SEXUAL BEHAVIOUR OF GRADE ELEVEN STUDENTS IN COFIMVABA, EASTERN CAPE.

By

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DEDICATION

This work is dedicated to my wife, Theresa and my children, Ernest, Florence, Emmanuel and Annette.

DECLARATION

I, Kofi Antwi-Anyimadu, hereby declare that this dissertation is my original work, and that no part of it has been or is being submitted for another degree at this or any other university.

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ABSTRACT

This study deals with sexual behaviour of adolescents in a rural area of South Africa.

OBJECTIVES: The primary objective is to explore the sexual behaviour of rural adolescents, specifically with regard to the first time they engage in sexual intercourse, the number of sexual partners, their use of contraceptives and their knowledge of HIV/AIDS and how this influences their sexual activity. This study also examines how alcohol drinking, cigarette smoking, drug and substance use affect adolescent sexuality. Lastly, it explores the influence of religion and family connectedness on adolescent sexuality.

DESIGN: Cross-sectional descriptive and analytic study, using self-administered questionnaires. **SETTING:** Six randomly selected high schools in rural Cofimvaba District in the Eastern Cape Province of South Africa were used for the study.

SUBJECTS: Grade Eleven students of both sexes aged between 12 and 21 years were used for the study. **MAIN OUTCOME MEASURES:** Areas assessed include the age of first intercourse, the number of sexual partners, the use of contraceptives (especially of condoms), HIV/AIDS knowledge, alcohol and drug use, religious affiliation and family connectedness.

RESULTS: The results of the study can be summarised as follows: 75% of males and 61% of females were sexually active, with 45% (males) and 15%

(females) having 2 or more sexual partners. The age of first intercourse was 14 years and 16 years for males and females respectively, indicating that males engage in sexual intercourse and indulge in risky sexual activity at an earlier age than females. With regard to contraceptive use, more females (55.6%) used condoms than males (46.5%). The main source of HIV/AIDS knowledge among the respondents was health workers (68%), radio and television (67.7%), teachers (41%), friends (37.6), partners (24%) and parents (5.6%). General HIV/AIDS knowledge was poor among the respondents, although performance at some individual questions was good. 95% of males and 85% females knew that AIDS was a deadly disease. Seventy-six percent (76%) of males and 83% of females also knew that condoms could prevent HIV/AIDS. however, only 37% of males and 36% of females knew that there is at present no cure for AIDS. Some students (53% of males and 43% of females) stated that even healthy looking people could be HIV positive. Interestingly, it was also discovered that, even if males had a good knowledge of HIV/AIDS, this did not affect their attitude or sexual behaviour; conversely, in females, a good knowledge of HIV/AIDS did have a positive influence on their sexuality. Alcohol intake is more rampant among males than females. Smoking, too, is more common among males than females, but dagga use and glue sniffing are quite low in both sexes. Although alcohol intake appears to have no influence on female sexuality, it does impact negatively on male sexuality. In males, cigarette smoking also contributes to unsafe sexual practice. Regular church attendance had no effect on male sexuality, although it did seem to have a slight positive effect on female sexual activity. Females are also more connected to

their parents than their male counterparts. Good family connectedness has no effect on male sexual attitude, although it does slightly influence females to engage in safer sex practices.

CONCLUSION: Adolescents in this rural area of South Africa are definitely sexually active. Moreover, they indulge in risky sex (with many of the respondents admitting that they had several sexual partners, and rarely used condoms) and tend to have a limited knowledge of HIV/AIDS. Alcohol intake and smoking among the boys contributes to them engaging in unsafe sexual practices. Parents are not particularly helpful as far as disseminating knowledge of HIV/AIDS to their children is concerned. Religiosity and good family connectedness make girls, but not boys, practise safer sex.

To reduce the effects of the HIV/AIDS pandemic on rural adolescents, more effort should be put into the education of the rural youth in the practice of safer sex. In this regard, parents should be encouraged to talk to their children about sex.

Effective programmes are clearly needed in the area to move adolescents toward safer sexual practises.

CHAPTER 1

INTRODUCTION

Sub-Saharan Africa has the highest incidence of HIV/AIDS in the world, with an estimated 85% of HIV/AIDS deaths occurring in this region of the world (World Bank, 2000). Transmission of the HIV/AIDS virus in sub-Saharan Africa occurs mainly by heterosexual means. During the past decade, more than 11 million adults and 1 million children have been infected with the HIV virus in Africa (World Bank 1996). Forty-four percent of the total South African population is under 20 years of age. The adolescent age group (age 10-19 years), which is characterised by curiosity, experimentation and peer group influence, is particularly vulnerable to the spread of HIV/AIDS. Considering the fact that there is presently no cure for HIV/AIDS, it is clear that close attention must be paid to this vulnerable group to help prevent a catastrophe. Since sexual behaviour and activity determine the spread of HIV infection, knowledge of the sexual behaviour of the adolescents must be established so that it can be modified where necessary to contain the spread of HIV/AIDS.

Many factors influence the sexual behaviour of adolescents. Social vices, such as the use of alcohol, cigarettes and drugs like dagga, have been known to encourage unsafe sexual practices such as having sex without using a condom and having multiple sexual partners (Fergusson and Lynskey, 1996). Adolescents who use these substances are therefore more likely to practise unsafe sex (Brook et al, 2002). A critical look at the impact of alcohol and drugs on the adolescents in this study will contribute to developing suitable

interventions to reduce the extent of unsafe sexual practice among this age group.

Another key issue in sexual behaviour modification is religious affiliation. Different views have been expressed on the effect of religion on adolescent sexual behaviour, and thus this study assesses the impact of religion on the sexual behaviour of adolescents in this particular geographical area. Family bonding, expressed as family connectedness, is another issue examined herein. In that regard, the study seeks to explore if adolescents who have better relationships with their parents are more likely to practise safer sex.

Forty-six percent of the South African youth are located in the rural areas (SA Population Census, 1999). Much can therefore be achieved by going into the rural areas of South Africa to study the sexual behaviour of the youth there. Nonetheless, very few studies have been done as far on this topic in the rural areas is concerned. Eaton and Flisher's 2003 review of research literature involving the extent of HIV/AIDS awareness among the South African youth points to a paucity of studies involving the rural youth. They show that only 18% of studies have been conducted in non-urban areas. Since the rural areas of South Africa have been neglected developmentally in the past, the social lifestyle here is likely to be different from that of the more advantaged urban areas. Specifically, they lack many amenities, such as infrastructure and communication linkage and thus access to the vehicles of HIV/AIDS education is limited as well. This study has been done in the rural district of Cofimvaba in the Eastern Cape Province of South Africa, which is among the least serviced areas of the Eastern Cape Province. Poverty is rife since unemployment is very

high. From the 2002 South Africa Population Census, it seems that 80% of the population of the Eastern Cape is unemployed. Most of the men here are migrant labourers at the mines in Gauteng Province. The prevalence of illiteracy is among the highest in South Africa. Accessibility of health services, too, is not very good, with few clinics being scattered around the province and being manned by inadequate personnel, in terms of numbers and training. Given that controlling the spread of HIV/AIDS is of the utmost concern worldwide for the survival of mankind, all efforts should be made to educate all people on this topic, – hence this research in the Cofimvaba district. Most studies in South Africa on youth sexuality vis-à-vis HIV/AIDS control have been conducted in the urban areas, with little attention being paid to these disadvantaged areas. This research tries to fill this wide gap.

1.1 AIM

The primary aim of this study is to document selected aspects of the sexual behaviour of Grade 11 (Standard 9) students in the Cofimvaba district in the Eastern Cape Province of South Africa.

1.2 OBJECTIVES

The following objectives provide the focus of this study:

1. To describe the sexual behaviour of Grade 11 students in the Cofimvaba district.
2. To document the levels of knowledge of these students regarding HIV/AIDS.

3. To determine the relationship between risky sexual behaviour and other high-risk behaviours e.g. smoking, alcohol drinking and drug use.
4. To establish the link between religion and sexual behaviour.
5. To ascertain the association between family connectedness and sexual behaviour.

1.3 DEFINITIONS

ADOLESCENCE

The period in life when social, psychological and cognitive maturation occurs. It is a complex period encompassing the transition from childhood to adulthood. The World Health Organisation fixes it as between ten and nineteen years (Friedman, 1993).

AIDS

An acronym: Acquired Immune Deficiency Syndrome. It is a collection of diseases that attacks the body after the HIV virus has destroyed the immune system of the body.

HIV

An acronym, referring to the Human Immunodeficiency Virus, which attacks and destroys the immune system in humans, rendering the body susceptible to opportunistic infections.

SAFE SEX

In this context, practising safe sex means having one or no sexual partner within a year, or having used a condom during the last sexual intercourse.

UNSAFE SEX

Refers to having two or more sexual partners in the last year or not using a condom during the last sexual intercourse.

RISK BEHAVIOUR

Indulging in activities, which are detrimental to the health of the individual. In this context, it means indulging in sexual intercourse without using a condom, having multiple sexual partners, actively taking alcohol, cigarette smoking, or substance (dagga and glue) use.

SUBSTANCE ABUSE

Using dagga (marijuana) or sniffing glue.

CHAPTER 2

LITERATURE REVIEW

2.1 ADOLESCENT SEXUAL BEHAVIOUR

Many researchers have worked on adolescent sexuality, but most of their studies have looked exclusively at urban areas. Past studies involving adolescent sexual behaviour have focused on the age of first intercourse, the number of sexual partners and contraceptive use (especially condoms).

Adolescents around the globe differ in the age at which they start engaging in sexual activity. In the United States , Jacobson et al. (1994) reported that proportionally more adolescents are having sexual intercourse at a younger age. This also means that they are more at risk of sexually related problems like sexually transmitted diseases, unplanned pregnancies, having more life-time sexual partners and poorer condom usage (Jacobson et al., 1994).

The onset of sexual activities is also dependent on gender. It is a well-known fact that boys generally start to participate in sexual activities at an earlier age than girls. The effects of this on the health of adolescents also differ widely. Durbin et al (1993) in their work among inner-city junior high school students stated that early initiation into sexual activities is a risk factor, as students who started sexual activities earlier were found to have multiple partners. This finding was confirmed by Santelli et al. (1998), who also worked among urban adolescents in the United States. Similar work by Greenberg et al (1992) in the United States showed that girls who became sexually active between the ages of 10 and 14 years were almost 4 times more likely to report

having had 5 or more sexual partners in the past year. They were also twice as likely to report a history of sexually transmitted diseases within the last 5 years, compared with girls who only became sexually active when they were 17 years of age or older.

In another urban area study in the United States, Coker et al. (1994) found that most of the adolescents studied started sexual activity as early as 13 years old. They were also found to be more likely to have sexually transmitted diseases, less likely to use condoms in their first intercourse, more likely to indulge in alcohol and other drug use and more likely to fall pregnant than late starters. There is also evidence that early initiation of sexual activity is not only associated with high-risk sexual behaviour, but also with other high-risk health behaviours, like alcohol and drug use. Using the Youth Risk Behaviour Survey of the Centres for Disease Control and Prevention to ascertain the number of sexual partners and health risk behaviour, Valois et al. (1999) studied students from 56 public high schools. They discovered that adolescents who had more sexual partners also indulged in other risky behaviours, like alcohol intake, drug use, carrying of weapons and violent physical activities, all of which made them more prone to contracting sexually transmitted diseases including HIV/AIDS. Comparing boys to girls, this study also ascertained that males were 6.8 times more likely than females to have had their first sexual intercourse when younger than 13 years, which made them more prone to the various sexual risk behaviours.

