# Knowledge, attitudes and behaviours of adolescents in relation to STIs, pregnancy, contraceptive utilization and substance abuse in the Mhlakulo region, Eastern Cape

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# Abstract

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**Background:** Sexually transmitted infections (STIs) and HIV/AIDS are a major problem in South Africa. This, coupled with a high incidence of teenage pregnancy, alcohol and drug abuse, is of grave concern, especially its impact among the young (15–24 years) and in economically poor, rural populations. This study aimed to assess the youths' knowledge, attitudes and behaviours regarding STIs, teenage pregnancy, contraception and substance abuse.

**Methodology:** This is an interview-based, descriptive study. The sample design employed a stratified sample (using schools as strata) of young people aged 15 to 24 years in three schools in the Mhlakulo region, Eastern Cape province. From each school, a sample of learners from grades 10 to 12 was selected randomly. Questionnaires covering relevant parameters were used to interview the learners, after which the data were assimilated and analysed.

**Results:** A total of 150 learners were surveyed (86 females and 64 males). In total, 56% of them knew about STIs. About 88% of the participants learned about STIs from health care workers/nurses/doctors/clinics, the media, educators, the school and friends. Most preferred to communicate to friends (38.67%) and siblings (28%); only 15% communicated with parents. Among the sexually active, 54% reported the use of condoms; of these only 62% used them consistently. Of the participants, 7.33% had more than five sexual partners. Of the young women, 12.8% reported to have fallen pregnant with one-sixth of them wanting to become pregnant. Thirty per cent of those pregnant had to quit school, but did return subsequently. Common contraceptives used were condoms (54%) and pills (58%). Twenty-two per cent of the youths admitted to the use of recreational drugs at some time; most of these were related to alcohol (19.33%). A small fraction (1.33%) used dagga (cannabis).

**Conclusion:** There is lack of knowledge of STIs and their prevention and condom and contraceptive use among young people of this community. Sexual promiscuity and teenage pregnancy in the group is a cause for concern. Substance abuse is another important problem that requires urgent attention..

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# Introduction

Sexually transmitted infections (STIs) are a major public health concern in South Africa, with 11 million STI cases occurring annually.<sup>1</sup> They not only present a huge disease burden on the society, but also facilitate the spread of HIV.<sup>2</sup> The prevalence of STIs in South Africa is high, although STI prevalence varies substantially between sentinel populations.<sup>3</sup> A study in rural South Africa estimates that at least 9% of men and 9% of women contract STIs every year with discharge (49% –with equal numbers of men and women); ulcer only (36% men & 14% women) and pelvic inflammatory disease (18% women).<sup>4</sup> Another study in a rural area showed that approximately 25% of all women in the reproductive age group have at least one STI on any given day, of which half are asymptomatic.<sup>1</sup> Equally disturbing is the high incidence of teenage pregnancy. The proportion of adolescents who have ever been pregnant rises rapidly with age; from 2% at age 15 to 35% at age 19.<sup>5</sup> This was shown to be related to alcohol use in another study, in which women who reported an unwanted pregnancy binged more heavily than those with an intended pregnancy.<sup>6</sup>

Alcohol consumption has increased in South Africa because of decreased controls over the production, sale and ready availability of alcohol and other local cultural factors, affecting both males and females.<sup>7</sup> It is probable that this may lead to an increase in episodes of unprotected sex, which in turn may contribute to an increase in STIs and unwanted pregnancies. Teenage pregnancy makes the young mother susceptible to social ostracism, interrupted education, lack of social security, poverty and repeat pregnancies.<sup>8</sup> Youths aged 15 to 24 years form about 18.3% of the population in South Africa and school attendance among 16 to 20-year and 21 to 24-year age groups in South Africa is 71.4% and 27.3% respectively.<sup>5</sup> This study was carried out in Mhlakulo which is a rural community area (30 km from Mthatha) in the Eastern Cape with a population of about 36 000.

Learners of the 15 to 24-year age group who would form a representative sample were included in this study, with the following objectives:

- To determine the levels of STI-related knowledge and perceptions among learners of this age group.
- · To identify their sexual attitudes and behaviour.
- To determine their sources of information about STIs and their preferences related to communication regarding the topic.
- To determine their knowledge and use of contraceptives in relation to teenage pregnancy.
- To determine their knowledge and use of alcohol and recreational drugs.

