 13.22]	0.000	5.95	[3.08 - 11.48]	0.000	5.97	[3.11 - 11.49]	0.000
No	Ref			Ref			Ref		

4. Discussion

Sociodemographic information:

In this study, which focused on secondary school students in the city of Uvira, the average age of the respondents was 18 [15]-[21], with 64.71% girls, a sex ratio of 1.8 in favor of girls. Our results corroborate that found by another researcher in whom the average age was 18.7 years with a standard deviation of 2.1 years [19]. Our result in relation to the predominance of the female sex is consistent with the study of Mukadi *et al.* and that of Smaila *et al.* of Burkina Faso for whom in their studies the female sex was dominant respectively at 52% and 53% [3] [19].

The study proves that 55.5% of the young people surveyed lived either with their mother, their father or their grandparents. In short, they did not live in a united family. This is an aspect that can negatively influence the behavior of young people due to the lack of supervision from the father and mother together. This state of affairs is confirmed by a study conducted in Benin where the fact of not living with both parents (OR = 0.57; 95% CI 0.38 - 0.86) was associated with intense sexual activity and consequently with unwanted pregnancies among students [20]. It should be noted that several studies prove that a single-parent home would encourage resignation if not a weakening of parental monitoring in the education of young people [21] [22]. Regarding the parents' profession, 20.51% of parents did not have income-generating activities. This state of affairs could undoubtedly lead parents to not meet the basic needs of their children, a situation likely to lead young girls to risky and paid sexual behavior. Akoha et al. (2021) reached the same conclusion in his study conducted among young girls in Benin. He found that the low socioeconomic level of the household (OR = 1.75; 95% CI 1.02 - 3.01) would be a factor associated with the fact that young girls engage more in sexual intercourse [20].

Sociodemographic variables were analyzed to try to identify possible statistical relationships with the dependent variable (having had sexual intercourse). The study proved that there is indeed a statistically significant relationship between our dependent variable and age (p = 0.000), sex (p = 0.021), type of union of the parents (p = 0.000) and the economic activity of the parents (with economic activities or without activity) (p = 0.019), origin (p = 0.000), religious beliefs (p = 0.000) and the fact that girls want to dress properly whatever the cost (p = 0.000). **Sexual behavior:**

The prevalence of sexually active youth is 73% [69% - 76%] in secondary schools in the city of Uvira. It is clear that single people in schools engage in sexual activities without reserve. This frequency remains slightly higher than that found in the study carried out in Lubumbashi by Roger *et al.* and that carried out by Françoise *et al.*, who found 42% and 51.5% respectively [2] [3].

The age at first sexual intercourse was 15 years [14 years - 16 years]. This average age is confirmed by another descriptive study conducted among secondary school students in the city of Uvira by Bushobole *et al.* (2022) [17]. In sub-Saharan Africa, the median age of sexuality varies from 15 years (Niger); 17.8 years (Zimbabwe); 17.4 years (Kenya); 18.8 years (Senegal) among women [3] whereas it has been at 17 years in France for a dozen years [23], which is similar to the result of the study carried out in Lodja, where the median age at first sexual intercourse was 17 [15] [18] and 16 [14] [18] years, respectively in boys and girls [24]. From all this theory we can deduce that the median age at first sexual intercourse in general is in the range of 14 - 18 years.

It was found that 86.2% of young people had sexual intercourse with more than one partner (≥ 2 partners). It is nevertheless crucial to point out that the number of sexual partners is one of the essential indicators of the level of risk in sexual practices. This exposure to sexual risk is not only observed in Uvira, but also in several countries [25]. In Nigeria for example, a study conducted discovered that 80% of young single people have adopted risky sexual behavior [26] and several other studies prove that young people's sexuality is currently multi-partner and risky [24] [27] [28], which is an enormous danger for this youth.

Another study found that peer pressure, youth experimentation, and intense sexual urge were the main reasons cited for multiple sexual partners among youth [25].

Other studies also prove that the earlier sexuality begins, the greater the risk of having multiple partners, thus exposing young people to HIV, especially as the latter has become more juvenile [3]. The number of partners over an individual's lifetime is also used as an indicator and is relevant for adolescents who have been sexually active for relatively few years [29].

Characteristics related to sexual activity:

Wanting to understand the nature of sexual relations experienced by the respondents, the result of the study proves that 91.56% of the sexual relations were consensual. A minority of the girls still mentioned cases of rape (4.73%), which rate seems lower compared to that found in Lodja where 21.3% of the young people mentioned having already been forced to have sexual relations against their will [24]. The city of Uvira and especially the surrounding villages being in an armed conflict zone, cases of rape are evident. The aspect of consent was also found in the study carried out by Kalambay *et al.* (2007) where nearly 87.5% of young girls and boys had their sexual relations voluntarily (after consent) [28].

3.70% of young girls mentioned sexual intercourse under the influence of addicts while this rate was 34.7% in another study conducted in Lodja in the Democratic Republic of Congo and for the majority 68.1% the condom had not been used [24]. Apart from the last two categories mentioned above, the context of the report for the majority of cases in our study was personal enjoyment at 80.86%.