On the African continent, the rural youth in Kenya feel that to conform to prescriptions of male prowess they should have sexual experience early and to

have many sexual partners (Nzioka, 2001). They regard it as a mark of masculinity, if their girlfriends fall pregnant and/ or if they have a sexually transmitted disease. Similar perceptions were found among Zambian rural youth (Nubani, 2001). These boys were also of the view that manhood encourages multiple partners and that condom use affects male potency negatively.

In South Africa, the story is no different. For instance, among the urban Grade 8 and Grade 11 students in Cape Town, Flisher et al (2003) showed that 25% had had their sexual debut by the age of 16 years. Males, as usual, commenced sexual intercourse earlier than females. However, better than their contemporaries overseas, most of them had only one sexual partner and 64.5% used contraceptives, of which 67.7% were condoms. This shows that, although some South African youth do start engaging in sexual intercourse at an early age, a good percentage of them are conscious about safety. However, this high level of condom use was not reflected in other studies on South Africa. The South African Demographic and Health Survey of the Department of Health in 1998 revealed that only 25% of teenagers used contraceptives and only 20% had used condoms during their last sexual intercourse. Confirming this, Eaton et al (2003), reviewing papers presented by other researchers in South Africa on unsafe sexual behaviour in the youth dating from 1990 to 2000, found that most of the work showed that 50 – 60% of the sexually active youth never used condoms. Eaton et al. also determined that 50% of adolescents became sexually active by the age of 16 years, and, with regard to gender, 10-25% of the males and only 1-5% of the females had had more than four sexual partners in the past year. Eaton et al's work was done in urban South African communities.

However, other projects have been based in the rural communities. In South Africa and specifically in rural Transkei, Buga et al. (1996) for instance also studied the sexual behaviour of adolescents. With the huge difference in the socio-economic trends between rural and urban areas, it is realistic to expect an equally big difference in sexual behaviour. This study found that the age of sexual debut was at 13.4 years in boys and 14.8 years in girls. This is far earlier than among their urban counterparts in Cape Town and elsewhere.

A surprise finding in this rural area was that as many as 62.1% of the sexually active boys claimed to use condoms and to enjoy using them, while only 19% of the girls used condoms. Despite this finding, twice as many boys as girls reported a history of sexually transmitted disease. The boys had also had more sexual partners than girls (3.27 versus 1.35). Pregnancy was also rife (31.3%) among the girls. Early sexual debut can be associated with increased risky sexual activity. The perception of sexuality among the African rural youth leaves much to be desired. Male peer ideas of masculinity which are wrongly evaluated by means of the number of sexual partners, indulgence in alcohol, cigarette smoking and drug use should be condemned in the strongest terms to save our youth from catastrophe.

2.2 KNOWLEDGE ABOUT HIV/AIDS

Since the emergence of HIV/AIDS, many countries have adopted education as the primary means of combating the pandemic. With prevention as the only means of curtailing the spread of HIV/AIDS, it is also of great importance to

find out how much adolescents know about the disease and how this knowledge is helping them to combat it in the practical sense.

From other parts of the globe and especially in the technologically more advanced countries, knowledge of the disease is far higher than in the so-called Third World. Work by Elkonin (1993) in South Africa, revealed that 100% of youth studied knew about HIV/AIDS and that it is spread through sexual intercourse. Having multiple partners and a lack of condom use is also widely known among the youth as spreading HIV/AIDS (Govender et al., 1992). On the international scene, there were wide differences in knowledge about HIV/AIDS between rural and urban adolescents. For example, Sodhi and Mehta (1997) found that among Indian girls in a senior secondary school 67.2% of urban and 63.4% of rural girls knew AIDS to be infectious. This work suggests that both the urban and rural youth have the same degree of knowledge as far as HIV/AIDS being infectious is concerned.

The actual vehicle used to impart knowledge about the disease is also of great importance. The communicational infrastructure across a country and the frequency of HIV/AIDS knowledge coverage by the media are major contributory factors in this regard. From the work by Sodhi and Mehta (1997) in India, it appears that the youth in the urban and rural areas studied acquired their knowledge from newspaper articles (56.9% and 21%), television (62% and 50%), magazine articles (34.5% and 9.6%), conversations with friends (25% and 11.5%) and discussions with health care professionals (13.8% and 1.9%). These percentages reveal that the urban youth had the upper hand as far as communicational links are concerned.

The next most important aspect is how knowledge about HIV/AIDS actually influences adolescents' sexual behaviour. Differing results are obtained in this regard; while some researchers find a positive change of attitude toward safer sex with increasing HIV/AIDS knowledge, others report no effect at all.

Reviewing 250 studies on sex education programmes, Kirby (1999) concluded that programmes that teach adolescents how to avoid pregnancy and HIV/AIDS infections do not increase sexual activity but rather decrease it. In their study of high school students in Athens (Greece), Merakou et al (2002) concluded that after 15 years of prevention activities among young people, students had a satisfactory level of knowledge and had adopted relatively safe sexual behaviour. Studying sexual behaviour and associated variables, Jacobson et al (1994) found that those who had received HIV/AIDS education were less likely to have multiple partners. These are fairly positive findings. On the other hand, Zimmer and Thurston (1998), working among adolescent nursing students in Mount Royal College, Alberta, Canada, found that, although the students were highly knowledgeable about HIV/AIDS, as many as 15% to 25% were indulging in high-risk sexual activities. Similar results were obtained by Facente (2001) in a study of adolescents in a US nursing school. He stated that 80% of adolescents who reported engaging in risky behaviour such as having multiple sexual partners or having sex without a condom, were very knowledgeable about HIV/AIDS transmission, but felt they were not personally at risk.

On the African continent, where the HIV/AIDS incidence is highest, a large amount of research on HIV/AIDS knowledge and its effect on adolescent sexual behaviour has been done. In the Niger state of Nigeria, Sunmola et al

(2003) studied adolescents aged between 11-25 years, and found 91.9% to have heard of HIV/AIDS. Despite this knowledge, 50% of the sexually active respondents had more than one sexual partner, and only 12.5% used contraceptive methods. Another study of adolescents in a female high school at Onitsha in Nigeria by Obiechina et al (2002) showed that general awareness of HIV/AIDS was high (93%). With regard to the prevention of HIV/AIDS in this study, 67.4% stated mutual fidelity and 54.8% condom use. The results of this work are very encouraging.

Notwithstanding the above findings, Akande (1994), studying university students in Zimbabwe and Nigeria, noted that, despite being well informed about HIV/AIDS, only 24,8% of the students had used condoms during the last two months whereas 29.4% had never used condoms. Assessing data from the 1994 Cote d'Ivoire Demographic and Health Survey, Zellner (2003) reported that the level of AIDS knowledge has no correlation with condom use. From Ethiopia, Ismail et al. (1995) reported from a survey of rural males that 92% had heard about HIV/AIDS but 89.9% did not know anything about condoms. From Kenya, Pattullo et al. (1994), evaluating knowledge, attitudes and sexual behaviour with respect to HIV/AIDS among secondary school students, found that knowledge was quite low, yet 71.3% of females and 25.2% of males were virgins. Forty-one (41%) of males and 7.3% of females had multiple sexual partners and, most importantly, 60% of the students denied ever using a condom. Kapiga et al.(1991), studying randomly selected students from both urban and rural areas in Tanzania, reported that 99% had heard about HIV/AIDS. They also found HIV/AIDS knowledge to increase with age and

that those in the urban areas were more knowledgeable than those from the rural areas. Again, most importantly, only 5% had ever used condoms. From their work among Rwandan women, Lindan et al.. (1991) concluded that, although they were highly knowledge about HIV/AIDS transmission, only 16% reported taking action to avoid AIDS in the previous year.

With regard to the vehicle of knowledge transmission, Fabiyi (1993) noted in his study of undergraduates in a Nigerian university that most of the students' knowledge of HIV had been acquired from newspapers and magazines. However, Obiechina et al.. (2002) also in Nigeria, found that the most common source of information among adolescent girls was through school (80.6%), followed by television (80.1%), then radio (73.1%), with health workers accounting for 64.1%. From Ethiopia, Ismail et al. (1995) again reports that the most common sources of HIV/AIDS information were close friends, health workers, schoolteachers and the radio, in that order.

In South Africa, research studies on HIV/AIDS awareness and its effect on attitude change are common. Reported percentages of HIV knowledge in South Africa range from 85% (Richter and Swart-Kruger, (1995) to 100% (Strebel and Perkel, 1991; Varga and Makubalo, 1996). These studies were, however, done in urban and thus privileged areas. Other researchers found that levels of knowledge differed across the various topics on HIV. Eaton and Flisher's (2000) review of research literature involving HIV/AIDS knowledge of South Africans aged 14-35 showed that, whilst most of the participants knew AIDS was deadly, they were less knowledgeable about HIV and its transmission. Van Aswegen (1995) reported that 84% of the youth surveyed

agreed that AIDS is spread through sexual intercourse. It is also well known among the youth that the correct use of condoms can prevent HIV transmission (Karim et al., 2003; Elkonin, 1993; Matthews et al. 1990 and Van Wijk, 1994). However, Du Plessis et al. (1993) and Van Dyk (1994) discovered that Black and Indian respondents had lower levels of AIDS-related knowledge than other groups interviewed in South Africa. Varga and Makubalo (1996) found equal knowledge (rural – urban) in their study.

With regard to the impact of HIV/AIDS knowledge on the sexual attitude of adolescents in South Africa, researchers like Blecher et al. (1995), Van Dyk (1994) and Perkel (1991) all found that there was no correlation between them. Others, like Booysen and Summerton (1998) who studied women aged 15-49 years drawn from the 1998 South African Demographic and Health Survey (SADHS), found that South Africans in general are aware of HIV/AIDS, yet do not translate this awareness into behavioural change. Interviewing street children aged between 11-18 years in Johannesburg, Soweto and Pretoria, Richter and Swart-Kruger (1996) noted that all but two participants of the study had heard of AIDS and knew that it was incurable and sexually transmitted. Ninety-three percent endorsed the idea that condoms could prevent infections, but all were overwhelmingly negative about condom use. Thus, we can conclude that knowledge per se does not really alter attitudes. Moreover, most of the studies on adolescents' knowledge of HIV/AIDS and their attitude toward sex have been done in the urban areas.

2.3 ALCOHOL, SMOKING AND SUBSTANCE USE

Other factors influencing sexual behaviour in adolescents include alcohol, cigarette smoking and drug use. Peer pressure tends to introduce adolescents to these habits with their attendant serious consequences. It has been shown that adolescents starting at an early age to indulge in alcohol, cigarette smoking and drug use, also participate in risky sexual practices like early sexual intercourse, having multiple partners and having sex without using condoms (Biglan et al., 1990).