## Methodology

This interview-based, descriptive study was carried out as a component of the Walter Sisulu University's Communitybased Education and Service (COBES) programme, which seeks to familiarise MBChB third-year students with community-specific health issues and initiate them into related research. Questionnaires were used in this study and were designed to cover demographics, sexual behaviours (condom use, partner number, age of sexual debut, transactional sex), teenage pregnancy and contraceptive use, alcohol and drug abuse, sexual coercion and violence, condom use, attitudes, norms and key communication practices about STIs.

The sample design employed a stratified (using schools as strata) sample of young people aged 15 to 24 years in three schools in the Mhlakulo region, Eastern Cape province. From each school a sample of learners (50 in number) from grades 10 to 12 were randomly selected, from a total of 360 learners in the three schools. The study was performed during the period of May to September 2008. Learners at the participating schools were interviewed face to face in a classroom setting and the pre-structured questionnaires were filled out. The study was also verbally explained to the participants by members of the research team. The primary analysis in this study involved responses from 150 participants.

## **Results**

## Demographics

The mean age of the sample was 18.2 years. Overall, 86 of the participants were female while 64 were male.

About 36% lived with their mothers alone and about 28% of participants lived with both parents (Figure 1). A total of 58.67% of the participants' parents were unemployed and 16% were receiving social grants (government pension funds). The average number of people staying in a one-bedroom house was six, and there were an equal number of mud houses and brick and cement houses. In about 58% of the households, the water supply was from a nearby river, with only 38% having water from a tap (municipality) and 4% using tanks.

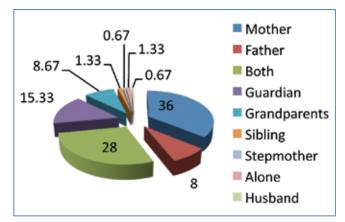


Figure 1: People living with the respondents

#### STI knowledge, communication and perceived risk

Fifty-six per cent of the youths responded that they knew STIs are diseases that are contracted during unsafe sex. There were 15.33% who did not know what STIs were and 2.16% who believed it to be 'female diseases'. About 65% of the participants had heard about HIV/AIDS specifically; and up to 37% had some vague idea about other STI syndromes like discharge and ulcers. Knowledge that STIs could be prevented was present in 56% of the participants though many of the participants were not clear on the differences between methods of contraception and STI prevention.

Most of the participants preferred to communicate with friends (38.67%) and siblings (28%) about sex (Figure 2). Only 15% talked to either parent. A total of 45.71% of the participants believed that their parents did not know about their sexual activity. However, 92% of them were concerned about what their parents might think and say about their sexual lives and 54% of the participants felt that parental disapproval of their sexual behaviour would cause them to change.

About 88% of the participants learned about STIs from health care workers/nurses/doctors/clinics, the media, educators, school (teachers, classmates or in the classroom) and friends (Table I). Only a small proportion reported having learned about these issues from their parents/guardian.

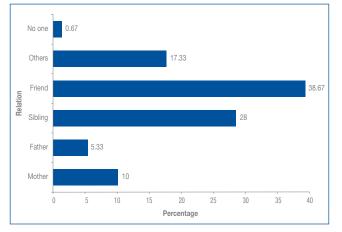


Figure 2: Preference of communication about matters related to sex

Main source of information	Frequency	Percentage
Parents	7	4.67
Health professional and clinic	54	36
Media	36	24
Educators	22	14.67
Friends	26	17.33
Never heard of them	5	3.33

### Table I: Source of information about STIs

# Levels and characteristics of sexual experience and activity

The definition of 'sex' varied among the participants. Sixty per cent thought that sexual intercourse was essential whereas the remaining thought that kissing, fondling, oral and anal sex was also included in the act. Overall, approximately 75% of the respondents reported to have had sex.. The median age of first sex among those who reported to being sexually active was 16 years. Of those who were sexually active, only 54% reported the use of condoms. Among those who reported condom use, 62% used condoms consistently. Seventy-five per cent of the sexually active girls reported really wanting their first sexual experience compared to 72% of sexually active boys.

