

## Condoms use determinants at first intercourse and knowledge of sexually transmitted infections by high school students in Lubumbashi, DR Congo

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**ABSTRACT:** Condom utilization at sexual initiation is associated with subsequent condom use and with a decreased risk of sexually transmitted infections (STIs). Our study objective was to determine the factors related to the use of condoms at first sexual intercourse and the level of knowledge about STIs/HIV/AIDS among high school students in grades 11 and 12. A cross-sectional survey was conducted within three secondary schools in Lubumbashi City, D.R. Congo, from 2017. Sampling was exhaustive of the 563 pupils present on the day of the survey. A logistic regression analysis was performed. The mean age of the respondents was  $18.2 \pm 1.4$  years. HIV/AIDS was the most commonly mentioned STI (99.8%). Sexual intercourse was the most quoted path of infection (93.4%) for STIs/HIV/AIDS. Condom use was the most cited form of prevention. Among the respondents, 21.2% had ever been sexually active. The condom was the most commonly used contraceptive (89.1%). The 118 pupils who were sexually active included 13.9% of all girls and 35.3% of all boys with a significant difference ( $p < 0.001$ ). Multivariate analysis showed that children 12 and older, and students who cited their parents as sources of information were more likely to use condoms at first sexual intercourse compared others. Students whose father's or guardian's education included university and who reported abstinence as a means to prevent STIs or pregnancy were less likely to use condoms at sexual debut than the others. Hence, family members, leaders and teachers should discuss reproductive health and responsible sexuality earlier with children.

**KEYWORDS:** Condom use, first sexual intercourse, knowledge, STI, HIV, school student, Lubumbashi, DRC.

### 1 INTRODUCTION

The incidence of human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) among adolescents and young people remains a concern. The United Nations Children's Fund (UNICEF) projects that, in the absence of corrective measures for the current situation, new cases of HIV infections among adolescents would increase by 13% each year through 2030 [1]. In West and Central Africa, adolescents 15-19 years old newly infected with HIV were estimated at 24% of all new HIV infections in 2016 [2].

Out of every three new HIV infections among adolescents 15 to 19 years old, two are recorded in sub-Saharan Africa. For every five adolescent boys living with HIV, there are a corresponding seven adolescent girls aged 10 to 19, and this disparity is more accentuated among younger adolescents. This is how the number of young women living with HIV becomes twice that of men [1], [3]. In 2022, 63% of new HIV infections were among women and girls [4].

Sexually transmitted infections (STIs) indirectly promote the sexual transmission of HIV and cause cell changes that can induce the formation of certain cancers. These infections also imperil the quality of life of populations, their sexual and

reproductive health, as well as the health of newborns and children. This is why adolescents and young people are one of the most vulnerable groups [5].

The joint Program of the United Nations on HIV/AIDS (UNAIDS) and the World Health Organization (WHO) has proposed that investment in STI/HIV/AIDS prevention be prioritized to reduce new infections and thus contribute to objective 3 of the Sustainable Development Goals (SDGs). The interventions aimed at behavioral change are the most frequently mentioned, namely, promoting the systematic use of male and female condoms, communication about STI/HIV/AIDS, reduction of the number of sexual partners, increasing the age of first sexual intercourse and screening [6], [7]. These interventions should be prioritized for adolescent girls in sub-Saharan Africa and other adolescent groups most at risk in the rest of the world [2].

Premarital sexual practices without preventative measures among adolescents and young people exposes them to certain risks, in particular STIs/HIV/AIDS and unwanted pregnancy. Especially in cases where sex is initiated early, the probability of having a large number of sexual partners is increased [7].

Studies by Parkes et al in England and Scotland in 2009, Donadiki et al in Greece in 2013 and Yotebieng et al in Nairobi, Kenya in 2009, Ahadi and al in Democratic Republic of Congo have shown that condom use during first intercourse was a predictor of future use among young people and adolescents [8] – [11]. A study of adolescents in French-speaking sub-Saharan Africa by Rwege in 2013 revealed that adolescents and young people who used condoms at first intercourse were more likely to have used them at their last intercourse [12]. True et al in France reported that earlier contraceptive initiation was associated with greater utilization of more effective methods at the time of the study [13]. As well, condom use at sexual initiation is associated with a decreased risk of sexually transmitted infections [14].