On the international scene, Duncan et al (1999) stated that the combination of marijuana with cigarettes and alcohol was significantly related to risky sexual behaviour. Biglan et al. (1990) reported similar findings, underscoring the fact that those indulging in unsafe sexual practices also consume alcohol, smoke cigarettes and use drugs. In their work on the risk of premature sexual activity in high school populations of Seventh Day Adventists in North America, Weinbender and Rossignol (1996) concluded that a wide variety of behaviours were associated with premature sexual activities including the use of drugs and alcohol. In their words, adolescents who use alcohol, cigarettes and hard drugs like cocaine, also practise premarital sex. Many other researchers came to similar conclusions. For example, work by Brook et al (2002) on "The Longitudinal Relationship between drug use and risky sexual behaviours among Colombian Adolescents" found that adolescents reporting higher levels of drug use also had more sexual partners and participated more frequently in unprotected sex. Boyer et al (2000) depicted one important consequence of drug use by adolescents, namely unprotected sexual activity.

Their work showed that adolescents using marijuana 1-2 times or more per week are more likely to have sexually transmitted diseases at screening. A similar relationship between alcohol use and risky sexual behaviour was shown by Graves (1995), who found from a national survey that respondents who had multiple sexual partners and used condoms less frequently, are also among the men who consumed five or more drinks at a sitting, Dunn et al. (1994) binge drinking is another important factor in respect of risky sexual practices. They thus stated that: "Binge drinking had stronger relations with sexual activity variables (sexual initiation, multiple sex partners, condom use) than lifetime use of alcohol". Fergusson and Lynskey (1996) in New Zealand found that adolescents who reported misusing alcohol had odds of early onset sexual activity, multiple partners and unprotected intercourse that were 6.1 to 23 times of those who did not misuse alcohol. Few works that compare the unsafe sexual practices and alcohol intake, cigarette smoking and drug use of urban adolescents with their rural counterparts can be found. One such work is that of Geckova et al. (2002) who, while studying health risk behaviour among Slovak adolescents, concluded that adolescents of lower socio-economic groups depicted a more risky behaviour than their higher socio-economic counterparts.

On the South African scene, the use of alcohol, cigarette smoking and drug use and their effect on adolescents is not much different to that of the international scene. The South African Community Epidemiology Network on Drug Use (SACENDU) project (Parry et al., 2002) has done a large amount of research on alcohol, cigarette and drug use among adolescents in South Africa. This project provides community–level public health surveillance on alcohol

misuse and its negative consequences in South Africa. Data was collected biannually from four sources over four years. Places visited included psychiatric hospitals, trauma units, mortuaries, schools and police facilities. It was found from this project that alcohol remains the primary substance of abuse. High numbers of trauma unit patients tested positive for alcohol. Forty-three percent (43%) of all trauma injuries in Durban were due to alcohol abuse. Even more strikingly, 91.8% of trauma patients from Port Elizabeth tested positive for alcohol. Alcohol abuse was also rampant in schools with 53% and 36.5% of male students in Durban and Cape Town respectively showing harmful drinking patterns (Parry et al., 2002).

Apart from SACENDU, other works on alcohol abuse and its consequences include that of Rocha-Silva et al (1996). Working among South African black youth aged 10-21 years, they reported that 34% of them had used alcohol in the previous 12 months while 6% had used cannabis. Those that had used cannabis were living in the urban areas. Rocha-Silva (1988) also found that, although South Africans in general evaluate drunkenness negatively, some regard drunkenness off duty as normal. Adolescents of parents in this category consequently see nothing wrong with alcohol intake, hence promoting one of the variables that enhance risky sexual behaviour. Comparing the role of gender in the use of alcohol in South Africa, there appears to be a higher incidence of alcohol use among males than females (Rocha-Silva et al., 1996; Flisher et al., 1993). It is also evident that the proportion of male students taking alcohol increases with an increase in grade (or standard), while in females it remains relatively constant (Flisher et al., 1993).

In addition to alcohol abuse, cigarette smoking and drugs like cannabis and glue sniffing and, to some extent cocaine, also feature prominently in the South African markets and among adolescents. From the work by Rocha-Silva et al. (1996) in South Africa, it seems that adolescents living in the metropolitan areas use harder drugs than do their counterparts in the rural areas. This may be due to accessibility since harder drugs may be more commonly available in the markets of cities than in the rural areas. This contrasts sharply with work done by Geckova et al. in Slovakia (2002), who found that adolescents in the rural area indulged in more risky behaviours than their urban counterparts. Levine and Coupey (2003), seeking to determine if urban youth are at a greater risk of engaging in risk behaviours than rural youth, analysed data on substance use and sexual risk behaviours from the national school-based Youth Risk Behaviour Survey conducted in 1999. They concluded that urban status had little if any association with the youth engaging in substance use and high-risk sexual behaviours. Does cigarette smoking make adolescents susceptible to unsafe sexual practices or do adolescents indulging in unsafe sexual practice smoke a lot? McKenzie et al. (1998) examined tobacco use and other health risk behaviour interventions in the context of an urban sexually transmitted diseases (STD) clinic. They concluded that cigarette smoking and other health risk behaviours are more prevalent among adolescents in an STD clinic than among adolescents in a community health centre. Other researchers established that cigarette smoking among adolescents does not occur in isolation, but in conjunction with other risky behaviours. Escobedo et al (1997) in the United States reported that dagga (marijuana) use, binge drinking, having multiple

sexual partners and fighting all correlate with cigarette smoking among adolescents. With this international research in mind, the difficult question is which vice precedes the others. In much of the research, it has been shown that drug use promotes risky sexual activities. Brook et al. (2002), studying Colombian adolescents, noted that those who reported higher levels of drug use also had more sexual partners and engaged in unprotected sex more often.

In South Africa, Flisher et al. (2003) also revealed that, among high school students of all races in Cape Town, a mere 8% had used cannabis. This suggests that, in general, South African youth do not use hard drugs profoundly. Flisher et al further explained that the regular smokers and users of cannabis do practise unsafe sex. This finding is similar to those of the international researchers. The paucity of work on drug and sexual behaviour of adolescents in the rural areas of South Africa is clearly evident.

2.4 RELIGION

The next topic on which many researchers differ is the effect of religion on adolescent sexual behaviour. Religious activity is one of the variables believed to be correlated with sexual behaviour. However, although some findings (Mahoney, 1980; Woodroof, 1985) show that attachment to religion does indeed promote safer sex practices, others (Dunne et al., 1994) show that religious affiliation has no such effect. Strictly speaking, if people were to follow their religious teachings, there should be a positive effect of religion on sexual activity. Christian and Hindu teachings strongly oppose pre-marital sex and consider sex to be restricted to the corridors of marriage. The Islamic religion

also considers HIV/AIDS to be a self-inflicted disease caused by promiscuity and the breakdown of morals (Naidu, 1997). Paul et al. (2000) found that in their group of young people aged 21 years, persistent involvement in religious activities was a significant promoter of sexual abstinence in both sexes. On similar lines, Mahoney (1980), conducting a study measuring the number and variety of sexual behaviours among adolescents concluded that very religious adolescents were less likely to participate in a wide variety of sexual behaviours. Wooddruff (1985), too, concluded that religiously active adolescents have the lowest levels of premarital sexual activity. Holder et al. (2000) in their study to determine the association between spirituality and voluntary sexual activity noted that adolescents with high spiritual connectedness, particularly interconnectedness among spiritual friends, are less likely to indulge in voluntary sexual activity. Miller and Gur (2002) also found that sexual responsibility was positively associated with personal devotion and frequent attendance at religious activities. Personal devotion was also associated with fewer sexual partners.

Does the positive effect of religion on sexuality differ with gender? Paulson et al. (1998) found that women with strong religious beliefs consumed less alcohol and were less likely to engage in risky sexual behaviour than those with weaker religious beliefs. In contrast, though, men with strong and less strong religious beliefs did not differ in their sexual activities.

In the National Longitudinal Survey of Adolescents' Health (1997) in the United States, it was made evident that adolescents who stated that religion and prayer were important to them were less likely to use unhealthy substances or to

indulge in premarital sex. Adolescents who attend church services do so for a number of reasons. Some attend because their parents or friends want them to or because it is obligatory for those in boarding schools to do so. Others do so out of commitment to the religious beliefs (Jensen et al., 1990). Those who attend out of commitment are included in the group in which church attendance has a positive influence on their sexual activity.

Notwithstanding the above findings, other studies have found that religious affiliation and activity does not have a positive influence on sexual behaviour. Daughtery and Burger (1984) found that church activity was not related to sexual attitude or behaviour in any way. In other words, the attitudes of respondents toward sex did not appear to change, no matter how often they attended religious activities. Sacks et al. (1984) agreed that the total effect of religion on sexual behaviour was minimal. Other studies by Dunne et al. (1994) clearly demonstrated no correlation between religion and the number of sexual partners and condom use.

Little works has been done in Africa and less still in the rural areas with regard to the influence of religion on adolescent sexual behaviour. The reason for this is not really known. What little has been done includes work done in Ghana where religious activity is widespread. Takyi (2003), for example, explored the interrelationship between religion and AIDS behaviour in Ghana, and concluded, that, although a woman's knowledge of HIV/AIDS is associated with her religious affiliation, her religious affiliation has no effect on her protective behaviour especially as far as condom use is concerned. Nicholas and Durrheim (1995) did extensive work on the influence of religion on the

sexuality of black first year students in South Africa. Using a structured questionnaire, consenting students rated themselves among other things on scales of religious activity, attitudes toward homosexuality and interfamilial communication about contraception. It was found that a negative attitude towards homosexuality was significantly associated with high religious commitment and that such commitment diminished the propensity to engage in sexual intercourse. This tended to delay the age of onset of sexual intercourse. This shows that religious youth in Africa are more likely to postpone sexual activity and to have fewer partners.

2.5 FAMILY CONNECTEDNESS

The probe into adolescents' sexuality is not complete without determining the effect of family connectedness. It is well known that children who are more attached to and have close relationships with their parents indulge in less sexual activities. Such attachment to parents is usually seen as an important means through which education on safer sex can be taught. To some extent, this assertion is true, but not always , as some parents regard it as a taboo to talk to their children about sex. This is even more so in Africa cultures. Researchers in the field of family connectedness and its association with adolescent sexuality in the international area include Resnick et al. (1997), who, in their cross-sectional analysis of interview data from the National Longitudinal Study of Adolescent Health in United States of America pointed out that parent-family connectedness gives effective protection against every health risk behaviour. This positive view is held by others, too, such as Jessor et al. (1998) and Kirby

(1999). Strong family ties are seen as a means of delaying an adolescent's first sexual intercourse, which is in turn a means of protecting them from sexual complications, such as pregnancy and sexually transmitted diseases, including HIV/AIDS. This view was confirmed by a National Longitudinal Study of Adolescents' Health in the United States in 2002. Sieving et al. (2000) had a closer look at the family connectedness of 12,105 students from grade 7 through to 12. They concluded that perceived maternal disapproval of sexual intercourse, along with mother-child relationships characterised by high levels of warmth and closeness, might be an important protective factor delaying adolescents' first sexual intercourse.