Regarding the number of sexual partners they had, it was found that 40.67% had a single longstanding partner; 28% had had two partners; 24% had three to five partners and the remaining had more than five partners (Figure 3). Twelve per cent had sex in the last week; 38% in the last month and 30% in the last year. Among those who had sexual intercourse in the past 12 months, 30% reported that they had more than one sexual partner in the past 12 months.

### Pregnancy and contraceptive use

Of the females, 12.8% reported to have been pregnant in this study. Only one-sixth of these young women

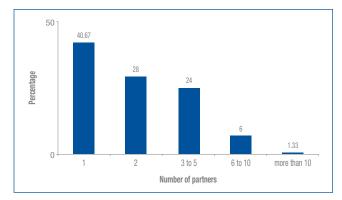


Figure 3: Number of sexual partners

wanted to be pregnant; hence most of the pregnancies were unwanted. Nevertheless, two-thirds of the females who became pregnant eventually wanted to keep their babies. Most of the pregnant females' families (85%) showed strong disapproval of the pregnancy; and almost 30% of these girls ended up quitting school, although they returned subsequently.

Regarding the participants' understanding of contraceptives, 80% connected contraceptives to the prevention of pregnancy and only 4% of them believed they could prevent STIs, including HIV; the remaining were not sure about the role of contraceptives. Types of contraceptive measures taken by participants mainly included barrier methods such as condoms (54%) and pills (58%) (Figure 4). There was a low number of girls using injectables (6%), and 16% reported not using any contraception. Some of the girls were using combinations (e.g. pills and condoms).

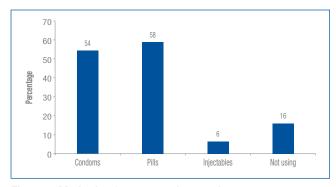


Figure 4: Methods of contraception used:

### Substance abuse

When asked about what drug abuse meant to the participants, 36% reported it to be the abuse of any substance. In addition, 20.8% believed that drugs affect the brain and about 23% believed that drugs lead to violent behaviour. The common substances of abuse known to them were alcohol (50.67%), dagga (54.67%), tobacco (48%) and cocaine (26.67%) (Figure 5).

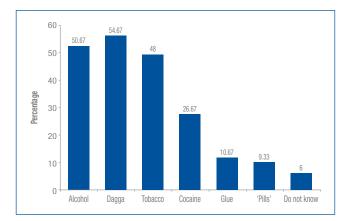


Figure 5: Knowledge of drugs

#### Table II: Use of recreational drugs

Substance	Number of participants
Nil	117 (78%)
Alcohol	29 (19.33%)
Dagga	2 (1.33%)
Tobacco	1 (0.67%)
Benzene	1 (0.67%)

Twenty-two per cent of the youths admitted to the use of recreational drugs at some time; most of these were related to drinking alcohol (19.33%). Two of them admitted to the use of dagga (Table II). Of the participants, 34.5% felt that they indulged in sexual activity and 20.7% admitted to engaging in violent behaviour following the use of drugs.

## **Discussion**

This study sought to understand STI knowledge, communication and perceived risk along with the levels of sexual activity, pregnancy, contraception and substance abuse in 15 to 24-year-old youths in the light of demographic factors such as socioeconomic status and education levels in a small rural community area of South Africa. The majority of subjects in this study came from a relatively disadvantaged socioeconomic background. More than half of the subjects in our study knew about STIs and HIV, with the major sources of information being health care workers/nurses/ doctors/clinics, the media, educators, the school (teachers, classmates or in the classroom) and friends; only a small proportion reported having learned the most about these issues from their parents. This was less than the findings in another study, in which 39% of participants agreed that parents had talked about what is right and what is wrong with regard to sexual behaviour, 56% talked about delaying sexual activity, and 58 and 62% talked about birth control and preventing STIs respectively.9 Open communication about these issues may lead to increased awareness and knowledge about STIs and may serve to reduce high-risk behaviour. That parents were a poor source of information as compared to clinics and the media in this study could

reflect the fact that more than one-quarter of those surveyed did not live with any parent. It could, however, also point to a lack of knowledge on the part of the parents themselves. This lack of knowledge could probably be addressed by greater health education for the parents as well. None of the participants believed that STIs were caused by witchcraft or evil spirits. Participants in one study considered STIs to be an agent of contamination or pollution.<sup>10</sup> The median age of sexual debut in this group was 16 years. This was slightly more than the South African (2003) figures in the adolescent group (7% of girls and 12% of boys) who had sex for the first time before they were 14 years old.<sup>11</sup>