Overall, factors affecting contraceptive use can be categorized into individual, household, community and access to health care services groups [15], [16]. True et al found (2014) that the mean age of first sexual intercourse was 17 years, and only half of women used contraception at the time of their first sexual encounter (56%), while 29% initiated contraception before their first sexual encounter [13].

In the Democratic Republic of Congo (DRC), the prevalence of HIV continues to be of a generalized type (1.2%), which was 2.8% (in 2017) in the province of Haut-Katanga and 4% in the sentinel surveillance site of the City of Lubumbashi [17]. Adolescents and young people in the DRC are concerned about this. Indeed, the Demographic Health Survey (DHS-2014) reported that the median age at first intercourse preceded that of entry into marriage [18]. A study carried out in the City of Likasi among secondary school pupils by Mukadi et al in 2018 revealed that the average age at first intercourse of respondents was 16.7 years for boys and 17.2 years for girls, and 38% had their first sexual intercourse between 10 and 15 years [19]. In DRC, the use of modern contraceptives was only 10.0% in 2017, the unmet need for modern methods was 39.9%, the demand satisfied was 20.0%, and this was the highest unmet need for modern methods in 2017 [20].

Given that the province of Haut-Katanga is one of the priority provinces of the strategic plan to fight HIV due to its high prevalence in the DRC [17], adolescents and young people in the City of Lubumbashi cannot escape the risks of having sex before marriage if they do not take precautions. Faced with the reluctance to communicate sexual information in our context and contraceptive behaviors that vary widely between and within countries, evidence-based data are needed, especially in our region, and there is a lack of consensus on what constitutes early sexual intercourse [14], [21] – [23].

This paper aimed to determine the factors associated with the use of condoms at first sexual intercourse and the level of STI knowledge among secondary school students.

## **2 MATERIAL AND METHODS**

### **2.1 STUDY DESIGN**

This survey was cross-sectional and involved three secondary schools in the City of Lubumbashi, the province of Haut-Katanga, in the DRC. This City has 7 municipalities. The Wema high school (for girls) is located in the municipality of Lubumbashi, the Kitumaini II Institute (for boys) is in the municipality of Katuba and the "Sainte Hélène" school complex (mixed-sex) is in the municipality of Lubumbashi. The two first schools belong to the Catholic church while the "Sainte Hélène" school is private. The choice of these schools was made for convenience.

## 2.2 DATA COLLECTION

The data collection took place from the 20th of April to the 20th of June, 2017. The sampling was exhaustive of students in the secondary classes (11th and 12th grades) present on the day of the survey.

The calculated sample size for the descriptive study assumed 25% of had ever sex (or condom users at first sexual intercourse), 95% confidence level, 1.8 of design effect, 3 clusters and 5% of margin error and was 519 students (EpiInfo version 7.2.1.0) [24].

The questionnaire was pretested with 20 students from another school not included in this study. This self-administered, anonymous questionnaire was provided by the investigators (students at the University of Lubumbashi medical school) during the teaching break in the classrooms. The data encoding was carried out in duplicate using the EPI info 7.1.1.14 software.

## 2.3 VARIABLES

According to the conceptual framework, the following individual, household, community, access to health care services variables were chosen [14], [15].

Individual variables included school, age, sex, class, option of study, have ever heard about an STI, to quote at least one STI, to know ways of transmission, type of transmission, to know the means of prevention, to know a common preventative means, have ever had sex, age at first sexual intercourse, have ever used a means of prevention during first sexual intercourse, have you mentioned these means of prevention during first sexual intercourse.

Household variables consisted of the profession of the father or guardian, profession of the mother, education of the father or guardian, and education of the mother. Community variables embraced mores and institutions such as the religious denomination attended by the pupil and source of information. Access to health care services variables were incorporated into the source of information.

## 2.4 STATISTICAL ANALYSIS

The data analysis was carried out using Excel 2010 and STATA 16 software. The following statistical measurements and tests were performed: the mean and standard deviation for the quantitative variables, and the proportion for the qualitative variables with regard to the descriptive part. Some data have been organized by sex. The dependent variable was condom use during first intercourse. Pearson's chi-square, 95% confidence interval (95% CI) and Odds ratio (OR) allowed us to find the associations between the dependent variable and the other variables at the significance level of 0.05. The explanatory variables included in the logistic regression models were selected by a regressive procedure. Only statistically significant variables were retained in these models. Interactions between potential predictors of condom use were tested by the likelihood ratio test. The Hosmer-Lemeshow test, which was not significant, was applied to verify the fit of the final model. The adjusted ORs, their 95% CI, as well as the p-value of the Wald test are presented in the results.