Another area where family connectedness is known to exert a positive influence is drug abuse in adolescents. This became evident from the largest survey of adolescents in the United States, The National Longitudinal Survey of Adolescents' Health in 1997. This survey indicated that a feeling of personal connectedness to family invariably protects young people against cigarette smoking, alcohol abuse, marijuana use, violence and early sexual activity. Maternal monitoring as a positive influence on adolescents' risk behaviour was also revealed by DiClemente et al. (2001). In their examination of the influence of parental monitoring on a spectrum of adolescent health-compromising behaviours, they found that those who received less parental monitoring were more likely to test positive for a sexually transmitted disease, to report not using a condom at last sexual intercourse or to have multiple sexual partners. The positive influence of family connectedness is, however, sometimes gender sensitive. Huerta-Franco et al. (1996) came up with the findings that family

connectedness had a greater influence on female adolescent sexuality than on male adolescents.

On the African continent, Slap et al (2003) concluded that the level of connection experienced by Nigerian adolescents in secondary school towards their parents is associated with a lesser likelihood to participate in sexual activity. Similar work among rural youth in Niger by Odimegwu et al. (2002) showed that adolescents who discussed discussed family life issues with their parents were less likely to be sexually active than those whose parents had never discussed family issues. In contrast, though, Adu-Mireku (2003) in his work on HIV/AIDS and sexual activity in Ghanaian adolescents reports that student-family communication about HIV was not in fact associated with sexual activity. Nonetheless, his work did show that adolescents whose families communicated with them about HIV/AIDS tended to use condoms more regularly than their counterparts. It can thus be said that the effect of religious affiliation and commitment on sexual behaviour in Africa is the same as elsewhere in the world.

CHAPTER 3

METHODOLOGY

3.1 STUDY DESIGN

This study is a cross-sectional descriptive study with an analytic component.

3.2 STUDY POPULATION

The target group consists of all Grade 11 students in the Cofimvaba district of the Eastern Cape . The schools used in the survey were found in numerous locations scattered around the small town of Cofimvaba. Access to these schools was by gravel roads. Only one school had access to electricity and treated water. The study population is therefore exclusively located in a rural environment.

Seventy-five percent (75%) of the youth in the district attend school, and thus this population can be regarded as being representative of the adolescents in the district. Grade 11 was chosen because most of the students are of the age group of 12-20 years which falls approximately within the World Health Organisation's adolescent age group of 10-19 years. There are 1,434 Grade 11 students in the 13 high schools in the Cofimvaba district. This number represents about 10% of the 14-20 year age group in the district (1999 SA Population census). It is thus a good representation of adolescents in the schools, as well as in the district as a whole.

3.3 SAMPLING STRATEGY

As 1,434 students are a large number to deal with adequately and given the available resources, 500 students were randomly chosen out of these for the study. It was found that there were on average 100 students in each of the Grade 11 classes, so 5 schools were randomly selected to participate in the study. The names of all the schools were written on sheets of paper and put in a box. A colleague was asked to choose 5 of the sheets after reshuffling them, and the chosen 5 schools were used for the study.

3.4 INSTRUMENT

Self-administered open-ended and closed-ended questionnaires were prepared for the participants (Appendix 1). These questionnaires were in both English and isiXhosa, having been first written in English and then translated into the local language. The participants could thus choose the language with which they were more comfortable. Various people from the local population fluent in both languages thereafter translated the responses back into English. The questionnaires were structured to be as simple, as easy to understand and as legible as possible. They started by asking about the background of the participants and then covered the objectives of the research.

DRUG USE

Questions were asked about high-risk behaviours such as alcohol intake, cigarette and dagga smoking as well as glue sniffing. Cigarette smoking was explained as the smoking of a full stick of a cigarette. The study also sought to

know if the student was still engaging in the above behaviour. They were also asked about their relation to persons who had introduced them to the above behaviours in the first place.

SEXUAL BEHAVIOUR

Students were asked whether they were virgins, or the age of first sexual intercourse. Sexual intercourse was explained to the participants as penetration of the female sexual organ by the male organ. Questions were also asked about risky sexual practices, such as the number of partners within the last 12 months as well as unprotected sex and the use of condoms and other contraceptives.

KNOWLEDGE OF HIV/AIDS

Questions on HIV/AIDS comprised how deadly the disease is, whether it was curable, its mode of transmission and how to prevent infection. The writer developed the above questions himself.

RELIGION

The questions on religion were based on the instrument developed by Robert Blum of the University of Minnesota, covering issues such as the religion to which one belongs, the religious denomination, frequency of attendance at religious services and frequency at prayer sessions (Blum, 1999). Answers to frequency of church attendance were: once a week, less than once a week but at least once a month, less than once a month and never. The scores for these

answers were 2, 1 and 0 respectively. A score of 2 was taken as regular church attendance.

FAMILY CONNECTEDNESS

The last section of the questionnaire looked at family connectedness, i.e. parent-adolescent relations. These questions were prepared based on the instrument developed by Brian K. Barber of Brigham Young University in the United States of America. They showed the level of connection, regulation of adolescent activity and psychological autonomy. The family connection questionnaires were structured using the Likert scaling method. The first part sought to know whether the parent was interested in the participant's problems and helped to solve them, whether the parent comforted him/her when upset and provided care when needed. The participant was asked to tick one of the following: not like him/her, somewhat like him/her and a lot like him/her. The scores allotted to these answers were 1, 2 and 3 respectively.

The psychological autonomy questions asks whether the parent praised the participant when he/she did a good deed, whether the parent was easy to talk to, makes him/her feel important and shows love to him/her. The responses here are: not like him/her, somewhat like him/her and a lot like him/her. The scores for these answers were also 1, 2 and 3 respectively.

The regulation questions sought to know if the parent knows: where the participant goes at night, what he/she does with his/her free time, and if he/she plays truant. The responses were in the format: does not know; knows a little; knows a lot. The scores here were similarly 1, 2 and 3 respectively.

The maximum score possible for the whole questionnaires in this section was 30. Scores of the mean and above were considered to reflect good family connectedness while scores below mean were regarded as poor family connectedness.

3.5 METHODS OF DATA COLLECTION

The selected schools were visited and the purpose of the study explained to the participants beforehand. A date was set for answering the questionnaires and an appeal was made to the students for maximum participation. A team of four (the researcher, two assistants and driver) visited the various schools. Since access to the various schools by road was difficult due to the nature of the roads, a 4 x 4 vehicle was hired to make the various journeys. In all, two weeks were used to complete data collection. Confidentiality was assured on the day the questions were distributed. No names were to be written on the sheets. The students were seated so that no one knew how each answered what. No teachers of the participating schools were allowed into the classrooms where the questions were being answered. The students were advised to answer the questionnaires as fully and honestly as possible. The completed questionnaires were collected after each student had been given the maximum amount of time necessary to complete them The students were again assured of the confidentiality of their answers.

3.6 METHODS OF DATA ENTRY AND ANALYSIS

A number of assistants went through the answers of the questionnaires, which were collated onto a master sheet according to the objectives. Codes were used where necessary. Analysis was done using Epinfo.ref. (CDC., USA., 1997) The "STATCALC." part of Epinfo was used to calculate the various odds ratios and chi-square tests. Means, medians, interquartile ranges, odds ratios and chi-square tests were computed. Some of the analysis was then stratified according to gender. These helped to compare and contrast the behaviours of both sexes.

3.7 ETHICAL ISSUES

Permission had been sought in writing from the office of the Cofimvaba District Education Department to use the students for the study. The Education Office was given a copy of the questionnaires for their perusal. The various Principals were also given copies of the questionnaires to study. A Principal of one of the schools (a Catholic school) refused to have anything to do with the questionnaires but delegated a teacher to assist me.

Consent forms were also given to the participants and their parents or guardians. The participants were assured of confidentiality throughout the research. To ensure anonymity, no names were allowed to be written on the answered questionnaires. Copies of the research protocol with questionnaires, a copy of the consent form and a letter from the District Education Officer giving permission for the various students to participate in the study were sent to the Ethics Committee of the Faculty of Health Sciences, University of Cape Town

for approval. Data collection started after the Ethics Committee gave its approval.

3.8 COFIMVABA SUB-DISTRICT

Cofimvaba sub-district, also known as the Ntsika-Yethu municipal area, is located in the southern region of the former Transkei in the Eastern Cape Province. It falls within the Chris Hani District Municipality and covers an area of 4226 hectares.

The area comprises two settlements – rural and urban. The urban area is Cofimvaba town itself, whereas the rural area comprises scattered locations in the region linked by gravel roads and footpaths. Cofimvaba town is the main commercial area in the sub district. The town has a post office, a bank, a police station, a magistrate office and a district hospital with 70 beds and 4 resident medical doctors.

The area has a population of 207 500, 2% of which is found in Cofimvaba town, with 98% in the scattered locations outside the town.

Water is mainly supplied from rivers and streams and from a few dams that supply treated water to Cofimvaba town. Eighty percent of the households depend on rivers and streams for their water supply. Forty percent of the population use pit latrines, whilst over 50% have no sanitation at all.

Unemployment (69% of the population) is rife due to an absence of sustainable economic opportunities. Since the area is grassy with non-arable lands, cattle rearing are the mainstay of agricultural venture. The area is among

the poorest in South Africa with most of the population living on old age grants and remittances from relatives working in other provinces.

Most of the population (79%) has no access to telephone services, with 8% using public telephones. Electricity supply is only found in Cofimvaba town, with the rest of the population depending on paraffin as a source of energy.

Housing is a problem in this sub-district, with the majority (74%) of the households living in traditional rondavels. These rondavels usually have no windows and are overcrowded, making them health hazards.

Health provision facilities include a district hospital in Cofimvaba town and a few clinics scattered among the locations. Mobile clinics manned by nurses also afford much needed services to the rural population.

Despite the poverty of the area, there are 22 primary schools and 13 high schools in the area which is quite impressive. From the above description of Cofimvaba sub district, it can be concluded that the study population is from a typical rural area.

CHAPTER 4

RESULTS

4.1 RESPONSE RATE

The results presented here pertain to the questionnaires that were correctly answered. The total number of students who participated in the study was 500. Three hundred and seventy-two (372) answered scripts were accepted, while the remainder were discarded due to massive omissions (49 scripts), meaningless answers (30 scripts) or respondents above 21 years (49 scripts). Questionnaires completed by respondents older than 21 years were rejected because their circumstances may be different to those of adolescents. This gave a response rate of 74.4%, which is quite a suitable number for the study. Thirty-three (33) of the rejected scripts, on which the gender of the respondents had been indicated (62 scripts in total), had been completed by males, whereas 29 had been completed by females.

4.2 AGE

The respondents chosen were of the 15-21 year group.

In terms of gender, 114 boys and 258 girls took part in the study; thus, 30.6% of the respondents were males and 69.4% females. The boys in Grade 11 are older than the girls, as can be seen by the difference in the mean ages (Table 4.1)

Table 4.1 Age in Years by Gender

	Age (years)	
	Boys	Girls
Interquartile range	17 - 19	17 - 19
Mean	18	17
Median	18	17
Mode	18	17
Range	15 - 21	15 – 21

4.3 SEXUAL BEHAVIOUR

4.3.1 Age of First Intercourse

Most of the adolescents started to engage in sexual intercourse at the age of 15 years, although the range was wider among the boys than among the girls (10 – 18 years as compared to 13 – 19 years). The mean age and the median age of first intercourse were also lower among the boys (14 years, 15 years) than among the girls (16 years, 16 years).