The chances of acquiring STIs increase with the number of sexual partners. What was alarming in our study was that 6 and 1.33% of the learners had had six to ten and more than ten sexual partners respectively in their lifetimes. Overall condom usage in this study was found to be 54%; however, only 64% of these users reported consistent use. In comparison, in a study conducted in KwaZulu-Natal, South Africa, the figures for condom usage 'regularly', 'occasionally' and 'never' were 1, 58 and 41 among men and 9, 27 and 64 among women respectively.<sup>12</sup> Regular use of condoms with casual partners varied from 41.5 to 42% in a Durban study<sup>13</sup> to 59% in another study.<sup>14</sup> Reasons described for not using condoms include lack of awareness, decreased sexual pleasure, shifting responsibility to the other partner, non-availability of condoms and 'too shy' to buy them, among others.<sup>15</sup> This could be addressed by greater emphasis on health education with regard to safe sex and also by making condoms more easily and freely available.

Other than the risk of contracting HIV and STIs, unprotected sex can also result in unwanted pregnancies. The percentage of females aged 15 to 19 who were mothers or who had ever been pregnant had risen from 11.9% in 2003 to 39% (2006) in South Africa, and the percentage of women of reproductive age (15-49) who were using a modern contraceptive method was 64.7% for South Africa and 62.4% for the Eastern Cape province.11 In our study, the commonest methods of contraception included condoms and pills although 16% of the females did not use any form of contraception. Of the females, 12.8% reported pregnancy, most of which were unwanted. The females who wanted the pregnancy were aged between 21 and 24 years and admitted that they had been influenced by the fact that some other females in the community of similar age had had babies. Another South African study showed that by age 24 years, over two-thirds of young South African women reported being sexually experienced and 50% had been pregnant (many unwanted), yet only half reported using contraception.<sup>16</sup> Teenage pregnancy compromises education and future social and financial security.<sup>17</sup> In fact, studies in South Africa have shown that after financial concerns, teen pregnancy is one of the main reasons for high school dropout rates. This is supported by the results obtained from our study, which indicated that almost 30% of the participants that became pregnant had quit school temporarily, resulting in a disruption in their education, although they returned to school subsequently.

Young people are more likely to engage in high-risk behaviour when under the influence of alcohol and drugs. According to the first South African National Youth Risk Behaviour Survey 2002, in the Eastern Cape province, 16.7% agreed that they bought or were given illegal drugs on school premises, 9% used alcohol on school premises and 4% used dagga on school premises.<sup>18</sup> In our study too, alcohol and dagga were the leading types of substances used by the youths and they had different ideas about the effects of drugs on the human body. They admitted that the use of drugs was more prevalent during holiday or ceremonial occasions (traditional and others). Alcohol consumption might directly cause an increased risk of STIs due to its effects on behaviour and sexual arousal or by adverse effects on the immune system.<sup>19</sup> In one study, substance abuse was significantly associated with having multiple sexual partners.<sup>20</sup> In this study, some of the youths who used recreational drugs admitted to increased sexual activity and violent behaviour following their use. Therefore, substance abuse also puts these youths at a greater risk of contracting STIs, including HIV. There exists a problem of drug abuse in the youth, as evident from the results obtained in our study, and if no remedial intervention is brought about, they are at serious risk of jeopardising their health and future life.

# Conclusion

There is lack of knowledge of STIs and their prevention and condom and contraceptive use among learners of this community. Sexual promiscuity and teenage pregnancy are also issues of concern. Substance abuse is another important problem that requires urgent attention. These can be addressed by targeted health education for this group in the community.

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Authors' contribution: All authors contributed equally to this work and names are in alphabetical order

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