## 2.5 ETHICS

Authorization to carry out this study was obtained from the authorities of these three schools. Participants received explanations from investigators about the anonymity, confidentiality and purpose of the study before providing their verbal consent. To strengthen confidentiality, the questionnaires filled out on the spot were placed directly into a nontransparent ballot box by the participants themselves. Approval by the Medical Ethics Committee of the University of Lubumbashi has been obtained.

## 3 RESULTS

The participation rate in this study was 79.3% (563) school students were interviewed, out of 710 total enrolled students), with a majority of the participants from the Wema High school (54%, n = 304). Two-thirds of the participants were girls. The average age of the respondents was  $18.2 \pm 1.4$  years, with a minimum age of 14 and a maximum of 24 years. Nearly one out of three fathers or guardians of the participants were employees of a company. The father or guardian (69%) as well as the mother (48%) of the respondents were mainly of higher or university education. The Protestant (and Revival) religious groups were predominant (45.7%) among the participants (Table I).

**Table 1. Socio-demographic variables of the surveyed students (N=563)**

<b>VARIABLES</b>		<b>N</b>	<b>%</b>
School	Institute Kitumaini/Katuba boy's high	161	28.6
	Wema girls high	304	54.0
	Sainte Hélène gender-mixed high school	98	17.4
Sex	Female	372	66.1
	Male	191	33.9
Actual age in years (n=558)	14-18	336	60.2
	19-24	222	39.8
Section/Option	Biology and-chemistry	143	25.4
	Commercial	142	25.2
	Fashion designer	55	9.8
	General-Pedagogy	162	28.7
	Latin-philosophy	56	10.0
	Physical-Mathematics	5	0.9
Secondary school level	Form 11	188	33.4
	Form 12	375	66.6
Profession of the father or guardian (559)	Worker of a company	163	29.2
	Other	159	28.4
	Civil servant	124	22.2
	Traders	113	20.2
Education of the father or guardian	Null	6	1.1
	Primary	27	4.8
	Secondary	140	25.1
	Superiors/University	385	69.0
Education of the mother (n=560)	Null	8	1.4
	Primary	47	8.4
	Secondary	236	42.1
	Superior/University	269	48.0
Believe faith of the family (n=559)	Protest	256	45.7
	Catholic	203	36.2
	Others	65	11.6
	Kimbanguist	16	2.9
	Muslim	20	3.6

All participants in this study admitted having ever heard about and knowing about STIs. School was the primary source of information (73%, n = 411). Approximately 7 in 10 students thought that the information received about STIs/HIV/AIDS was insufficient. HIV/AIDS was the most cited STI (99.8%). Aside from HIV/AIDS, 7 out of 10 participants said that they knew about other STIs, such as gonorrhoea, syphilis, chancroid, trichomoniasis, hepatitis and papillomavirus infection (Table II).

The knowledge of the routes of transmission was almost general (94%), and taking sex into account, girls had more knowledge with a statistically significant difference ( $p = 0.001$ ). Sexual intercourse was the most frequently cited means of infection (93.4%) by our participants. On the other hand, 88.3% (n = 497) of students admitted to knowing the means of prevention against STIs/HIV/AIDS, and the use of condoms was the most cited (61%, n = 303) (Table II).

Of all of the respondents, 4 out of 5 admitted to knowing a common means of protection against pregnancy and STIs/HIV/AIDS, and the use of condoms was cited by nearly 9 out of 10 students. Almost 1 in 5 students said they knew of other means of prevention against pregnancy. Among those who cited other means of prevention against pregnancy, the calendar method and the contraceptive pill were most cited by 82.4% (n = 84) and 69.6% (n = 71), respectively. The means of pregnancy prevention were cited more by girls than boys ( $p = 0.014$ ). One in five students said that someone with HIV/AIDS could be cured, predominantly by girls ( $p < 0.001$ ) (Table II).