Table 4.2 Age of First Intercourse in Years by gender

	Age (years)	
	Boys	Girls
Mean	14	16

Median	15	16
Mode	15	15
Range	10 - 18	19

4.3.2 Sexual Partners

Eighty-six boys (75.4%) reported that they had experienced sexual intercourse. Sixty-two boys (54.4%) had had one or no partner in the last year and fifty-two (45.6%) had two or more partners. With the girls, one hundred and fifty-nine (61.6%) responded that they had engaged in sexual intercourse. During the previous year, thirty-nine girls (15%) had had two or more partners, while two hundred and nineteen (85%) had one or no partners. These responses are summarised in Table 4.3.

Table 4.3 Sexual partners by Gender

	Boys (Total number =114)		Girls (Total number =258)	
	Number	Percentage	Number	Percentage
Intercourse ever	86	75.4	159	61.6
0 – 1 partners in last year	62	54.4	219	85
2 or more partners in past year	52	45.6	39	15

4.3.3 Contraceptive Use

Respondents were asked if they had used anything to prevent pregnancy or sexually transmitted diseases the last time they had sex. Twenty-five (29%) sexually active boys did not use anything. Twenty-six (16.3%) sexually active girls also did not use anything. A high percentage (60.5%) of the sexually active boys, however, used condoms, 26.7% used injections, and no boy used the withdrawal method. Contraceptive use among the girls, on the other hand, was not encouraging (Table 4.4).

Table 4.4 Contraceptive Use among Sexually Active Students

Contraceptives	Boys (Total sexually active = 86)		Girls (Total sexually active = 159)	
	Number	Percentage	Number	Percentage
Condoms	52	60.5	88	55.6
Injections	23	26.7	49	30.8
Oral	3	3.5	9	6.0
Withdrawal	0	0.0	6	3.7
Other	8	9.3	7	3.9

4.4 KNOWLEDGE ABOUT HIV/AIDS

This section of the questionnaires inquired whether the students had heard about HIV/AIDS, what their sources of knowledge were, and probes into their depth of knowledge.

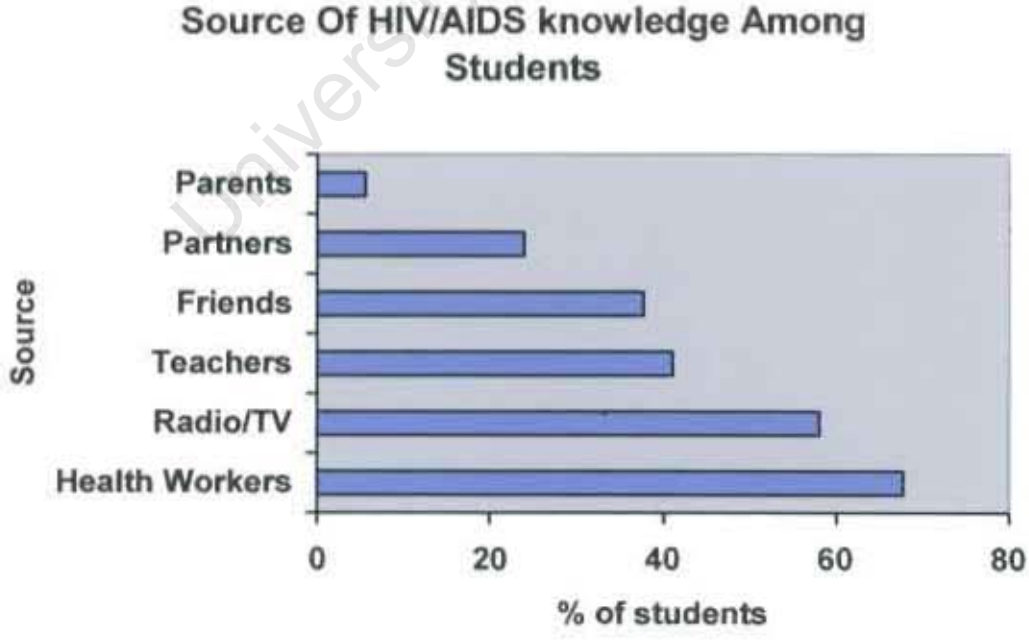
4.4.1 Level of Knowledge

Three hundred and sixty-four (98%) of the respondents confirmed that they had heard about HIV/AIDS. In terms of gender distribution, 111 (97%) and 253 (98%) girls had heard about HIV/AIDS.

4.4.2 Source of HIV/AIDS Knowledge

As indicated by Figure 4.2 below, most of the students obtained their knowledge of the disease from health personnel, and mainly from visiting school nurses (67.7%). Surprisingly, teachers come third with 41%, followed by friends (37.6%) and partners (24%), with parents being the least common source of HIV/AIDS knowledge (5.6%).

Fig. 1. Source of HIV/AIDS Knowledge among Students



4.4.3 HIV/AIDS Knowledge Among Students

The general knowledge of the respondents in HIV/Aids was ascertained from the general score on this part of the questionnaires and is summarised in Table 4.5 below. The questions here were marked out of 10:students with good knowledge are those who scored 8 or more, whereas those with poor knowledge scored 3 or less. Fair knowledge was a score of 4 to 7. The mean score was 5 and 1 standard deviation below mean was a score of 3.

Table 4.5 General HIV/AIDS Knowledge in Boys and Girls

Level of knowledge	Boys		Girls	
	Number	Percentage	Number	Percentage
Good HIV knowledge	32	28	52	20
Fair HIV knowledge	15	13	26	110
Poor HIV knowledge	38	33	69	27

All in all, the general knowledge of the respondents on all aspects of HIV/AIDS was not good. Only 84 (22.6%) students had good knowledge of the disease, while 100 (29%) had poor knowledge of the disease. However, most of the students performed better at some of the individual questions (see Table 4.6 below).

Table 4.6 Performance at Individual Questions on HIV/AIDS

	Boys		Girls	
Questions	No. correct	% correct	No. correct	% correct
AIDS is a deadly disease	95	82	220	85
AIDS is preventable	70	60	140	54
AIDS is curable presently	43	37	94	36
AIDS is transmitted by 1.Sexual intercourse	102	88	240	93

2.Blood transfusion	65	56	166	64
3.Breastfeeding	44	38	96	37
4.Mother to unborn baby	57	49	162	63
AIDS is prevented by				
1.Using a condom well	88	76	214	83
2. Abstaining from sex	64	55	154	59
It is easy to recognise an HIV positive person	42	36	80	31
Healthy looking people can be HIV positive	61	53	110	43
You can get HIV/AIDS by having multiple partners	65	56	128	49

This section was compiled to ascertain the depth of knowledge of the respondents with regard to specific questions of HIV/AIDS. The questions tested the knowledge of the students on the seriousness of the disease, its mode of transmission, how to prevent it and how to recognise a person with HIV. The responses are summarised in Table 4.6, according to gender to show how the boys and girls performed in respect of each question. Most of the boys and girls knew that AIDS was a deadly disease (82% of boys and 85% of girls). However, the percentage decreased considerably when it came to the question of prevention. A fair number of girls knew that AIDS was preventable. Fewer respondents knew that AIDS is presently incurable. With regard to transmission of the virus, the majority of the students knew that sexual intercourse and blood transfusions (88% and 56% for boys and 93% and 64% for girls respectively) could transmit the disease. Transmission through breastfeeding and mother to unborn child was not widely known, as only 38% of the boys and 37% of the girls agreed that breastfeeding might be a mode of transmission. A sizable number of boys and girls also knew that an HIV-positive mother could transmit HIV to her unborn baby.

Many of the respondents stated that HIV could be prevented by using condoms, whereas only about half of them thought abstaining from sexual intercourse prevented transmission. A similarly low percentage of boys and girls agreed that having multiple partners could increase one's chances of becoming infected. Both sexes again performed poorly when asked whether it was possible to recognise an HIV-positive person. Quite a fair number of boys and girls realised that even healthy looking people could be HIV-positive, but only a small number of respondents stated that it was not easy to recognise an HIV-positive person. Generally, both sexes performed nearly equally on the individual questions.

4.4.4 HIV/AIDS Knowledge and Safe Sex

The most important question, though, is whether knowledge of HIV/AIDS is associated with safe sexual behaviour. In this section, the relationship between HIV/AIDS knowledge and sexual behaviour will be examined, specifically with regard to whether knowing about HIV/AIDS helps students to practise safe sex (abstaining, using condoms during sexual intercourse or having fewer sexual partners). With regard to the boys good, HIV knowledge was not associated with safe sex practices ($\chi^2 = 0.55$ p value = 0.46). the other hand, HIV/AIDS knowledge was associated with the practise of safe sex (χ^2 test = 3.96 p value = 0.04).

Table 4.7 HIV/AIDS Knowledge and Safe Sex

N (for boys) =114 N (for girls) = 358

	BOYS		GIRLS	
	Safe Sex	Unsafe Sex	Safe Sex	Unsafe Sex
Good HIV knowledge	18	14	42	6
Poor HIV knowledge	17	19	52	20
Odds Ratio (OR)	1.44 (CI:0.50 – 4.19)		2.69 (CI:0.91 – 8.9)	
χ^2 test	0.55 p = 0.46		3.69 p = 0.04	

4.5 ALCOHOL, SMOKING AND DRUG USE

The behaviour of adolescents usually entails experimentation with drugs, alcohol and smoking. Participants were thus asked to state to what extent they were or are still experiencing with these vices. The results are summarised in Table 4.8

Table 4.8 Alcohol, Smoking, Dagga and Glue use by Gender

	BOYS		GIRLS	
	Number	Percentage	Number	Percentage
ALCOHOL	45	39.5	56	21.7
SMOKING	25	21.9	5	2
DAGGA	19	16.7	5	2
GLUE	27	23.7	16	6.2

Clearly, alcohol and drug use are not very popular with the respondents, with only 39% of boys and 21.7% of girls actively using alcohol or having used it before. About 22% of boys and only 2% of girls smoke. Dagga use and glue sniffing among the students are also very low, with only 16.7% of boys and 2% of the girls indulging in dagga.

4.5.1 Introduction to Alcohol

Peer group influence is the most important factor when it comes to how these adolescents started using alcohol, with 93% of boys and 86% of girls actively taking alcohol having been introduced to it by friends. Another important finding was that parents introduced 6.6% of boys and as many as 17% of girls to alcohol.

4.5.2 Alcohol Use and Risky Sexual Behaviour

An association between alcohol consumption and indulgence in risky sexual activity was computed for both boys and girls. The result is tabulated in Table 4.9. It shows that whereas alcohol use by boys is associated with risky sexual behaviour (χ^2 test = 8.47 p = 0.003), it had no influence on the sexual attitude of girls (χ^2 test = 0.54 p = 0.44).

