

Original Research Article

Knowledge, attitudes, practices of teenagers on sexual health in the district of Ambohidratrimo

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ABSTRACT

Background: Talking about sex, sexuality, sexual health in many countries, including Madagascar, is very difficult because of the sacred and taboos that surround these questions but especially because of certain puritanism. The objective of this study was to assess the knowledge, attitudes and practices of adolescents in matters of sexual health.

Methods: A retrospective, descriptive cross-sectional study was carried out in adolescents aged 10 to 19 seen in Ambohidratrimo district. The data were collected during the month of June and July 2019 and relate to data for the twelve months before the survey.

Results: A total of 210 adolescents were recruited whose average age was 15.82 ± 2.75 years and the sex ratio was 1:04. Eighty-six percent of the adolescents surveyed had heard of sexual health. Nine out of 10 adolescents would go to a health worker if they contract an STI. Almost a quarter or 23.8% of respondents declared having already had sexual intercourse.

Conclusions: At the end of this study on the knowledge, attitudes and practices of adolescents on sexual health, they certainly have knowledge but considered average. Therefore, there is a need for sexuality education, for improving knowledge and understanding of sexual development, human procreation, healthy and adapted sexual behavior and different means of contraception, on the part of adolescents, but also with the aim of improving communications between adolescents and their parent.

Keywords: Adolescence, Attitude, Knowledge, Practice, Sexual health

INTRODUCTION

Adolescence is a phase that humans go through from the age of 10 to 19 years if the age of 15 to 24 years marks youth, according to the WHO.¹ Talking about sex, sexuality, sexual health in many countries, including Madagascar, is very difficult because of the sacred and taboos that surround these questions but especially because of a certain puritanism; this greatly prevents people from receiving or giving information about health

and related care.² Unprotected sexual activities due to the ignorance and even recklessness of adolescents with regard to sexual and reproductive health demand from the state (and the society) urgent, important and complex actions such as health education. The danger represented by Sexually transmitted infections (STIs) too often threatens young people today.^{3,4} Would a better working knowledge of adolescents have an impact on the communication of information on the sexual health of these young people? Faced with this situation, our study

aims to identify the social profile of adolescents and assess the knowledge, attitudes and practices of adolescents in matters of sexual health in order to make suggestions based on the results obtained.

METHODS

A retrospective, descriptive cross-sectional study was carried out in Ambohidratrimo district, one of the districts of the Analamanga region. The study took place in the district of Ambohidratrimo. Adolescents seen in the district constitute the study population. The data relate to a period of twelve months before the survey and the data were collected during the months of June and July 2019. Adolescents aged 10 to 19 years seen in the district of Ambohidratrimo who live there for at least a period of three months are included.

Adolescents unable to answer the questionnaire are excluded such as hearing impaired adolescents, those who have a speech problem and have a mental handicap. This study adopted the three-stage cluster random sampling mode. Sampling was obtained that is thirty clusters. The first stage identifies the communes, the second stage identifies the Fokontany drawn at random and the number of the respective clusters, the third part identifies the household of adolescents to be surveyed. The sample size was fixed at 210.

The data have been collected. using a pre-established and pretested survey form and this is an individual interview with adolescents according to the inclusion criteria. The variables studied concern the social profile, knowledge about sexual health, attitudes and practices regarding sexuality. Concerning the scoring of knowledge, the knowledge of the types of STIs was scored as follows: were considered to have an average knowledge, the one who had 1 to 4 correct answers; those with good knowledge with 4 to 8 correct answers and those with excellent those with more than 8 correct answers. The data collected manually were entered with Excel® 2010, they were then analyzed with the software Epi-info® 7.1.3.

The Chi square test was used for comparison of observed proportions and when there are expected values less than 5, Fisher's exact test was interpreted. Statistical significance was set at p less than or equal to 0.05. Before data collection, authorization from the Regional Directorate of Public Health of Analamanga, of the District Public Health Service of Antananarivo Atsimondrano was obtained. And before proceeding with the survey, explanations concerning the objectives and the conduct of the survey were given to the adolescents surveyed.