Table 2. Knowledge of surveyed students on STIs/HIV/AIDS (N=563)

Variables		N	%
Have ever heard about STI/ HIV	No	0	0.0
	Yes	563	100.0
Source of information*	School	411	73.0
	Media	95	16.9
	Church	33	5.9
	Friend	63	11.2
	Parents	37	6.6
Information received	insufficient	412	73.2
	sufficient	151	26.8
Know STI	No	0	0.0
	Yes	563	100.0
Know another STI apart from HIV/AIDS	No	161	28.6
	Yes	402	71.4
If Yes cited*	Gonorrhea	180	32.0
	Syphilis	181	32.2
	Hepatitis	22	3.9
	Chancroid	33	5.9
	PapillomavirusInfection	11	2.0
	Trichomoniasis	23	4.1
	Knowledge of contamination routes	No	34
Routes of contamination cited (n=529) *	Yes	529	94.0
	Sexual intercourse	496	93.4
	Contaminatedsharpobjects	199	37.6
	Transfusion	98	18.5
	Mother-child	37	7.0
	Kissing	14	2.6
	Knowledge of means of prevention against STIs	No	66
Means of prevention against STIs (n=497) *	Yes	497	88.3
	Use of Condom	303	61.0
	Abstinence	208	41.9
Knowledge of means of prevention common against STI and pregnancy (n=561)	Fidelity	38	7.6
	No	129	23.0
Means of protection common against STI/HIV/AIDS and pregnancy (n=432) *	Yes	432	77.0
	Abstinence	102	23.6
Knowledge of others means of prevention against pregnancy	Use of condom	387	89.6
	No	461	81.9
If yes mentioned (n=102) *	Yes	102	18.1
	Calendar	84	82.4
	Pill	71	69.6
	IUD methods	24	23.5
	Cervical mucus methods	38	37.2
	Diaphragm	42	41.2
	Other	32	31.4
Can a person with HIV be cured? (n=561)	No	447	79.7
	Yes	114	20.3

Legend: HIV= Human Immunodeficiency Virus; AIDS= Acquired Immunodeficiency Syndrome; STI = Sexually Transmitted infection, \*: possibility of several responses.

Table III revealed that of all the respondents, 21.2% (n = 118) declared that they were already sexually active, including 13.9% of all girls and 35.3% of all boys, with a sex-significant difference (p <0.001). The mean and median ages at the first sexual encounter of the students were 13.8±2.7 years and 14 years, respectively. The median age of first sexual intercourse for

boys was 14 years (minimum 8, maximum 20) and 15 years (minimum 10, maximum 18) for girls. Almost 2 in 5 sexually active participants admitted to using an STI or pregnancy prevention method when they first had sex. The condom was the most cited means of a prevention method used when they first had sex (89.1%). Of all condom users at the first sexual intercourse, boys represented 75.6% (n = 31).

**Table 3. Sexual intercourse variables of surveyed students**

Variables		N	%
Ever had sexual intercourse ? (n=558)	No	440	78.8
	Yes	118	21.2
Sex (n=118)	Male	67	56.8
	Female	51	43.2
Age at first sexual intercourse (n=118)	<14 years old	46	39.0
	≥14 years old	72	61.0
Age at first sexual intercourse among boys (n=67)	<14 years old	30	44.8
	≥14 years old	37	55.2
Age at first sexual intercourse among girls (n=51)	<14 years old	16	31.4
	≥14 years old	35	68.6
Utilization of means of prevention at the first sexual intercourse (n=118)	No	72	61.0
	Yes	46	39.0
Means of prevention used at the 1st sexual intercourse (n=46)	Condom	41	89.1
	Pill	3	6.5
	Diaphragm	2	4.4
Utilization of condom at the first sexual intercourse (n=41)	Male	31	75.6
	Female	10	24.4

Multivariate analysis showed that older children were 10 to 41 times more likely to use condoms at first sexual intercourse compared to those less than 12 years old. In addition, pupils who cited their parents as sources of information were 9.3 times more likely to use condoms at the first sexual intercourse than others. In our study, students who cited abstinence as a means to prevent STIs or pregnancy were less likely to use condoms during their first sexual experience. Additionally, students whose father’s or guardian’s education included university were less likely to use condoms at the first intercourse compared to others. (Table IV).

