

## Evaluation of Young Adults' Knowledge of STIs AND HIV/AIDS in the Health Area of the Korofina-Sud-Salembougou Community Health Centre (MALI)

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### Abstract

### Original Research Article

**Introduction:** STIs have a profound impact on sexual and reproductive health worldwide. The risks of transmission are linked to age and sexual behaviour. The aim of this study was to assess young adults' knowledge of STIs/AIDS in order to prevent the risks. **Materials and Method:** We conducted a descriptive cross-sectional qualitative study of 170 randomly selected people in the health area of the Korofina-Sud and Salembougou community health centre (ASACOKOSSA). **Results:** The most common STIs were HIV (98.8%), urinary tract infections (92.9%), gonorrhoea (88.2%), genital mycoses (87.7%), syphilis (77.6%) and papillomavirus (74.7%). Although condoms, fidelity and abstinence were known as means of protection in 58.8%, 32.9% and 13.5% respectively, erroneous knowledge existed and risky behaviour was adopted. **Conclusion:** The family was far from being a place for sex education for young single people. Awareness-raising initiatives seemed to be needed to help parents talk to their unmarried young adults about sexuality, so that they could pass on the right information.

**Keywords:** Knowledge of STIs and HIV/AIDS, risk factors, source of information, Korofina-Sud and Salembougou.

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## INTRODUCTION

In 2001, the Conseil Supérieur d'Hygiène Publique de France defined Sexually Transmitted Infections (STIs) as "infections in which the causative agents are transmitted exclusively or predominantly by sexual means and which require the partner(s) to be treated" [1]. This terminology covers a wide range of infections, both in terms of their clinical expression and the complications they can cause, and in terms of the treatments available (short- or long-term treatments)

and the populations affected [1]. Chlamydia, papillomavirus and herpes infections affect the general population. Infection with the Human Immunodeficiency Virus (HIV), gonorrhoea, syphilis, lymphogranulomatosis venereum (LGV) and hepatitis B preferentially affect certain groups such as men who have sex with men (MSM), migrants from high-prevalence areas and drug users [1]. HIV infection is one of the most dreaded diseases of the 20th century. Of the general world population, 37.9 million people were living with HIV in 2018, of whom 36.2 million were

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adults and 1.7 million were children (<15 years). The majority, namely 79%, of all people living with HIV knew their HIV status and around 8.1 million people did not know they were living with HIV [2]. STIs have a profound impact on sexual and reproductive health worldwide. Every day, more than a million people contract sexually transmitted infections. According to the World Health Organisation (WHO) Africa report, an estimated 357 million people contract one of the following four (4) STIs every year: chlamydia (131 million), gonorrhoea (78 million), syphilis (5.6 million) and *Trichomonas vaginalis* (143 million). More than 500 million people are infected with the Human Papillomavirus (HSV) herpes [3]. At any given time, around 291 million women are infected with HPV, one of the most common STIs [4]. In Mali, 16% of women and 23% of men aged 15-49 have full knowledge of HIV. Among young people aged 15-24, the figure is 16% for women and 16% for men. Knowledge of mother-to-child transmission: 49% of women and 38% of men know that HIV can be transmitted from mother to child during pregnancy, childbirth or breastfeeding. In addition, 38% of women and 38% of men know that the risk of mother-to-child transmission can be reduced by taking special drugs [5]. The risk of transmission among young adults is linked to the age and sexual behaviour of this group. One of the major pillars of prevention is the dissemination of information about HIV-AIDS. A 2012 study [6] highlighted an interesting finding: students who felt better informed about HIV-AIDS were more likely to undergo screening. They also have a better level of knowledge about the infection. STIs are a real social problem in our country, given their impact on women and the taboos surrounding sexuality. Several factors contribute to the increased risk of STI/HIV/AIDS, including young age, different sexual behaviour (change of sexual partner, partner with other partners) and social habits (early marriage, economic dependence of women, sexual violence, etc.). Better overall knowledge of the infection would make young adults more aware of the need for screening. This is why we proposed to focus our research on the health of young adults, and in particular their knowledge of STIs/AIDS in an urban centre in Bamako. In 2019, according to statistics from the Korofina Sud Salembougou CScCom, STIs/HIV accounted for 3.72%. The population is made up of 45% young adults. The risk of STI transmission is high. We therefore targeted this group to assess their knowledge of STIs/AIDS in order to prevent the risks.

