

**SEXUAL RISK BEHAVIOUR AMONG  
ADOLESCENT SCHOOL GIRLS  
IN A LOCAL COMMUNITY IN THE  
WESTERN CAPE, SOUTH AFRICA**

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**ABSTRACT**

Youth in Sub-Saharan Africa are faced with a changeover from adolescence to adulthood shadowed by the growing HIV/AIDS epidemic sweeping through the African continent. With this growing HIV/AIDS epidemic in South Africa it is important to understand the behaviours that place youth at risk of HIV/AIDS, other STDs and unwanted pregnancies in order to develop and to implement appropriate health-promoting interventions. The prevalence of self-reported sexual risk behaviours of high school girls was investigated at three high schools in the Strand, Western Cape. Data was collected using a self-administered questionnaire adapted from the *Youth Risk Behavior Surveillance System*. Statistical methods of data analysis included cross-tabulations using the Chi-square test for association between sexual risk behaviours and socio-demographic variables. The study sample consisted of 801 female high school learners aged 13-19 years ( $X=15.75$  years,  $SD = 1.57$ ). Twenty-seven percent of the learners reported being sexually active with 3.6% reporting sexual intercourse onset before 14 years of age. Forty-five percent reported having had more than one sexual partner and 50% of the sample reported no condom use. More than 5% of the learners had already been pregnant. Most learners (78.9%) indicated that they had been informed about HIV/AIDS at school, and 82.5% indicated that they are aware of the consequences of unprotected sex. Results of the study confirm that many female high school learners are engaging in sexual risk behaviours despite risk knowledge. The results emphasise the need to provide learners with targeted information and skills at an early age.

**Key words:** Sexual risk, behaviours, females, school, adolescents.

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**INTRODUCTION**

Youth in Sub-Saharan Africa are experiencing a unique challenge in their reproductive and sexual health. As they enter their reproductive years, they are faced with a transition from adolescence to adulthood shadowed by the growing HIV/AIDS pandemic sweeping through the continent. Unprotected sexual intercourse and multiple sex partners place young people at risk of HIV infection, other sexually transmitted diseases and unwanted pregnancy (Center for Disease Control and Prevention [CDC], 2001). Sexually transmitted diseases that destroy or diminish reproductive potential and early pregnancies are obvious health risks unique to adolescent women. Young adolescent women are more likely than young men to be infected with a sexually transmitted disease (STD), and are at especially high risk within four years of menarche (Sarigiani, Ryan & Petersen, 1999).

During 2001, twelve percent of all young females in South Africa between the ages of 12 and 16 years became mothers (Government Report, 2001). This highlights the seriousness of the problem of unwanted and unplanned pregnancies, particularly among teenagers of school-going age. Adolescent sexual and reproductive health has been identified as one of the most important health, development and population problems facing South Africa (ANC, 1994), and adolescent mothers often experience reduced educational and occupational attainment, as they have to leave school at an early age.

Several researchers described outcomes associated with adolescent sexual behaviour as ranging from “a public concern” to “a near epidemic” (Beck & Davies, 1987; Nahom, Wells, Gillmore, Hoppe, Morrison, Archibald, Murowchick, Wildson & Graham, 2001). Studies worldwide suggest that adolescents initiate sexual activity at an early age and that it is associated with alcohol and drug use. Several researchers in South Africa reported that adolescents admitted to have had sexual intercourse (Coetzee, 2003; Taylor,

Dlamini, Kagoro, Jinabhai & De Vries, 2003). Findings of these studies are alarming, especially in South Africa where the HIV epidemic is one of the fastest growing epidemics in the world. According to Taylor et al. (2003), an estimated 4.7 million people in South Africa (of a total population of 40.5 million) are currently infected with HIV/AIDS. Several researchers have expressed concern about the particular increase in the incidence of AIDS among younger women and adolescent girls (Ehrhardt & Exner, 2000; Piot, 2001; Taylor et al., 2003).