**Table 4. Multivariate analysis of students condom use during 1st sexual intercourse (n=118)**

Variables	n	Condom use [N (%)]	OR* (95% CI)	p*	Ad-OR (95%CI)	p
Age at first sexual intercourse (year)						
8-11	22	1 (4.6%)	1		1	
12-14	39	10 (25.6%)	7.2 (0.9-70.0)	0.069	10.1 (1.1-90.6)	0.038
15-16	39	22 (56.4%)	27.2 (3.3-222.7)	0.002	41.1 (4.7-361.3)	0.001
17-20	18	8 (44.4%)	16.8 (1.8-153.3)	0.012	27.3 (2.6-293.1)	0.006
Did Parents be source of informations?						
Yes	9	7 (77.8%)	7.7 (1.5-39.1)	0.006	9.3 (1.2-74.5)	0.035
No	109	34 (31.2%)	1		1	
Did student cite abstinence as means to prevent both STIs and pregnancy?						
Yes	16	1 (6.3%)	0.10 (0.03-0.01)	0.004	0.1 (0.01-0.6)	0.014
No	102	40 (39.2%)	1		1	
Father or guardian’s education						
University	72	19 (26.4%)	0.4 (0.2-0.9)	0.018	0.3 (0.1-0.8)	0.017
Nul, primary & secondary	46	22 (47.8%)	1		1	

Legend: \* crude Odds ratio, p=p-value, \*=Chisquare, Ad-OR= Adjusted Odds Ratio (Logistic regression), CI= confidence interval, Other variable included in logistic model was "student sex".

#### 4 DISCUSSION

We found in this survey that 34.7% (41/118) of students used a condom at their first sexual encounter, similar to findings of Trang et al (2014), who reported 28.6%. Elsewhere, Manning et al (2000) reported 51.8% [26]. Other factors of the conceptual model or random sampling distribution may influence these differences [15], [16].

Our survey revealed that 21.2% of participants were already sexually active. This proportion is close to the 27.6% found by Kokou et al (2012) in Lomé with college students aged 10 to 19 [27]. In contrast, the studies of Mukadi et al and Adohinzin et al presented high proportions of 42% and 54% of sexually active respondents [19], [28]. Indeed, opinions are divided on the role played by schooling regarding the sexual activity of adolescents and young people. Kayembe et al (2007), in the DRC, published that schooling was a predictor of the sexual activity of adolescents and young people [29]. On the other hand, school has been identified as a factor delaying the sexual intercourse of adolescents and young people by giving them knowledge and allowing them to adopt responsible behaviors for their sexual life [28], [30]. Given that the predictors of sexual activity before marriage would be diverse, previous studies have cited, among other things, age, sex, living environment, family standard of living, personality, and economic dependence [12], [28], [30]

During the survey, the mean age of the participants in our study was  $18.2 \pm 1.4$  years. This observation is close to that of Mukadi et al in their study carried out in the City of Likasi (mean age 18 years) [19]. Certainly, in the DRC, primary school and secondary last 6 years, each [31].

Our results revealed that the median age at first sexual intercourse was 14 years for all students, 14 years for boys (minimum 8 years and maximum 20 years) and 15 years for girls (minimum 10 years and maximum 18 years). The mean age at sexual debut was  $13.8 \pm 2.7$  years. These results are similar to those found by Yacoubab et al (2014) in Gao among high school students (mean  $13 \pm 2.5$  years for boys and  $15.5 \pm 1.8$  years for girls) and Alawode et al (2021) in Nageria among all adolescents (15 years) [32], [33]. The mean age of first sexual intercourse was 17 years (16.9–17.7) for True (2014) [13] and the median age of 16.9 years for Upchurch (1998) [21]. In the results of the 2014 DRC-DHS, the population median age at first coital debut was 17.6 years for men and 16.8 years for women [18]. This median age is decreasing and shows the precociousness of sexual intercourse among adolescents. Our convenient selection of schools may explain this difference compared to the DHS survey.

Our investigation established that the older children were 10 to 41 times more likely to use condoms at first sexual intercourse compared to those less than 12 years old (Table IV). A similar observation was made by Putra et al (2012) in Indonesia among unmarried adolescents 15 to 24 and with different levels of education. The oldest male adolescents in their series used condoms significantly more often than the youngest at the time of their first sexual intercourse [34]. True et al (2014) found that earlier contraceptive initiators were more likely to have experienced first intercourse at an older age [13]. The increase in age would be proportional to the increase in the probability of improved knowledge about the prevention of STIs/HIV/AIDS and unwanted pregnancies [28]. In addition, the increase in the age of first sexual intercourse desired by UNAIDS and WHO allows adolescents to acquire biological maturity and responsible behavior [6].