Table 4.9. Alcohol Taking and Risky Sexual Behaviour

N(for boys) = 144 N(for girls) = 258

	BOYS		GIRLS	
	Unsafe Sex	Safe Sex	Unsafe Sex	Safe Sex
Taking alcohol	25	14	12	21
Not taking alcohol	25	46	74	174
Odds ratio 95% confidence limit	3.29 (1.34-8.09) 95% confidence limit		1.34 (0.59-3.04) 95% confidence limit	
χ^2; p value	8.47; p = 0.003		0.58; p = 0.444	

4.5.3 Smoking and Risky Sexual Behaviour

Another common behaviour among the boys is smoking. The sexual behaviour of the smoking boys was computed against the non-smoking ones. As only 2%

of the girls smoke, they were not compared with the non-smoking girls. Table 4.10 shows that smoking among the boys predisposes them to risky sexual practices (χ^2 test = 11.92 p = 0.00).

Table 4.10 Smoking and Risky Sexual Behaviour in Boys

	Unsafe Sex	Safe Sex
Actively smoking	19	6
Not smoking	33	56
Odds ratio (95% confidence limit)	5.37 (1.79 – 16.88) 95% confidence limit	
χ^2 ; p value	11.92; p = 0.000	

4.6 RELIGION

Respondents were asked to indicate their religious orientation as well as the religious denomination to which they belong. It was found that 98% of the respondents were Christians. The remaining 2% had no religious affiliation or were Rastafarians and Moslems. Of the Christians, Table 4.11 shows the Christian Denominations.

Table 4.11 Religious Denomination by Gender

	BOYS		GIRLS	
	Number	Percentage	Number	Percentage
Methodists	47	42	138	53
Baptists	14	12	37	14
Catholics	15	13	30	12
Presbyterians	20	18	8	3
Anglicans	5	4	20	8
Others	13	11	25	10

Most of the students were Methodists, with Baptists, Catholics, Presbyterians and Anglicans following in that order. Respondents were also tasked to indicate the number of times they attended church services and their frequency at prayers. It was seen that 70% of the Christians attended Church services at least once a week, a similar percentage (70%) also prayed at least once daily. Twenty-eight of the Christians do not attend church services regularly, i.e. less than once a week. Church attendance was used instead of prayers, because it is evident that the more an individual attends church services, the more he/she assimilates the news that can change his/her attitude towards sexual relationships and other life issues.

Regular church attendance was computed against safe/unsafe sexual activities for both sexes, with the results summarised in Table 4.12.

Table 4.12 Church Attendance and Sexual Attitude

	BOYS		GIRLS	
	Safe Sex	Unsafe Sex	Safe Sex	Unsafe Sex
Regular church attendance	41	25	133	64
Non regular church attendance	21	24	42	10
Odds ratio (OR)	1.87 (0.81<OR<4.35) 95% confidence limit		0.49 (0.22<OR<1.10) 95% confidence limit	
χ^2 test	2.59 p = 0.11		3.46 p = 0.06	

Church attendance has no influence on sexual behaviour on boys (χ^2 test 2.59 p = 0.11). On the part of girls, however, it can be said that there was a trend for

church attendance to be associated with the practice of safer sex (χ^2 test = 3.46 p = 0.06).

4.7 FAMILY CONNECTEDNESS

This part of the questionnaire sought to determine how close respondents were to their parents. Those scoring the mean and above are said to have Good Family Connectedness while those scoring below the mean have Poor Family Connectedness. Table 4.13, which shows how the respondents fared by gender, indicates that girls enjoyed better family connectedness (66%) than boys (49%).

Table 4.13. Family Connectedness by Gender

N (for boys) = 114 N (for girls) = 258

	BOYS		GIRLS	
	Number	Percentage	Number	Percentage
Good Family Connectedness	56	49	169	66
Poor Family Connectedness	55	46	88	34

4.7.1 Family Connectedness and Sexual behaviour

Responses for family connectedness were computed against the sexual attitudes of the respondents, with the results depicted in Table 4.14 below. It can be seen that Family Connectedness has no effect on the sexual attitude of boys (χ^2 test = 0.00 p = 0.94), although it does have a slightly positive influence on girls (χ^2 test = 2.80 p = 0.09).

Table 4.14 Family Connectedness and Sexual Behaviour by Gender

	BOYS		GIRLS	
	Safe Sex	Unsafe Sex	Safe Sex	Unsafe Sex
Good Family Connectedness	34	26	113	52
Poor Family Connectedness	28	22	69	19
Odds ratio (OR)	1.03 (0.45<OR<2.35) 95% confidence limit		0.60 (0.31<OR<1.14) 95% confidence limit	
χ^2 test	0.00 p = 0.94		2.80 p = 0.09	

CHAPTER 5

DISCUSSION OF RESULTS

Much work has been done globally (including in South Africa) on many different aspects of adolescent life. Some studies have focused on adolescent sexual behaviour, others on other risky adolescent behaviour such as alcohol intake and drug use. Most of these have however been done in urban and more affluent societies. This work may be the first to examine all these issues in a rural area of South Africa.

5.1 SAMPLE CHARACTERISTICS

For the purposes of analysis, 372 of the 500 answered questionnaires were considered useful: 114 were those of boys and 258 were of girls. This comprises a ratio of approximately 1:2, and a good overall response rate of 74.4%. Although it is well documented that low response rates are usually encountered in self-completed questionnaires, (Cartwright, 1983), this was not the case here. The remaining 25.6% questionnaires were rejected because some contained meaningless answers, others were blank (either the students did not understand anything or were not interested in participating in the study), and in others, the respondents were over the cut-off age of 21 years. Of the discarded questionnaires that reflected the ages of the respondents, 33 were females and 29 males.

With regard to the age, most of the boys were 18 years old, while most of the girls were 17, signifying that overall the boys were older than the girls in the class. It could be said either that boys in this area were sent to school at a later age than girls, or that the girls move easily through the grades than the boys.

5.2 AGE OF SEXUAL INTERCOURSE

The study of sexual behaviour among the Grade 11 students in this disadvantaged area revealed that 75% of the boys and 61% of the girls had had sexual intercourse before.

Many of them had started having sexual intercourse at 15 years. Among the boys, the range was 10 – 18 years while it was 13 – 19 years among the girls. This finding compares well with studies done in Cape Town by Flisher et al. (1996), Eaton et al. (2003) and Buga et al. (1996), who all obtained similar results. In contrast, Kau (1991) reported from a study in rural Bophuthatswana that most adolescent males had had sexual intercourse by the age of 12 years. From Malawi, Helitzer-allen et al. (1993) found that 70% of the girls had already had sex before the onset of menstruation and that the average age at first intercourse was 13.6 years. In Ghana, however, Karim et al., (2003) found that 41% of girls and 36% of boys aged 12 – 24 years were sexually active. In Nigeria, too, Slap et al. (2003) reported that only 34% of adolescents (aged 12 – 21years) studied had had sexual intercourse. This seems to suggest that adolescents in Southern Africa are more sexually active than their counterparts in West Africa. This could be partly attributed to the perceptions of different

cultures with regard to sexual behaviour. It is also evident that, in all the studies, the males start sexual activity sooner than the girls do. This may be explained by the fact that males are more inquisitive than girls, and that peer influence is higher in boys. Furthermore, sex could be less threatening to boys, as it does not require being on the receiving end of penetration. The fear of pregnancy on the part of the girls and that this could jeopardize their education and future lives could be a factor too.

5.3 SAFE SEX

Contraceptive use among the sexually active students is not very encouraging: 53% of boys and 51.5% of girls in this study said that they use contraceptives. With regard to contraceptive use among the girls, the order of use in descending order is: condoms, injections, oral contraceptives and the withdrawal method. Of the boys, only 43.5% of those who are sexually active use condoms. Condom use in this area is better than that found by other researchers, for example Karim et al.(2003) in Ghana and Eaton et al., (2003) in South Africa, but less than elsewhere,.for example Buga et al. (1996), in the Transkei, Boyer et al.(2000) and Flisher et al.(1996).

Since only 43.6% of the boys had used condoms in their last intercourse as against 55.6% of the girls, it could be deduced that the girls are more concerned about the safety of their sexual behaviour than the boys. It could also be that boys think it is the responsibility of the girls to think about contraception and safer sex.

During the past year, 54.4% of the boys had not had more than one sexual partner, while 45% had had 2 or more partners. Of the girls, 85% had one or no partners in the last year and only 15% had 2 or more partners in the last year. Correlation between the number of sexual partners and the acquisition of sexually transmitted diseases including HIV/AIDS is well documented (Rosenberg et al, 1999; Boyer et al, 2000). Based on this criterion, it can be said that boys in this area are more prone to sexually transmitted diseases than girls. This assertion was also made by Valois et al. (1999) in his study of adolescents in 56 public schools in the United States. In , the boys in this area, like elsewhere, are clearly indulging in more risky sexual behaviour than the girls.

5.4 KNOWLEDGE ABOUT HIV/AIDS

Although many of the students in the Cofimvaba district have heard about HIV/AIDS, the general knowledge of HIV/AIDS among the students was generally low. Only 28% of the boys and 20% of the girls had a good knowledge about HIV/AIDS, i.e. scoring 8 or more out of 10. 29% of the students had a poor knowledge about HIV/AIDS, i.e. scoring less than 3 out of 10. This poor general knowledge about the disease is contrary to the findings of other researchers who recorded very high rates (Richter and Swart-Kruger, 1996; Strebel and Perkel, 1991; Varga and Makubalo, 1996), though their studies had been done in urban areas. Obiechina et al. (2002) and Sunmola et al. (2003) have however shown a high knowledge of HIV/AIDS among rural adolescents in South Africa and other parts of Africa. The finding in this study

can be attributed to the fact that the Cofimvaba district is one of the least developed in South Africa, which means that vehicles of HIV/AIDS information are not optimal. regional location is no barrier to the level of HIV/AIDS knowledge (Varga and Makubalo, 1996).

With regard to the performances of the respondents in the present study with regard to the individual questions about HIV/AIDS, there were many variations. This is confirmed by the following findings: A large number of students knew AIDS to be a deadly disease but a low 60% and 54% respectively knew that it is preventable. Most of the students also knew that sexual intercourse was important in transmitting the disease, but only a small percentage of students knew it could be transmitted through breastfeeding. On one of the key points on HIV/AIDS transmission, only 56% of boys and 49% of girls considered having multiple sexual partners to be a cause of acquiring the HIV virus. A large number of the students knew that using condoms properly could block HIV transmission. Only 53% of boys and 43% of girls thought that healthy looking people could be HIV carriers. This shows that individual adolescents in this area have a shallow general knowledge of HIV/AIDS. Other researchers were of similar views (Govender et al, 1992; Karim et al, 2003; Elkonin, 1993; Mathews et al, 1990; Van Wijk, 1994). In respect of gender, it can also be seen that girls are generally more knowledgeable about HIV/AIDS than boys. More work is needed to help explain why this is the case.