The consent of the adolescents surveyed as well as their parent or guardian was obtained. The confidentiality and anonymity of the information collected has been respected. The investigation process respected human rights. As in all studies using interviews as the main sources of

information, responses to questionnaires can be tainted with confusing bias.

RESULTS

A total of 210 adolescents were recruited with an average age of 15.82 ± 2.75 years with a sex ratio of 1.04.

Knowledge of adolescents in sexual health

Most of the respondents have already heard of sexual health, i.e.; 86.0%. School was the source of information for 86.5% of adolescents (Figure 1).

Knowledge of STI

The majority of adolescents know the STI, i.e.; 81%. Among them, 39.4%, are between 10 and 14 years old, 50.5%, male, 49.4%, having completed a secondary education level, 93.5%, living in rural areas and 47, 3% of Catholic religion. The relationship between each of these variables and knowledge of signs of STIs is statistically significant (Table 1).

Among adolescents with excellent knowledge of STI types, 53.7% are in the 18-19 years age group and this association is statistically significant with a p value < 10⁻⁵. Those with an average knowledge of the types of STIs of 65.2% are at the secondary school level and the relationship between this knowledge and the level of study is statistically significant with p < 10⁻⁵. All those with an average knowledge of types of STIs live in rural areas, i.e.; 100%; there is a statistically significant association between place of residence and knowledge of types of STIs (p=0.0128).

Adolescents knowledge of contraception

More than half of adolescents who have heard of contraception are in the 18-19 years age group, or 50.3%; there is a statistically significant association between knowledge of contraception and age group with a value of p < 10. The 47.0% who do not know about contraception are female. Thirty-nine percent of respondents who know about contraception are at the secondary school level. Those with knowledge of contraception live in rural areas, i.e.; 72.7%; the relationship between knowledge of contraception and home environment is statistically insignificant.

As for religion, 48.6% knowing contraception belong to the Protestant religion. The majority who do not know about contraception live with their parents, i.e.; 60.7%; cohabitation is not statistically associated with this knowledge. Adolescents who know about contraception have a father with a high school education, i.e.; 65.1%; the statistically significant association between the father's educational level and this knowledge does not exist. The 50.3% among them with knowledge of contraception have a mother with secondary school education; there is no

statistically significant relationship between knowledge of contraception and maternal education level.

Attitude if you contract an STI

The majority of adolescents if they contract an STI would see a health worker with 90.5%. Among them, 43.1% are aged 18 to 19, 50.3% female, 91.4% secondary school, 95% living in urban areas and 45.5% Protestant religion. Only age and level of education have a statistically significant relationship with the attitudes adopted if adolescents contract an STI (Table 2).

Attitude to discuss contraception

The majority of adolescents who believe that contraception should be discussed are in the 18-19 years age group, or 43.7%; there is a statistically significant association between the age group and this attitude ($p=0.0014$). 49 adolescents wishing to discuss contraception are male, i.e.; 51.5%; gender and this attitude are not statistically related. The 41.3% of them answering 'yes' are of secondary school level and the relationship between the level of study with this attitude is statistically significant, $p=0.0036$.

Concerning the place of residence, most of them who say they discuss contraception live in rural areas, i.e.; 93.4%; but there is no statistically significant relationship between this attitude and place of residence. As for religion, almost half of Protestant adolescents, or 49.1%, think that

contraception should be discussed; but there is no statistical association between religion and the idea of contraception.

Sexual intercourse practice

Almost a quarter, or 23.8% of the adolescents surveyed declared having already had sexual intercourse.

Most adolescents had their first intercourse by the age of 17, or 47.9% (Figure 2).

The average age of first sexual intercourse is 17.6 ± 0.26 . During this first sexual intercourse, the majority of adolescents did not use a condom, i.e.; 82.6%.