A number of reasons are given for the higher incidence of HIV/AIDS among young women in Sub-Saharan Africa. Piot (2001) suggests that it could be accounted for by age mixing, i.e. younger women with older male sex partners. This author further suggests that the rate of women’s infection peak at a younger age than men’s, that their age groups are a large proportion of the population, and that those infected at younger ages tend to survive longer.

Piot (2001) warns that the women's HIV vulnerability also evolve in particular from contexts in which they have little control over sex; whether as a consequence of the prevailing power relations between men and women or as a function of the economic and life choices available. Wood, Mofarah and Jewkes (2001) also state that sexual activities of young people are mostly underpinned by gender power relationships. They further state that the Xhosa-speaking adolescents in their study revealed that they play a submissive role in their sexual relationships. Their study highlights the powerlessness and physical abuse that overshadows every aspect of adolescent women's sexual lives.

With this burgeoning HIV/AIDS epidemic in South Africa it is therefore of vital importance to understand the behaviours that place female youth at risk of HIV/AIDS, other STDs and unwanted pregnancies in order to develop and to implement appropriate interventions. After the 1<sup>st</sup> South African National Youth Risk Behaviour Survey 2002 (Reddy, Panday, Swart, Jinabhai, Amosun, James, Monyeki,

Stevens, Morejele, Kambaran, Omardien & Van den Borne, 2003), they recommended that determinant studies to be undertaken of behaviours that place young people at risk, to complement the national prevalence study. They further recommended localised studies to be done to assist in designing provincial and district level intervention programmes as the data of the 1<sup>st</sup> South African National Youth Risk Behaviour Survey will be useful for macro-level policy and planning but not for local interventions. The prevalence of a wide variety of risk-taking behaviours among female high school learners attending three schools in the urban area of Strand, Western Cape was investigated during this study. Only the self-reported sexual risk behaviours of high school girls are presented in this article.

#### *School profiles*

The Strand is situated in the Helderberg Basin, which is part of the City of Cape Town Municipality. The study was carried out in three high schools in the Strand, Western Cape. Within the Strand area, there are four high schools that cater for the adolescent age group.

Although all the schools are non-racial, only three of the schools enrolled primarily black learners. The fourth school had a negligible number of black female learners enrolled and was subsequently excluded from the study's sampling frame. During the second semester of 2002 about 55% of the learners in these three schools were female.

## **METHODS**

Data were collected using a two self-administered questionnaires. The self-constructed demographic questionnaire measured demographic and socio-economic characteristics. The second instrument used was an abbreviated form of the Center for Disease Control and Prevention's *Youth Risk Behavior Survey*. The questionnaire has been tested by the Questionnaire Design Research Laboratory at the National Center for Health Statistics and has a kappa statistic reliability of 61-80% or higher and an alpha reliability of .79 (Kann et al., 1999). The instrument has also been found to have both face and content validity. The questions on sexual activity measured the prevalence of sexual activity, number of sexual

partners, and age of first intercourse. The use of condoms the last time they had sexual intercourse and the use of contraception were also assessed. The question whether high school learners have ever been pregnant and have ever received education regarding the prevention of HIV, was also assessed. The preliminary sampling frame comprised black female learners enrolled at three historically black high schools in the Strand. Grade 12 learners were excluded from the study in adherence to the guidelines and procedures of the Director of Education Research, the Western Cape Education Department, which stipulate that Grade 12 learners should not be included in studies undertaken by private researchers during the third term. The study specifically employed a stratified sample using grade level as the individual stratum. The instrument was administered to two randomly selected female class groups per grade from Grade 8 to 11 at each school. After approval of the study by the Senate Committee for Higher Degrees at the University of the Western Cape, further permission was requested and granted

by the Western Cape Education Department and the principals of the participating schools. The researcher explained the purpose of the study to the head of the research section at the Western Cape Education Department, principals, staff, parent-teacher associations, and learners of the selected schools. Learners returned signed parent-consent and learner-consent forms to their teachers; therefore, all the learners participated with informed consent. The final sampling frame thus consisted of those black female learners who returned the signed parent and learner consent forms. Twenty four classes in which 952 female learners were enrolled were randomly selected from grades 8-11 in the three participating schools. Of the learners selected only 857 had signed parent-consent forms, the remaining 95 learners were thus excluded from the study. Of the learners remaining 801 submitted completed questionnaires. The overall response rate was thus 84.1%.