## MATERIAL AND METHOD

This was a qualitative, cross-sectional and descriptive study that took place from 1 to 30 December 2020, i.e. over a period of one month. It took place in the CScCom ASACOKOSSA area, which is a community establishment at the 1st level of the health pyramid in Mali. It is located in Commune I of the Bamako district, and has a population of 27,500. According to the SLIS (Local Health Information

System), in 2019 young adults will represent 45%, i.e. 12375. Our study covered the population of the Korofina-sud Salembougou health area. The study included people aged between 15 and 54 who had lived in the Korofina-sud Salembougou health area for 6 months and had agreed to take part in the study. Non-consenting subjects, subjects under 15 years of age, subjects over 54 years of age, subjects not resident in the health area and subjects who refused to participate in the study were not included in this study. A random sampling method was used. A questionnaire was sent to each participant at the ASACOKOSSA health centre, at the market and even in the street. To assess the respondents' level of knowledge about STIs and HIV/AIDS, we asked them to answer Yes, No or Don't know from the list of sexually transmitted infections. The sample size for the study area was determined using Daniel Schwartz's formula:

$$N = \frac{z^2 * p * q}{i^2}$$

N = minimum sample size. Z = parameter related to the risk of error (1.96)

P = STI/HIV prevalence in the ASACOKOSSA CScCom in the DHIS2 2019 (0.037).

Q = Prevalence of other pathologies (q = 1- p). I = Desired absolute precision expressed as a function (0.03)

Taking into account in the sample size around 10% of tests that could be unusable, we needed 170 young adult participants. Access and SPSS software were used for data entry and analysis.

The administrative and health authorities were informed of the survey's progress. The study did not involve any additional risk, and the information was treated confidentially. Individual informed consent was obtained verbally from participants.

## RESULTS

The 15-30 age group was the most represented with 62.9%. Females accounted for 55% of the total. Malians were the most represented, accounting for 88% of cases. Civil servants were the most numerous, with 29 cases (49.3%). Married people were the most represented, with 67% of cases, of which 39% were polygamous (66 cases) and 28% monogamous (48 cases), compared with 33% unmarried (56 cases). The age of first intercourse began at 12. The peak age for first intercourse was 16, followed by 18. The most common STIs were HIV (98.8%), urinary tract infections (92.9%), gonorrhoea (88.2%), genital mycoses (87.7%), syphilis (77.6%) and papillomavirus (74.7%). The most common signs of STIs and HIV/AIDS were vaginal discharge (96.5%). Signs of STIs were said to be visible in 85.9% of cases. STIs were cited as contagious in 97.1% of cases. The mode of sexual transmission of STIs was known in more than half the cases, with the exception of oral sex. Condoms were the most frequently cited means of prevention

(58.8%), followed by faithfulness (32.9%) and abstinence (13.5%). Erroneous knowledge of the means of preventing STIs and HIV/AIDS concerned vaccination (19.4%), antiseptics (14.1%) and coitus interruptus (17.1%). Knowledge of at least one screening method was good in all cases (96.5%). In more than two-thirds of cases, the stated aims were: to be treated rapidly (76.5%), to avoid contamination by the AIDS virus (72.9%), and to confirm forms of the disease with no visible signs (71.8%). Samples taken from the urogenital organs were the most frequently cited: 94.7% for vaginal swabs, 87.1% for urine and 82.9% for urethral discharge. Awareness of a screening centre was generally good, at 96.5%. Schools were poorly represented as screening centres. Hospitals were cited in 84.1% of cases, and specialised centres in 78.2% of cases. Over two-thirds of respondents (88.2%) said they knew of at least one source of information on STIs and AIDS. General practitioners were the most frequently cited source of information in 81.8% of cases. Specialised centres seemed to be less well known to most respondents. More than two-thirds of respondents (114) had discussed sexuality with a close relative. In 84.2% of cases, the sexual partner was the person most often asked to talk about sex. Taboo was the main reason (89.3%). 55% of the respondents were female, compared with 45% male. Two-thirds of respondents discussed sexuality within the family. Men talked just as much about sex in the family (67.1%) as women (67.0%). Polygamists were the most represented by marital status at 38.8%. Monogamous couples accounted for 28.2% of the total and talked about sex in 81.3% of cases. Married people (polygamous and monogamous) talked about sex with their family in 76.3% (87/114) of cases, compared to single people in 51.8% of cases.  $P=0.001$ . Between the ages of 12 and 16, 50 cases (29.4%) of women had begun sexual relations, compared with 25 cases (14.7%) of men. They were equally likely between 17 and 20 years of age with 41 cases, i.e. 24.1% each,  $p=0.006$ . Subjects with a single sexual partner were the most numerous with 64.1%, followed by subjects with multiple partners (30%). Over the majority of respondents (52.4%) said they had had unprotected sex. Single people used protection more than married people, with 53.6% of cases compared with 44.7% (51/114). Women protected themselves better (48.9%) than men (46.1%).