At the time of the survey, the majority of them do not use a contraceptive method, i.e.; 90.7%.

Of those who use contraception, 82.4% are in the 18-19 years age group; there is a statistically significant association between age group and contraceptive use with a p value=0.0007. The 14.7% who use contraceptives are female.

Adolescents who have already used a contraceptive have a secondary school level of 70.6%; the association between education level and contraceptive use is statistically significant with $p=0.0269$. Adolescents using a contraceptive cohabit in the majority of cases with their parents and this association is statistically significant.

Table 1: Distribution of adolescents according to their knowledge of STIs and their social profile.

Social profile	Knowledge of STI		P value
	Yes N (%)	No N (%)	
Age category (years)			
10-14	67 (39.4)	0 (0)	$<10^{-5}$
15-17	44 (25.8)	14 (35.0)	
18-19	59 (34.7)	26 (65.0)	
Gender			
Male	86 (50.5)	21 (52.5)	0.0006
Female	84 (49.4)	19 (47.5)	
Level of study			
Primary	82 (48.2)	0 (0)	$<10^{-5}$
Secondary	84 (49.4)	11 (27.5)	
High school	40 (23.5)	23 (57.5)	
University	13 (7.6)	6 (15.0)	
Residence			
Urban	11 (6.4)	0 (0)	$<10^{-5}$
Rural	159 (93.5)	40 (100.0)	
Religion			
Catholic	79 (47.3)	7 (17.5)	0.0001
Protestant	63 (37.7)	31 (77.5)	
Other religions	25 (14.9)	2 (5.0)	

Table 2: Distribution of adolescents according to their attitude if they contract an STI and their social profile.

Social profile	Attitude of STI N (%)				P value
	See a health worker	Discuss with parents	See friends for advice	I don't know	
Age category (years)					
10-14	52 (28.7)	11 (61.1)	0.0	4 (66.7)	0.0014
15-17	51 (28.2)	5 (27.8)	0.0	2 (33.3)	
18-19	78 (43.1)	2 (11.1)	5 (100.0)	0.0	
Gender					
Male	90 (49.7)	10 (55.6)	5 (100.0)	2 (33.3)	0.1207
Female	91 (50.3)	8 (44.4)	0.0	4 (66.7)	
Level of study					
Primary	23 (12.7)	10 (55)	0.0	2 (33.3)	<10-5
Secondary	85 (91.4)	4 (4.3)	0.0	4 (66.7)	
High school	57 (31.5)	4 (22.2)	2 (40.0)	0.0	
University	16 (8.8)	0.0	3 (60.0)	0.0	
Residence					
Urban	9 (5.0)	2 (11.1)	0.0	0.0	0.5967
Rural	172 (75.0)	16 (88.9)	5 (100.0)	6 (100.0)	
Religion					
Catholic	74 (41.6)	10 (55.6)	0.0	2 (33.3)	0.292
Protestant	81 (45.5)	5 (27.8)	4 (80.0)	4 (66.7)	
Other religions	23 (12.9)	3 (16.7)	1 (20.0)	0 (0)	

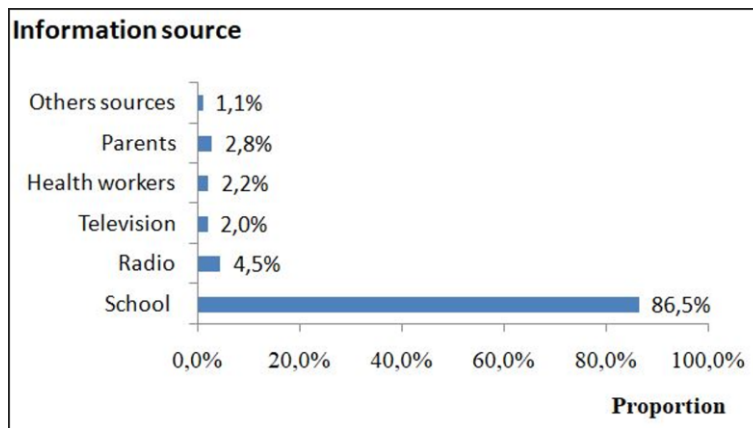


Figure 1: Distribution of adolescents according to their source of information.