The learners were informed that participation in the study was anonymous and voluntary, and that they reserve the right to withdraw at any time.

Participants and schools were assured that information provided would be treated in strict confidence. In view of the fact that the questionnaire could have aroused some emotions, the students were told to feel free to contact the researchers (through their telephone numbers provided to the students) in case of questions, or if they needed counselling and/or psychotherapy. A clinical psychologist in the area was made available for consultation.

In order to standardise the procedure it was decided not to involve the school principals or the teachers in the administration of the questionnaire. In this way the learners were less likely to regard the questionnaire with suspicion, as it was not directly associated with the specific school or the education department. Furthermore, the validity of the responses was increased because there was no possibility of the school staff having access to the learners' responses. Besides the learners, the only people present in the classrooms while the questionnaire was being administered were the researcher and research assistant.

The data were subjected to both descriptive and inferential statistics. Demographic data were expressed as means, standard deviations and percentages. Statistical methods of data analysis included cross-tabulations using the Chi-square test for association between sexual risk behaviours and selected socio-demographic variables. The exact binomial method was used to construct confidence intervals (CIs) for proportions. The analysis was conducted using SPSS version 11. Alpha level was set at  $p < 0.05$ .

## RESULTS

### *Description of sample*

The study sample consisted of 801 female high school learners ranging from age 13-19 years ( $X$  15.75 years,  $SD$  1.57). Educationally, there was an even representation of class grades, with Grade 11 having the smallest proportion of learners (1.4%). The majority of the sample classified themselves as “Coloured” (56.1%), 38.2% as “Black” and 0.2% as “Indian”. Most learners (47.1%) reported their head of household as the mother. As far as the educational level of the head of household is

concerned, the majority (58.7%) had completed some secondary schooling.

### *Sexual intercourse*

The prevalence of reporting on ever having had sex was 27.6% (95% CI 24.5, 30.7). Significantly more “Black” learners (48.9%) (95% CI 37.9, 49.9)] reported ever having had sex when compared to “Coloured” learners (12.9) (95% CI 9.6, 16.0) ( $\chi^2$  85.6054,  $p < 0.05$ ) as illustrated in Table 1.

There was a significant increase in the prevalence of learners from Grade 8 to Grade 11 reporting ever having had sex ( $\chi^2$  135.415,  $p < 0.05$ ). Significantly more learners in Grade 11 (36.1%) (95% CI 27.9, 44.3) reported ever having had sex than learners in Grade 8 (7.1%) (95% CI 3.6, 10.6). Significantly more older learners reported ever having had sex than younger learners ( $\chi^2$  106.2766,  $p < 0.05$ ). Significantly more learners aged 18 years (65.1%) (95% CI 57.4, 72.8) and 17 years (37.5%) (95% CI 29.6, 45.4) reported ever having had sex than learners aged 13 years (1.9%) (95% CI -01.8, 5.6) and 14 years (5.0%) (95% CI 1.6, 8.4) ( $\chi^2$  127.6228,  $p < 0.05$ ).

Table 1: Percentage (with 95% CIs) of high school learners who engaged in sexual behaviours by race, grade and age.