Moreover, our respondents who cited their parents or guardians as a source of information were 9 times more likely to use condoms at the first sexual experience than pupils who did not (OR = 9.3;  $p=0.035$ ). As well, earlier contraceptive initiators were more likely to report greater ease of discussing sex with their mother at the age of 15 years when compared with those who initiated contraception at the time of first sex [13].

In our study, students whose father or guardian's education included university were less likely to use a condom at the first intercourse compared to others (OR = 0.3;  $p = 0.017$ ). In contrast, Mosher and McNally (1991) declared that the percentage using a contraception method was higher among women whose mothers completed high school than those whose mothers did not [35]. This difference from our data could be due to the distribution of the pupil's age at their first sexual debut and the mother's education.

In our investigation, pupils who cited abstinence as a means to prevent both STIs and pregnancy were less likely to use condoms during their first sex experience. This result may be affected by pupil characteristics, namely, knowledge, beliefs, religious affiliations [35] attitudes, other determinants or a random sampling distribution [15], [36]. Condom use and abstinence have been recognized, in our study, as the more frequent means of prevention against STIs/HIV/AIDS and unwanted pregnancies. Adohinzin et al and Grondin et al reported the same observation [28], [37]. The condom is the best known and most widely used preventative method by young people due to its financial accessibility, its wide availability and the fact that its use does not require the intervention of a health worker [9].

In a bivariate analysis of our study, male children were 7.3 times more likely to use condoms at first sexual intercourse compared to girls (OR = 7.3;  $p<0.01$ ). This observation supported the findings of Kobelemi in Bangui in the Central African

Republic, Adohinzi et al, Taffa et al, Do et al [14], [28], [30], [38]. Women in general and girls in particular in Africa do not have the courage to negotiate the use of condoms for several reasons, including the fear of creating a climate of mistrust face to face with her male partner, limited power linked to the social construction of her femininity, the often older age of the male partner, and finally their economic dependence [12], [39], [40]. Social inequalities linked to sex are major factors linked to risky behavior towards sexual partners [12].

With univariate analysis, school was the primary (73.0%) source of information about STIs/HIV/AIDS in our sample. Furthermore, in Bobo-Dioulasso, Burkina Faso, Adohinzi et al (2015), in their study carried out on schooled and unschooled youth, found that friends and health workers are the main sources of information [28]. Since our study was carried out in a school environment, this observation of the school as the first source of information would be linked to the category of our respondents.

Concerning the routes of transmission known by our respondents, sexual intercourse was the most cited while using a condom was the best-known means of prevention. Apart from these two, other means were poorly cited. WHO recommends that comprehensive information should be available to adolescents and young people to enable them to adopt responsible behavior [6]. Li et al found in their study of middle school students aged 18 to 25 in China that the risk of sexual behaviors such as unprotected sex, unwanted pregnancy and abortion was associated with a low level of knowledge about reproductive health [41].

The limitations of this work are those related to cross-sectional studies, the reliability of responses to questions relating to reproductive health, the accuracy of recalling retrospective facts such as age at first sexual intercourse, the means of protection used, and forgetting to answer certain questions. Due to the small sample size and the convenient choice of schools, these results cannot be generalized to all high school students in Lubumbashi. A prospective or interventional robust study with a large sample size should be carried out.

## 5 CONCLUSION

Participants in this study had insufficient knowledge of STIs/HIV/AIDS. The precociousness of sexual intercourse among the adolescents studied in Lubumbashi is a reality. Respondents did not systematically use condoms when they first had sex. The vulnerability of female students was highlighted by this work in bivariate analyses. In a multivariate binary logistic analysis, parents as the source of information, guardian's or father's education, student knowledge of STIs or contraception and an age of at least 12 years at first sexual intercourse of the respondents were statistically significantly associated with the use of a condom during the first sexual intercourse. Therefore, parents, leaders and the whole community should talk comprehensively about reproductive health and sexuality to young children, without sex discrimination. In addition, the education system should provide updated lessons adapted to each grade level to prevent sexual and reproductive adverse outcomes.

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