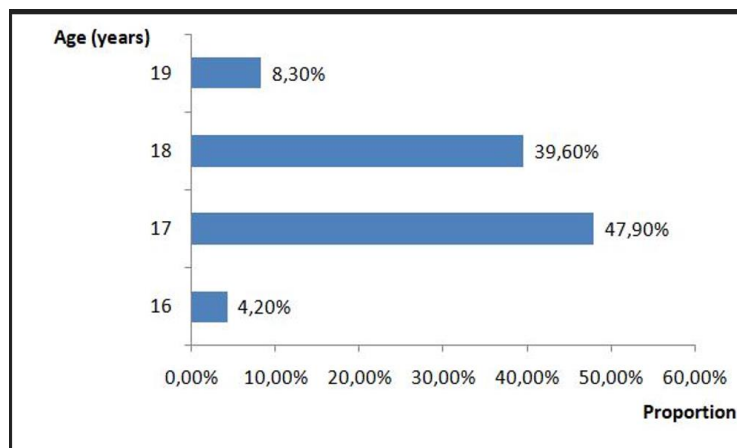


Figure 2: Distribution of adolescents according to their age of the first sexual intercourse.

DISCUSSION

Knowledge of adolescent sexual health

Of the 210 adolescents interviewed, 86.0% have heard of sexual health. Their sources of information were school for 86.5% of them, and radio for 4.5%. A study of adolescents in Togo in 2014 reported that adolescents are frequently exposed to audiovisual media regardless of gender or age. These are TV for 79.1%, radio for 77.5% and internet for 28.9%⁵. In most studies, the media are among the preferred sources of information for students, including television, radio and the Internet; Rochigneux in his study found that the school emerged as the primary source of information for students about sexuality. The majority of students during the survey found this education relevant and said they had found information at school⁶. Not all rural adolescents have access to audiovisual media. Consideration should be given to integrating sex education on STI/AIDS into the school curriculum, establishing interpersonal communication, and practicing a peer education approach, strengthening the capacities and training of teachers and teachers. parents of students.

The majority who know the STI are between 10 and 14 years old, i.e.; 39.4%; there is a statistically significant association between age group and knowledge of STIs with a value of $p < 10^{-5}$; almost half who have also contracted an STI are male, i.e.; 50.5% and 49.4% are in high school. The study which was conducted in Bobo Dioulasso, according to Adohinzin, states that 98% of young people surveyed have heard of STIs regardless of HIV (49% of boys and 51% of girls).⁷

Currently, the promotion of sexual health among young people requires information about risks, such as HIV and AIDS, and how to avoid their negative effects on sexual health. Since the 1980s, all authorities have had programs aimed at informing young people about HIV, AIDS and other STIs.

Among adolescents with excellent knowledge of types of STIs, 53.7% are in the 18-19 age group. The study carried out in the north-east of Lomé showed average knowledge and that HIV infection is one of the most well-known STIs for most adolescents aged 15 to 19.⁸

This is because the more mature age group has excellent knowledge. Awareness of STIs/AIDS needs to be strengthened, adolescents must be made aware of STIs/AIDS so that they have better knowledge and collaborate in the fight against these diseases. It is also necessary to let adolescents know their responsibilities, from the moment they assume the sexual act.