## DISCUSSIONS

**Limitations:** Sampling was random but could not be extrapolated to the general population. We used questions with closed answers. This could be a bias in the veracity of the answers chosen. The upper age limit was 54, whereas younger people are more exposed to STIs and HIV/AIDS.

**Difficulties:** The difficulties in collecting data were linked to the taboo of sexuality in the community because of the low socio-cultural level and the intimate nature of the questions. We noted a slightly female-dominated workforce of just over half the cases, which

was different from that of Ariane M T T, who found a male predominance of 62.1% [7]. Her study population consisted solely of medical and pharmacy students, whereas in our case the profession was not a study criterion. Married people were the most frequently observed, accounting for two-thirds of cases, and polygamists were the most numerous, accounting for just over half. Our results differed from those of Ariane M T T where 87.2% of students were single [7]. This could easily be explained by the school environment in her case, where marriage is not the primary concern.

In terms of knowledge of the most common STIs, our results differed from those of Ariane M T T, who cited gonorrhoea as the STI most commonly known by medical and pharmacy students in 2009 (66.1%), followed by syphilis (65.4%) and HIV/AIDS (35.3%) [7]. Our targets were different from his. As for the data collection technique, she had asked open-ended questions, but we used questions with closed answers. The best-known mode of transmission of STIs and HIV/AIDS was vaginal. This can be explained by the fact that sexual practices in our contexts mainly involve penis- vagina contact. Ano-genital and oral-genital practices, on the other hand, are little used and therefore little known.

In terms of means of protection, our observations were similar to those of Ariane M T T, who found condoms to be the most frequently cited means of prevention (82.9% of students), followed respectively by abstinence and fidelity [7]. However, we noted some erroneous knowledge in our study which could constitute a risk of transmission of STIs, as the vaginal use of antiseptics can modify the vaginal flora, thus favouring its colonisation by pathogenic germs and sometimes even irritating the vaginal mucosa, thereby increasing the potential for contamination. The general practitioner is the first point of call for healthcare in Mali. The question of STIs is commonly raised during consultations and, above all, systematically during ANC. Specialised centres were known to be a source of information for half of the respondents. According to Ariane M T T, the main sources of information on STIs and HIV/AIDS for students were: television (24.3%) and radio (23%); discussions with fellow students (22.1%); university lectures (20.1%); parents (10.2%); others (friends in the neighbourhood): 0.2% [7]. In both studies, we found that the family was not the place where young people could obtain information about STIs/AIDS, thus confirming the lack of communication between parent and child. With regard to discussing sexuality with their close relatives, our results differed from those of Traoré A in 2006, who reported that less than half the pupils had discussed sexuality with one of their parents [10]. His study was carried out in schools with 14-19 year olds, whereas our samples consisted of subjects aged 15-54. The sexual partner was most often asked about sexuality, and the reasons given for silence (taboo) on sexuality in the family were mainly shame

and religion. The low rate of discussion of sex in the family among single people can be explained by the fact that sex remains a taboo in our society and is rarely discussed between parents and children, although information about it is shared among couples. The higher protection of women than men against STIs/AIDS in our study was slightly higher than that of Sidibé S who found that 19.68% of patients wore condoms, including 15.21% of women compared with 31.42% of men [12]. This was different from that of Ariane M T T [6] who said that the male sex was the most represented with 76.7% of students declaring that they had used a condom during their last sexual intercourse. This difference can be explained in our study by the high frequency of married couples. In general among married couples preventives were used for planning than as a means of preventing STIs and AIDS in the faithful relationship.

## CONCLUSION

The level of knowledge about HIV/AIDS was acceptable. Although more than half of those surveyed knew about protection methods. Risky sexual practices and behaviour were still not negligible.

Family sex education was not widely practised among single people, which would make them at risk, as they could resort to uncontrollable sources with negative consequences such as sexually transmitted infections, the human immunodeficiency virus (HIV) and sexual coercion.

Awareness-raising campaigns seemed to be needed to encourage parents to talk to their unmarried young adults about sexuality, so as to pass on the right information. Parents should be a child's first source of information about sex. When parents talk to their children about sex, they can ensure that their children get the right information.

**Conflicts of Interest:** None

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