Referring to the use of contraceptives, 89.02% of young people stated that they used contraceptive methods. This result corroborates that of Grondin *et al.* (2018) in which the use of contraceptives among young adolescents was 92% [30]. We can deduce that the use of contraceptives among young people is currently not negligible.

In our study, the pill was used more at 31.89%, followed by the condom at

21.60%. These results corroborate those found by Sidikiba *et al.* (2020) who also found that the most known and most used contraceptive methods by young people were condoms (81.3%), oral contraceptives/pills (67%) [1]. A small nuance is visible between the two data, which is that for young people in Uvira the use of pills comes before the condom, which is clearly a bad thing given that 86.2% of them have multiple partners. The condom is undoubtedly the best indicated for young people with this high-risk attitude to protect them not only from unwanted pregnancies but also from STDs/STIs and HIV-AIDS. On the other hand, in a study conducted in Benin, sexual intercourse was unprotected in 80% [31].

Some factors that expose young people to the desire to have sexual intercourse (Influencing factors) were identified in this study. Social media/Internet took first place with 70.16%, bad company followed with 68.3% and television (films showing nudity) at 29.2%. Since the study was carried out in a city where the vast majority of young people have the opportunity to access social media and television, these statements probably seem true. Currently it is very important to point out that social media has a very big role to play in the depravity of morals. The study conducted by Isimit M. (2021) confirms our result by finding that the influence of social media and romantic films has become so widespread that it is shattering all existing social and family arrangements [32]. Thus, the abusive and problematic use of the Internet and social media function as a risk factor and constitute a threat to the well-being of young adolescents [33] [34].

A study conducted in Kinshasa showed that sexual activity is becoming fashionable and any opportunity that allows young people to have sexual relations can only be exploited [28].

Bad company, on the other hand, is obvious. Generally, the people we spend time with play a very important role in our behavior. The author Johann Wolfgang said, and I quote: "Tell me who you haunt and I'll tell you who you are" [35].

According to the respondents, 79.91% of young people are aware of the consequences of unprotected sex in schools. Among the most commonly cited are unwanted pregnancies (99.5%), sexually transmitted diseases (92%), and dropping out or being excluded from school (23.8%).

We tried to identify among young people some of the reasons that push them to have sexual relations, it was identified among others the desire to gain value as a young person (66%), the desire to do it/the will (53%), to have points with teachers (39.71%), the influence of friends (26.13%) and the low means of parents (20.16%). In any case, when it comes to sexuality in the school environment, several organizations speak of the phenomenon in terms of violence, exonerating the young girl and presenting her as a victim. The available statistics show that no country is safe from this scourge. These statistics remain below the reality because of the silence surrounding this phenomenon [36].

In the context of this study, because of sexual intercourse, 81.4% of young people reported having contracted sexually transmitted diseases (We can ask the question here what about HIV-AIDS contamination? 142/486 or 29.2% contracted early and unwanted pregnancies. Of this last percentage, 68/142 or 13.99% of the total were able to resort to clandestine abortion and of all 76/142 or 15.64% had been victims of exclusion from school, while in a study conducted in Guinea Conakry, 69.8% of young single people had contracted a pregnancy in a school environment, a percentage much higher than ours [1]. Based on statistics, adolescent fertility is of particular concern in sub-Saharan African countries. The fertility rate among adolescent girls is the highest in the world, varying from 109 per 1000 to 129 per 1000 [37]. And therefore the occurrence of a pregnancy in adolescence is presented as a worrying fact which could lead to a voluntary termination of pregnancy [1] and the WHO shows that there are 80 million unwanted pregnancies each year, which cause 45 million voluntary terminations of pregnancy which result in 70,000 deaths, 97% of which are recorded in developing countries [38].

81.4% of sexually transmitted infections, 29.2% of unwanted pregnancies, and 13.99% of illegal abortions are alarming rates in this study. This largely reflects the low rate of condom use, but also the poor use of contraceptives used. It is also important to question the quality of the products used by these young people.

It is disappointing to note that of all sexually active female students, 60.8% or 199/327 say they have already had sexual intercourse with at least one teacher in their school. And 63.99% of all sexually active students (or 311/486) confirm they have had sexual intercourse with at least one of their fellow students (girls or boys). Sexual intercourse between teachers and learners is part of a desire to take advantage of the teacher's position to obtain sexual favors and in return the learners take advantage of it to get points [36].

This suggests that school has become a place where sex seems to be common currency. The attitude of teachers at this stage is very undignified and leaves something to be desired. Sleeping with approximately 64% of the girls they are supposed to educate as parents is inconceivable. This observation was also observed in a study conducted in Burundi Athanas N (2018), it was observed that in several secondary schools in Burundi, there is a phenomenon of exchanging points for sexual favors, and the provocation according to this study comes either from the student or the teacher. This exchange allows some students to move up a class [36]. Overall, this sexual movement experienced in the schools that are the subject of our study would undoubtedly be the basis of a lack of concentration and lack of attendance on the part of the students and consequently a deterioration in the quality of teaching.