Regarding the knowledge of adolescents on contraception, more than half of adolescents who have already known contraception are in the age group of 18 to 19 years or 50.3% and are of secondary and rural level or 72.7%. Rasoarilanto revealed that 4.16% of adolescents require

information from young people on contraception from the age of 10 for girls and between 14 and 20 for boys.⁹ Also, the study conducted by Hajason in the Vatovavy Fitovinany region showed that 96% of women in the region know of a contraceptive method.¹⁰ A study by USAID in Benin and Madagascar found that educated city-dwellers had better knowledge of family planning methods compared to uneducated youth.¹¹ Measuring the level of contraceptive knowledge provides partial but useful indications on the degree of success of IEC activities; it is therefore necessary to try to present all the contraceptive methods and to explain in a brief, synthetic and repetitive way to adolescents, to educate and develop guides on contraception and to organize educational sessions on contraception, and to raise awareness through the media and to sensitize adolescents in the field of planning.

Attitudes if they contract an STI

For most adolescents, if they get an STI, they will go to a health worker. Most of the respondents who say "see a health worker if they contract an STI" are in the 18-19 age group, or 43.1%. Almost half are female, i.e.; 50.3%, and secondary school education, 91.4%. Embarrassment at seeing a doctor or nurse can make it difficult to get tested for STIs. Our study is comparable to one done in Canada which reported that almost a quarter of teens in the 15-18 age range say they will see a doctor or nurse if they are worried about having an STI while 85.0% of female adolescents seem eager to confess to their sexual partner a possible STI which is contrary to our study.¹² Another study in Burkina Faso found that one in three young people (and more among those aged 12-14) do not know where to go for STI treatment.

The health center or public hospital is identified mainly by young people, especially young people aged 15 to 19 years, as a place of treatment for STIs (65.0% of girls and 72.0% of boys). This location is also cited as the preferred center for receiving treatment by 91.0% of girls and 93.0% of boys. Six percent of young people mention a traditional source (traditional healer, herbalist, marabout).¹³ The health worker, health center or public hospital are the most frequently mentioned and young people consider them to be the best places to get STI methods or treatment. The best solution is to have IEC for adolescents intervene early since adolescent programs often start too late, after many adolescents have already started to have sex early, and sexual attitudes and behaviors are already good. anchored. Next, parents must be made aware of STIs/AIDS so that they can allow their children to collaborate in the fight against these diseases. In Madagascar, as elsewhere, contraceptive methods have emerged more than just Family planning (FP) and natal, but also as methods of protecting sexual health.

According to our study, the majority of adolescents who believe that "contraception should be discussed" are in the 18-19 years age group, or 43.7%; more than 51.0% are male and 41.3% have a secondary education and come

from rural areas or 93.4%. A study carried out by Stickley showed a similar study: the majority of boys, 10.0% of 17-year-olds, 18.0% from 18 years old and 19.0% from 19 years old, think that it is necessary to speak about the family planning, adolescents and adolescents need to communicate more with each other about contraception and protection methods.¹⁴ To better protect adolescents from their sexual activities, we believe that the ideal age to inform them about contraception is at the onset of puberty, so as not to handicap their future and prevent them from any unpleasant surprises. It is therefore necessary to strengthen peer education and strengthen civic education with Adolescent reproductive health (ARS) from primary school, the insertion of the ARS module in the curriculum of the basic education. Young people should be encouraged to discuss among themselves on the one hand, and among themselves and with educators on the other.

Practice of sexual intercourse

Entering sex, in marriage or in union are important events in the transition from adolescent to adult life. Along with this transition are factors that affect adolescents' vulnerability to the risks of pregnancy and STIs/HIV infection, as well as their immediate needs for information and services to protect their sexual health. The transition to marriage has even greater effects on the lives of young women, especially because it determines the extent to which they can make decisions, independently, in all aspects, including childbearing and planning. Pregnancies in Madagascar, half of women aged 15 to 24 had their first sexual intercourse at age 17.5 and 37% of adolescent girls aged 15 to 19 have already started their reproductive life.^{15,16} Young people also have a very active sex life, with multiple partners, and do not protect themselves, in particular because of the feeling of invulnerability to infections that characterize them.¹⁷