It is also interesting to note that the most important source of HIV/AIDS knowledge for these students was health care personnel (68%), and that parents were the least effective source of information on HIV/AIDS (5.6%). This can

be explained by the fact that parents do not want to discuss sex with their children, either as a cultural issue or because they are themselves ignorant about the disease. Clinic nurses who present school health programmes are thus the main source of the dissemination of health knowledge to the students. Lack of transport or enthusiasm on the part of the health personnel can thus seriously jeopardise the health knowledge of the students. This does happen in fact, and it is therefore not surprising how low the HIV knowledge is in this area. Radio and television are the next best source of HIV information, followed by teachers and friends in that order. As teachers are with the students most of the time, programmes should be instituted to enable them to attend courses on HIV/AIDS to improve their own knowledge, so that they can impart this to the students in their care.

Although the students' knowledge of HIV/AIDS is not optimal, it is worthwhile knowing whether and how this has an impact on their sexual attitude. In other words, do those who show good HIV/AIDS knowledge practice safe sex? From the study, it appears that good HIV knowledge among the boys did not motivate them to practice safer sex. No matter how much the boys in this area know about HIV/AIDS, it is no deterrent to their practising sex, and they do not have fewer sexual partners or use condoms during sexual intercourse. This finding agrees with much of the research conducted elsewhere. On the part of the girls, however, good knowledge of HIV/AIDS had a positive impact on their sexual activity. Many researchers hold opposing views on this important finding in this rural area (Kirby, 2001; Merakou et al. 2002; Jacobson et al. 1994; Zimmer and Thurston, 1998; Zellner, 2003). Thus

enhancing HIV/AIDS knowledge among the girls in the Cofimvaba district will definitely help to change their sexual attitudes and practices.

5.5 ALCOHOL, SMOKING AND SUBSTANCE USE

This study revealed that these vices are not very popular here, as compared to the results obtained from other studies on adolescents. Only 39.5% of the boys and 22% of the girls were actively taking alcohol. As expected, peer influence in all adolescent groups everywhere, plays a significant role here. Among the boys, 93% of those taking alcohol had been introduced to it by friends. Most (86%) of the girls taking alcohol had also been introduced to it by friends. Another significant and disturbing finding is that some parents also introduce their children to alcohol (6.6% and 17% in boys and girls respectively). This may be because social functions in this area, such as circumcisions, funerals and weddings, use alcohol as tradition demands. The whole family usually attends most of these functions, so children are exposed to the locally brewed beers. It is therefore not surprising that some respondents cite their parents among those who introduced them to alcohol.

Comparing alcohol intake among the sexes, a greater percentage of boys indulge in alcohol than girls. This is an important finding, since from the literature virtually no work has been done on alcohol consumption among adolescent girls in the rural areas of South Africa. Alcohol intake does not seem to have any effect on the sexuality of girls This means that in finding ways of improving upon the sexuality of adolescent girls in this area, alcohol intake should not be considered

Apart from alcohol intake, tobacco is the most frequently used substance. Overall, though, smoking is not too popular in this study, since only 22% of the boys and 0.2% of the girls were indulging in it. Comparing smoking in the boys and girls, smoking was statistically more popular among boys than girls.

With regard to substance abuse, only 0.17% of the boys smoke dagga, whereas 24.8% sniff glue. Among the girls, 0.02% smoke dagga and 7.3% sniff glue. Statistically, then, more boys sniff glue than girls. It can be said from this finding that dagga smoking is not popular in this study, and that glue sniffing is more popular than dagga. This could be attributed to availability. It can also be inferred that as far as boys are concerned, drinking alcohol predisposes them to engage in unsafe sex. This finding is shared by numerous international researchers in this field: Weinbender and Rossignol, 1996; Duncan, Stryker and Duncan, 1999; Brook et al, 2002; Biglan et al, 1990. This is a very important finding, because, to prevent risky sexual behaviour in boys, structures that could be instituted to prevent them using alcohol are crucially important.

The effect of smoking on sexuality in this study agrees with the findings of other researchers, viz. that in boys smoking has a negative effect on adolescent sexual activity. It therefore stands to reason that curtailing smoking among adolescent boys will go a long way in promoting safer sexual activities.

5.6 RELIGION

As far as religion is concerned, 98% of the students were Christians, whereas the remaining 2% do not belong to any religion. Most of the Christians are of the Methodist denomination (53.5% of girls and 41.2% of boys). This is not

surprising, as Methodist chapels are very common in this area. Seventy percent (70%) of the students attend church services regularly, i.e. at least once a week, whereas 28% do not attend church regularly. More work is needed to determine the cause of this high rate of church attendance. This variable was used as a measure of religious commitment on the understanding that the more people attend church services, the more they hear the gospel preached and the more likely they are to adhere to Christian principles, which encourage them to abstain from premarital sexual activities. Among the boys in this study, religious commitment and risky sexual practices do run parallel. It was found that regular church attendance has no bearing on the sexuality of the boys in this area. On the part of the girls, however, it was found that there was a trend for regular church attendance to be associated with safer sexual practices. This means that seriously encouraging girls to attend church services could influence them to engage in safe sexual practices. This finding of gender difference is very significant, as little work had been done in this regard thus far, apart from Poulson et al's study of college students in the United States of America in 1998.The positive influence of religious commitment and activity in curtailing or preventing risky sexual behaviour was made evident in the work of researchers like Miller and Gur (2002), Dunn et al (1994), Zaleski and Schiaffino (2000), Holder et al. (2000). In contrast, Takyi in Ghana (2003) did not find religious affiliation to be associated with specific protective behaviour in the area of sexuality.

5.7 FAMILY CONNECTEDNESS

A look at family connectedness depicts girls as being more attached to their parents than boys (66% to 49%). This can partly be explained by the fact that, parents, especially women, are naturally more connected to their daughters than to their sons. Moreover, good family connectedness among the boys in the study did not seem to have any effect on their sexual activity. With girls, on the other hand, good family connectedness had a slight positive effect on sexuality. This finding is in agreement with work done by Huerta-Franco, De Leon and Malacara (1996). Other researchers like Jessor (1998), Slap et al. (2003), Kirby (1999) and Resnick et al. (1997) all showed that adolescents who have a close relationship with their parents tended to practise safer sex. Sieving et al.(2002) also found that good family connectedness led to parents giving advice on safer sex to their children, as well as indicating their disapproval of risky sex. Unfortunately, this was not the case in this study, as far as boys are concerned. This is explained by an earlier finding in this study that parents contribute very little to the HIV/AIDS knowledge of adolescents in this geographical area and that poor family connectedness among the boys means that they cannot or do not access even the little HIV/AIDS knowledge the family may impart to them.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSIONS

The findings of this study suggest that, generally, girls in the Cofimvaba area tend to practice safer sex and are more educated in HIV/AIDS than boys. Although general HIV/AIDS knowledge in both sexes is poor, the girls are more educated in this respect than the boys. The girls also use their higher HIV/AIDS knowledge in a positive way to alter their attitudes toward sex and thus their sexual behaviour. Factors such as religious commitment and involvement and family connectedness also have a more positive influence on female sexuality than on male sexuality. It could also be speculated that girls are more obedient to authority than boys, and that peer pressure is stronger among the latter.

It was also found that the contribution of parents to the dissemination of knowledge about HIV/AIDS is minimal. Moreover, in contrast to the urban areas, alcohol and drug use are not high in this very rural area of the Eastern Cape. This could be attributed to the lack of availability of alcohol and drugs here. This is very encouraging, as it greatly reduces many of the risk factors associated with adolescent sexuality.

6.2 RECOMMENDATIONS

In order to control the spread of the HIV pandemic effectively, much more attention needs to be focused on the youth, who are after all the future of the nation. Since the youth are, moreover, a particularly sexually active section of

the population, more effort needs to be directed at bringing to the fore effective ways of containing the spread of HIV among them. A critical look at their sexuality is imperative. Given the findings of this study, viz. that boys indulge in more risky sexual behaviour than girls, whatever strategies are formulated to effect positive changes should target boys more than girls, although the latter should not be entirely neglected or overlooked.

From this study, it could also be seen that the adolescents in this area tend to indulge in premarital sex, with the age of first intercourse being quite low (most of the students start sexual activity at the age of 15 years.) Some of them have had two or more sexual partners by the time they are 20 years old or in Grade 11 at school. They should therefore be educated and encouraged to change this attitude. Workshops need to be instituted for teachers, church leaders, parents, health and social workers in the community to empower these essential community members to educate the youth on safer sex. It has also been found that training some of the youth to use them as peer teachers is useful, so thinking in this direction should be encouraged. Although education seems to do little to change attitudes, yet it should be an important tool in our arsenal to combat the problem of HIV/AIDS.

It also became apparent from the study that condom use among the adolescents in this area was not encouraging. Could it be that condoms are not freely available, that they are not good quality condoms, that there are myths surrounding condom use, or is it just a lack of knowledge about how to use them correctly and how important they are in preventing the spread of STDs? Furthermore, condom use is more popular among the girls, who are more

conscious of using safer sexual practices than the boys In a practical sense, more condoms need to be made available free of charge in the community, courtesy of the Department of Health. Putting the condoms at publicly accessible points like market places, public toilets and even on school compounds will be effective in encouraging condom use.

In this rural area, there are no adolescent clinics and few health workers are trained in adolescent medicine; there is thus a serious lack of adolescent education. Establishing these clinics will go a long way to educating adolescents and solving their health needs. Adolescents in the Cofimvaba district in the Eastern Cape of South Africa are very similar in their sexual behaviour to youth of similar age groups in other parts of the world, and thus feasible measures used elsewhere to improve adolescent sexuality could be introduced here too.

Knowledge about HIV/AIDS is relatively poor among these adolescents, although most of them have heard of the disease. The girls are more knowledgeable in this area than the boys. Health care workers are the main source of knowledge about HIV/AIDS , followed closely by the radio, with parents being the least helpful. Because of this, it is imperative to request the government to spend more developmentally in the rural areas by supplying public radios at specific vantage points, where they can be used as vehicles of education. More clinics should be built and more nurses trained to man these and to move into the schools to increase access to HIV/AIDS education among the students. The greater their knowledge about HIV/AIDS, the more likely it will positively affect their sexual attitude, as had been found in this study with

respect to the girls. The writer is thus of the view that legislation to introduce sex education into schools should be enacted to help solve part of the HIV/AIDS problem. Teachers should also attend courses on HIV/AIDS so that they can be useful to the students in this respect.

With the threat of HIV/AIDS decimating the South African population in the coming decades, parents who have a close relationship with their children should be encouraged to open up to them so that the taboo surrounding sex in the home can be broken. Traditional leaders can also be educated to help break the taboo surrounding sexual education, thereby paving the way for parents to discuss safer sex with their children. Through such measures, a catastrophe might be averted, in the sense that sexually transmitted diseases including HIV/AIDS could be curtailed and the future leaders of the nation kept safe.

It was also found in this study that boys indulge in alcohol, drugs and smoking more than girls do. Indulgence in alcohol and smoking predisposes them to risky sexual activities. Peer group influence is also very strong in both sexes as far as alcohol and drug intake is concerned. Plans should thus be initiated to dissuade adolescents, especially boys, from using alcohol and drugs. It is known that adolescents usually resort to these vices if they have nothing to do; thus, organising social activities for them within their communities may reduce their indulgence in alcohol and drugs. Social activities, such as soccer or rugby matches, concerts and drama, would be the most popular. Allocating them to voluntary work groups would also help to draw them away from alcohol and drugs. These activities could even be used as platforms to educate the youth on distancing themselves from these vices. Legislation for banning

adolescents from shebeens should be enacted and enforced. Parents, as we have seen, also play a part in introducing the youth to alcohol and smoking. Church leaders should thus dissuade parents from doing so. Moreover, as most communities have much respect for their chiefs, the government could first organise educational programmes for these leaders with regard to alcoholic beverages and the youth, so that they, in turn, can impart this knowledge to their subjects. Customary practices that encourage adolescents to indulge in alcohol and drugs should be modified or abolished.