Religious beliefs:

Overall, sexual activity is observed among young single people of all religions, ranging from 65% to 83% according to the results of this study. It should be noted that faith and spirituality serve as an ethical framework and influence the beliefs, practices and choices of young people in relation to family, marriage, sexuality and procreation. But here we are observing the opposite. This is the case of the results of a study conducted in Likasi, where 66.1% of respondents belonging to

Christianity were sexually active [3]. Kambale *et al.* (2006) for their part, found that 70% of sexually active young people belonged to traditional churches (Protestant, Kimbanguist and Catholic) while one could expect a great practice of continence and chastity because the latter often dominate the teachings in these churches [39]. The results of all these studies mentioned above contrast with the teachings of Christianity which advocate continence and chastity.

Clearly, in our study environment, although Christian, they do it, and still do it with multiple partners. Which amounts to saying that young people deliberately ignore this prohibition of their religious denominations and ignore it, and that therefore, religion no longer seems to influence the behavior of young people regarding sexuality in our study environment. The paradox would rather be to expect more chastity from them.

Wanting to discover the factors associated with sexual intercourse of young people in school environment, in the univariate analysis, age, sex, type of union of parents, profession of parents, origin, religion and the need to dress properly whatever the cost for young girls were factors associated with sexual intercourse of young people in school environment.

In the multivariate analysis, age, origin, religion and the need to dress properly at all costs for young girls were factors associated with sexual intercourse among young people in school.

In the final model (**Table 3**), some factors associated with our dependent variable were statistically identified as risk factors. These are Age: the age group of 12 - 15 years OR = 18.59 95% CI [0.76 - 45.08], the place of origin of the students: Kalundu OR = 3.70 95% CI [1.73 - 7.92], Protestant religion OR = 2.56 95% CI [0.97 - 6.73], No religious beliefs OR = 6.71 95% CI [1.89 - 23.83], the Need to dress properly whatever the cost: Yes OR = 5.97 95% CI [3.11 - 11.49]. The study by Félicité K *et al.* (2021) also reached the same conclusion. It is observed that after its logistic regression analysis, age, origin, not living with both parents and the low socioeconomic level of the household were factors associated with the phenomenon under study [20]. Another study proves that a reconstituted or single-parent family, the effect of additives, bad company, rather negative appreciation of one's life and menarche at 12 years or less were factors statistically associated with the early sexual activity of young people [40].

On the other hand, certain variables were statistically identified as protective factors, such as age 16 - 20 years OR = $0.08\ 95\%$ CI [$0.03\ -\ 0.19$], 21 - 25 years OR = $0.009\ 95\%$ CI [$0.00\ -\ 0.03$] and origin: Mulongwe OR = $0.32\ 95\%$ CI [$0.14\ -\ 0.74$].

It should be said that this study is not immune to the probable biases of memory of events and social desirability of the respondents.

5. Conclusions

It is appropriate to say that the prevalence of sexually active young people in schools being so high, reaching up to 73% [69% - 76%], with a majority of multi-partner sexuality thus exposing them to STDs/STIs, HIV-AIDS and unwanted

pregnancies and, consequently, to illegal abortions, it is important that a more careful eye be directed towards these young people in schools.

Several factors expose young people to the desire to have sexual intercourse, such as social networks/the Internet, bad company and television (films showing nudity). However, because of sexual intercourse, a significant number of young people surveyed may have contracted sexually transmitted diseases, early and unwanted pregnancies and some have even resorted to clandestine abortion and others had been in the past victims of exclusion from school. Age, the place of origin of the students, the need to dress properly whatever the cost were factors statistically associated with the sexual activity of young people. In view of the rate of STIs, unwanted pregnancies and clandestine abortion observed in this study, it is crucial to question the use of contraceptives by this youth.

Promoting sex education among young people in their respective families and in the school environment will enable young people to make thoughtful and responsible decisions regarding their sexual and reproductive health.

Ethical Considerations

This study received favorable approval from all selected schools. The protocol was first presented and explained to the management of each school. Each institution granted us prior authorization. Before the interviews began, each participant was informed about the study and gave their free and informed consent. The study was conducted in accordance with the ethical guidelines of the Declaration of Helsinki [41].

Consent to Publication

All authors have read and approved the final version of this manuscript.

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Authors' Contribution

The design, literature review, data processing and writing of the manuscript was done by Bushobole Akiba Derrick; the style correction was done by Deo Harimenshi, Musemakweli Mushute Guy, Amuri Madabali Eric, Faustin Bukuru Mudage and Diane Muantama Balimo, the improvement of the text: Muhinduka Somi Aimé, Zabibu Masumbuko Gertrude, Cadeau Matabishi Kawawa, Fataki Nondo Aloise, Aloise Asende Luhendama and Christian Banyakwa Mitunda, the supervision of this study was done by Manya Mboni Henry, Ntabe Namegabe Edmond and Koba Mjumbe Criss.

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Conflicts of Interest

The authors declare no conflict of interest.

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