In Bolivia, the average age at first sexual intercourse is 18.8 years, approaching our study.¹⁸ In France, 15 to 19 years old said at 43% to have had sex at least once, down from 47% before. The decline is due to the fact that reported sexual activity fell from 51% to 43% among young girls.¹⁹ Today, young people have their first sexual intercourse at almost the same age with the median age at first penetration of 17 years and 3 months for boys and 17 years and 6 months for girls.²⁰ It is estimated that nearly 80% of single women under the age of 20 are sexually active in sub-Saharan Africa, compared with 75% respectively in certain developed countries and 50% in Latin America.²¹ In Cameroonian urban areas where premarital sex has become the rule, "social norms so strongly encourage the sexuality of young adolescents that, after a certain age, those who are still virgins feel rather marginalized".²²

This situation has fostered risky sexuality among young people (early sex and casual sex), because they do not always have the necessary information or receive incorrect information from their friends.²³ As described above, the age at first sexual intercourse varies from country to

country, and from region to region. This could be due to the fact that each country has its own cultures, traditions, religions, economy, politics and even each has its own legal status. There is a real tension between the apology for pre-marital sex and the efforts of church authorities to promote responsible sexual behavior. It is therefore not surprising that we are now witnessing a decline in the traditional values that once governed the attitudes and behaviors of parents in their youth.

It is then our duty to seek to improve our case by trying to provide integrated health services for adolescents, including family planning information and services for adolescents having sex, to offer accessible health services to adolescents who respect the confidentiality and privacy of adolescents and to provide them with the information they need to act knowingly.

Despite this, we need to take a differentiated approach to the topic of "youth sexuality" in our society. And for that, to underline the positive aspects which support a healthy sexual development, while highlighting the risks and the dangers especially of the risks incurred of the multi sexual partnership. This may require providing adequate sexuality education to young people also beyond compulsory schooling to avoid superficial information and the spread of "myths". During this first sexual intercourse, the majority of adolescents do not use a condom, i.e; 82.6% among 15 to 19 year olds. The same goes for the study in Burkina Faso, 73% of girls aged 12 to 19 do not have any method of contraception used during their first sexual intercourse.¹³ Adolescents often cite "trust" between partners to justify not protecting their sexual relations. According to a study by the United Nations Population Fund (UNFPA), 56.2% of young women aged 15 to 24 do not use contraceptive methods and according to a demographic and health study in Madagascar, 3.9% of young women used a condom during their first sexual intercourse versus 5.3% among young men in France, during the first sexual intercourse.^{24,25} The low use of contraceptive methods among adolescents, especially girls, can be attributed to the fact that access to prevention is not always easy for them, or there is difficulty convincing their partner; either the meaning and the representation conveyed among the populations of what contraceptive methods are, or for some adolescents, synonymous with "foreign body", and synonymous with mistrust.

The circumstances suggest that policymakers and health professionals need to remove legal and institutional barriers that prevent adolescents from accessing family planning and reproductive health services. Involve young people in the design, delivery and even improvement of programs that would benefit them.

Limitation

As in all studies using interviews as primary sources information, responses to questionnaires may be tainted with bias confusion.

CONCLUSION

There is growing interest in adolescent sexual health. It varies according to time, cultures, countries, ethnicities and individuals. Despite the fact that the number of studies on the subject is increasing significantly, relatively little information is known about Malagasy adolescents who represent a large proportion of the population. At the end of this study on the knowledge, attitudes and practices of adolescents on sexual health, they certainly have knowledge but considered average. It results from this work that most adolescents have an average knowledge of sexual health. The attitudes and practices of adolescents are average. However, we noted positive aspects and negative aspects. Obviously, the knowledge of adolescents depends on the agents of socialization: families, family planning agencies, school, religion. The level of attitudes of adolescents vis-à-vis the themes selected is all in all acceptable. Through our results, there is a need for sex education seeking to improve knowledge and understanding of sexual development, human procreation, healthy and adapted sexual behavior and different means of contraception, on the part of adolescents, but also with the aim of improving communications between adolescents and their parents.

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