Church attendance plays a positive part in curtailing risky sexual behaviour in girls, but not in boys. In this area, then, Christian parents need to encourage their children to attend church services with them. Increasing Christian activities in the community could therefore produce good results.

6.3 RECOMMENDATIONS FOR FUTURE RESEARCH

This study is so far the only one conducted in South Africa, which embodies almost all of the variables influencing adolescent sexuality, such as the effect of drugs, HIV/AIDS knowledge, religious commitment and family connectedness, and it has done so by focussing on a rural area. Given the findings of this study, it is imperative to conduct more extensive work of this nature in other rural areas, too, as well as in urban areas in South Africa as a whole, to compare and contrast results. This would allow us to create a true picture of adolescent sexuality in South Africa, and even Africa as a whole. This particular study focused only on adolescents at school, and specifically at learners in Grade 11. To arrive at a more accurate picture, more work is needed to include those

adolescents who do not attend schools, as they are expected to be more vulnerable to risky sex in view of their lack of exposure to safe sex education.

Based on this research, it also appears that few parents talk to their children about HIV/AIDS and sexuality in general. Is it ignorance on their part or the usual traditional norms of parents remaining quiet on sexual matters? Knowing this can be of great help in encouraging safer adolescent behaviour. More work also needs to be done to find out why adolescents indulge in alcohol and smoking, and an effective solution must be found to reduce this practice.

Extensive work should also be done on the youth in the rural areas to find out why condom use is so unpopular among them and how to overcome this. Considering the gender differences in religious commitment and family connectedness in respect of adolescent sexuality , i.e. that positive findings showed up among the girls but not among the boys, more research is needed to ascertain the reasons for that difference.

6.4 LIMITATIONS OF THE STUDY

There are a number of limitations to this study. Firstly, because it was a cross-sectional study, it is not a true picture of the sexual activities of adolescents across the board. This necessitates caution in attributing causal explanations for the associations found herein. Secondly, the fact that it examined only Grade 11 students means that other adolescents in other grades, who might have interesting or different sexual behaviours might have modified the results profoundly. Even with regard to the Grade 11 students, only those who were present on the day the questionnaires were answered were included in the study.

The truants who did not report to school on the day the questionnaires were answered were thus excluded; it has been documented that this subgroup in particular has candidates for higher rates of substance abuse (Eggert et al. 1990; Flisher and Chalton, 1995). Thirdly, the adolescents who do not attend school are also expected to be particularly prone to unsafe sexual practices, and their inclusion might have produced different findings altogether. Fourthly, the small population sample was also a drawback, as more accurate results are statistically expected from a larger population sample. The fact that as many as 26% of the questionnaires had to be rejected due to gross omissions and senseless answers also adds to the limitations in respect of sample size, as well as to the depth of the study. Finally, in spite of the fact that all assurances were given as to the confidentiality of the answers and anonymity, there is no way of measuring the honesty on the part of the respondents. Nonetheless, in this regard,, there is evidence that self-report measures of adolescent risk behaviour are reliable and valid (Brener et al, 1995).

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APPENDIX I

Questionnaires.

TO: 11th grade learners

FROM: Research project involving sexual behaviour

DATE:

Dear Learner

We are about to commence a research project at your school. This will involve completing a questionnaire about certain aspects of sexual behaviour. In addition, we will ask about other topics that may be relevant for understanding sexual behaviour, such as religion and relationships within your family.

The results of the study will assist those who are planning to implement programmes in schools to prevent the spread of the virus that causes AIDS. The responses to the questionnaires will be anonymous and confidential. You will not be asked to provide your name at any stage and nobody will be able to find out how you responded to the questionnaires.

We hope that you will agree to participate. However, no student is required to participate in the project. Participation in this project or refusal to do so will not affect your marks or the way the teachers treat you.

It is possible that during or after the research, you may have thoughts about the possibility of getting HIV infection. You will be told how to contact a counsellor if you wish to discuss these thoughts or other issues related to HIV/AIDS.

Yours sincerely

Dr. Kofi Antwi-Anyimadu

I understand this document and have been given a copy of it to keep.

_____

Agreement to Participate

Signature: _____ Date: _____

QUESTIONNAIRES

Please will you fill in the questionnaire as honestly as possible. Your answers will be treated in strict confidence. No one will know what your answers are. We are trying to find out what you know about HIV/AIDS, how your lifestyle is, and how best we can advise you later to lead a healthy life.

Before we start, we need to know a few things about you.

1. How old are you? _____

2. What is your sex? _____

3. What is your home language? _____

4. What other languages can you speak? _____

5. Which of the following do you or your family have at home?

   a. Telephone _____
   b. Television _____
   c. Radio _____
   d. Electricity _____
   e. Pipe borne water _____

This part of the questionnaire is concerned with use of tobacco, alcohol and other drugs.

6. Have you ever smoked a whole cigarette before?

   Yes _____
   No _____

If Yes

6.1 How old were you when you first smoked a cigarette?

_____ years.

6.2 During the past month how many days did you smoke cigarettes?

_____ days.

6.3 Who introduced you to cigarette smoking? (You can tick more than one)

Friends _____
Parents _____
Other (specify) _____

7. Have you ever used alcohol (beer, home brewed beer)?

Yes _____
No _____

If Yes

How old were you when you first tasted alcohol?

_____ years.

8. Are you still taking alcohol?

Yes _____
No _____

9. Who introduced you to alcohol?

Friends _____
Parents _____
Other (specify) _____

10. Have you ever smoked dagga?

Yes _____
No _____

If Yes

How old were you when you first smoked dagga?

_____ years.

11. Who introduced you to dagga smoking? (You can tick more than one)

Friends _____
Parents _____
Other (specify) _____

12. Have you ever sniffed glue, petrol or thinner before?

Yes _____
No _____

If yes

At what age did you sniff petrol, glue or thinners?

_____ years.

Now your sexual behaviour.

13. Do you have a girl/boyfriend?

Yes _____
No _____

14. Have you ever had sexual intercourse?

Yes _____
No _____

If yes

How old were you when you fist had sexual intercourse?

_____ years.

With how many partners have you had sexual intercourse in the last 12 months?

_____ years.

How long did you have sexual intercourse?

_____ weeks.

On the last occasion that you had sexual intercourse did you or your partner use anything to prevent pregnancy (family planning) or prevent diseases?

Yes _____
No _____

If yes

What did you or your partner use? (You can tick more than one)

Condoms _____
Injection _____
Pill _____
Withdrawal _____
Loop _____

We now want to know how much you know about HIV/AIDS

15. Have you ever heard about HIV/AIDS?

Yes _____
No _____

If yes

From whom? (You can tick more than one)

Friends _____
Partners _____
Teachers _____
Health personnel (nurse) _____
Radio/TV _____
Other(specify) _____

16. AIDS is a deadly disease.

True _____
False _____
Don't know _____

17. AIDS is preventable.

True _____
False _____
Don't know _____

18. AIDS is curable presently.

True _____
False _____
Don't know _____

19. How is HIV/AIDS transmitted. (tick as many as possible)

Sexual intercourse _____
Blood transfusion _____
Breastfeeding _____
Mother to unborn baby _____
Kissing _____
Insect bites _____
Others (specify) _____
Don't know _____

20. AIDS can be prevented by? (You can tick more than one)

Using condoms well _____
Abstaining from sex _____
Having a vaccine _____
Using other contraceptives other than a condom _____
Don't know _____

21. It is easy to recognise an HIV positive person?

True _____
False _____
Don't know _____

22. Healthy looking people can be HIV positive.

True _____
False _____
Don't know _____

23. You can get HIV/AIDS by having multiple sexual partners.

True _____
False _____
Don't know _____
Not sure _____

Let us know about your religion now

24. Do you belong to any religion?

Yes _____
No _____

If yes

Which one?

Christianity _____
Islam _____
Other(specity) _____

25. If Christian which denomination?

Baptists _____
Methodists _____
Presbyterian _____
Catholic _____
Other(specify) _____

26. How often do you attend religious services?

Once a week or more _____
Less than once a week but at least once in a month _____
Less than once a month _____
Never _____

27. How important is religion to you?

Very important _____
Fairly important _____
Not important at all _____
Don't know _____

28. How often do you pray?

At least once a day _____
At least once a week _____
At least once a month _____
Never _____

29. The sacred scriptures of your religion are the works of God and are completely without mistake.

Agree _____
Disagree _____
Don't know _____

This part deals with relationships with your parents

30. My father or mother is a person who makes me feel better after talking over my worries with him/her. (tick one)

    Not like him/her _____
    Somewhat like him/her _____
    A lot like him/her _____

31. My father is a person who smiles at me very often. (tick one)

    Not like him/her _____
    Somewhat like him/her _____
    A lot like him/her _____

32. My father or mother is able to make me feel better when I am upset. (tick one)

    Not like him/her _____
    Somewhat like him/her _____
    A lot like him/her _____

33. My father or mother enjoys doing things with me. (tick one)

    Not like him/her _____
    Somewhat like him/her _____
    A lot like him/her _____

34. My father or mother cheers me up when I am sad. (tick one)

    Not like him/her _____
    Somewhat like him/her _____
    A lot like him/her _____

35. My father or mother gives me a lot of care and attention. (tick one)

    Not like him/her _____
    Somewhat like him/her _____
    A lot like him/her _____

36. My father or mother makes me feel like the most important person in his/her life. (tick one)

    Not like him/her _____
    Somewhat like him/her _____
    A lot like him/her _____

37. My father or mother believes in showing his/her love for me. (tick one)

Not like him/her _____
Somewhat like him/her _____
A lot like him/her _____

38. My father or mother often praises me. (tick one)

Not like him/her _____
Somewhat like him/her _____
A lot like him/her _____

39. My father or mother is easy to talk to. (tick one)

Not like him/her _____
Somewhat like him/her _____
A lot like him/her _____

40. How much does your mother/father really know about your friends? (tick one)

doesn't know _____
knows a little _____
knows a lot _____

41. How much does your mother/father really know where you go at night? (tick one)

doesn't know _____
knows a little _____
knows a lot _____

42. How much does your father/ mother really know about what you do with your free times? (tick one)

doesn't know _____
knows a little _____
knows a lot _____

43. How much does your mother/father really know where you are most afternoons after school? (tick one)

doesn't know _____
knows a little _____
knows a lot _____

44. How much does your father/mother really know if you have done your homework? (tick one)

doesn't know _____
knows a little _____
knows a lot _____

45. How much does your father/mother really know if you did go to school?(tick one)

doesn't know _____
knows a little _____
knows a lot _____

Thank you

Appendix 2

Map of South Africa showing Cofimvaba District