Variable	Ever had sex	Age of first sex (<14 years old)	Had >1 sexual partner in lifetime
<b>Race:</b>			
“Black”	43.9 (37.9 – 49.9)	6.8 (3.9 – 9.7)	18.9 (14.1 – 23.7)
“Coloured”	12.9 (9.8 – 16.0)	1.3 (0.3 – 2.3)	5.0 (3.0 – 8.0)
<b>Age:</b>			
13	1.9 (-1.8 – 5.6)	–	0.00
14	5.0 (1.6 – 8.4)	0.6 (-0.6 – 1.8)	1.9 (-0.01 – 3.9)
15	16.7 (10.8 – 22.6)	3.9 (0.9 – 6.9)	8.4 (4.4 – 12.4)
16	25.2 (17.9 – 32.5)	1.5 (-0.6 – 3.6)	8.9 (3.9 – 13.9)
17	37.5 (29.6 – 45.4)	0.7 (-0.7 – 2.1)	12.0 (7.0 – 17.0)
18	65.1 (57.4 – 72.8)	12.7 (7.2 – 18.2)	34.2 (26.8 – 42.2)
<b>Grade:</b>			
8	7.1 (3.6 – 10.6)	1.0 (-0.3 – 2.3)	3.3 (0.09 – 5.7)
9	12.3 (7.7 – 16.9)	2.1 (0.1 – 4.1)	6.2 (3.2 – 9.2)
10	45.0 (38.1 – 51.9)	5.3 (2.2 – 8.4)	19.0 (13.5 – 24.5)
11	36.1 (27.9 – 44.3)	6.6 (2.8 – 10.4)	13.5 (7.7 – 19.3)

Table 2: Percentage (with 95% CIs) of high school learners who used condoms with last sexual intercourse and those who had been pregnant by race, grade and age.

Variable	Used condom with last sexual intercourse	Had been pregnant
<b>Race:</b>		
“Black”	78.6 (74.0 – 83.2)	10.5 (6.9 – 14.1)
“Coloured”	91.7 (89.1 – 94.3)	2.9 (1.3 – 4.5)
<b>Age:</b>		
13	100.0	0.00
14	97.5 (95.1 – 99.9)	0.6 (-0.006 – 1.8)
15	94.9 (91.4 – 98.4)	3.2 (0.004 – 6.0)
16	85.1 (79.1 – 91.1)	3.8 (0.005 – 7.1)
17	79.9 (73.4 – 86.4)	8.5 (3.9 – 13.1)
18	67.5 (59.9 – 75.1)	15.8 (6.2 – 20.4)
<b>Grade:</b>		
8	97.1 (94.8 – 99.4)	2.4 (0.003 – 4.5)
9	94.3 (91.0 – 97.6)	2.1 (0.001 – 4.1)
10	75.2 (69.4 – 81.0)	8.7 (4.9 – 12.5)
11	77.1 (70.7 – 83.5)	10.3 (5.5 – 15.1)

Significantly fewer learners reporting religious affiliation (21.0%) reported ever having had sex than those reporting no religious affiliation.

*Age of initiation of sexual activity and sexual partners*

The prevalence of learners who reported having had first sexual intercourse before age 14 years of those who were sexually active, was 3.6% (95% CI 2.3, 4.9). Significantly more “Black” learners (6.8%) (95% CI 3.9, 9.7) than “Coloured” learners (1.3%) (95% CI 0.3, 2.3) reported having had their first sexual intercourse before the age of 14 years ( $\chi^2$  108.582,  $p < 0.05$ ) as illustrated in Table 1. The learners in Grade 10 (5.3%) (95% CI 2.2, 8.4) and Grade 11 (6.6%) (95% CI 2.8, 10.4) were significantly more likely to report having had their first sexual intercourse before 14 years of age than those in Grade 8 (1.0%) (95% CI -0.3, 2.3) and Grade 9 (2.1%) (95% CI 0.1, 4.1) ( $\chi^2$  134.233,  $p < 0.05$ ).

Of the learners who reported ever having had sex, 45.3% (95% CI 38.6, 52.0) reported having had more than one sexual partner. Significantly more

“Black” learners (18.9%) (95% CI 14.1, 23.7) than “Coloured” learners (5.0%) (95% CI 3.0, 8.0) reported having had more than one sexual partner in their lifetime ( $\chi^2$  48.1024,  $p < 0.05$ ) as illustrated in Table 1. Significantly more learners reporting no religious affiliation (17.4%) reported having had more than one sexual partner than those reporting religious affiliation (8.7%) ( $\chi^2$  7.0985,  $p < 0.05$ ).

*Use of condoms and pregnancy*

Overall 50.0% (95% CI 46.5, 53.5) of those who ever had sex reported that they used a condom the last time they had sexual intercourse. Significantly more “Coloured” learners (91.7%) (95% CI 89.1, 94.3] than “Black” learners (78.6%) (95% CI 74.0, 83.2) reported that they used a condom the last time they had sexual intercourse ( $\chi^2$  27.7482,  $p < 0.05$ ). The use of condoms decreased as age increased, as illustrated in Table 2. More than 5% (95% CI 4.2, 7.4) of the learners have already been pregnant. A significantly smaller percentage of “Coloured” learners (2.9%) (95% CI 1.3, 4.5) have been pregnant than “Black” learners (10.5%) (95% CI 6.9, 14.1) ( $\chi^2$  20.3733,  $p < 0.05$ ).

There was also significantly more learners aged 18 years old (15.8%) (95% CI 6.2, 20.4) compared to learners aged 15 years old (3.2%) (95% CI 0.004, 6.0) who had been pregnant ( $\chi^2 = 51.9062$ ,  $p < 0.05$ ). Significantly less learners reporting no religious affiliation (11.0%) used a condom the last time they had sexual intercourse than those reporting religious affiliation (29.5%) ( $\chi^2 = 30.357$ ,  $p < 0.05$ ).

#### *HIV/AIDS education at school*

The overall prevalence of learners indicating that they were informed about HIV/AIDS at school, was 78.9% (95% CI 76.0, 81.8). Significantly more “Coloured” learners (87.7%) (95% CI 84.6, 90.8) than “Black” learners (68.2%) (95% CI 62.9, 73.5) indicated that they had been informed about HIV/AIDS at school (see Table 2). A significantly smaller percentage of learners aged 18 years (70.1%) (95% CI 62.6, 77.6) than those aged 13 years (80.4%) (95% CI 69.5, 91.3) reported that they had been informed about HIV/AIDS at school. Learners in Grade 11 (92.1%) (95% CI 88.0, 96.2) were significantly more likely than those in Grade 8 (74.0%) (95% CI 68.0, 80.0) to

indicate that they had been informed about HIV/AIDS at school.

#### *Knowledge of consequences of unprotected sex*

The majority of the learners (82.5%) (95% CI 9.9, 85.1) knew the consequences of unprotected sex. There was no significant variation by race or age. However, significantly more learners in Grade 11 (91.0%) (95% CI 86.6, 95.4) than those in Grade 8 (76.8%) (95% CI 71.1, 82.5) were aware of the consequences of unprotected sex ( $\chi^2 = 15.8413$ ,  $p < 0.05$ ).

## **DISCUSSION**

In this study the percentage of female high school learners who have had sexual intercourse (27.6%) is comparable to that reported in a previous South African study in which 30% of high school learners in KwaZulu-Natal indicated that they were sexually active (Taylor et al., 2003). The findings of the current study are however in stark contrast to those of the First South African National Youth Risk Behaviour Survey conducted in 2002 (Reddy et al., 2003) in which 41.1% of the learners

reported having had sexual intercourse and a Canadian study done in 2000 (Langille & Curtis, 2002) where a larger proportion of female adolescents was sexually active (49.5%). A large percentage of learners (45.3%) in the present study reported having had more than one sexual partner. Eaton, Flisher and Aaro (2003) also found in their review of South African literature that the majority of school-going adolescents reported having one or two partners in their lifetime. The age of first sexual encounter varied but many reported an early age. Of concern is the percentage of learners (3.6%) who were sexually active before the age of 14 years.

One half (50.0%) of the learners reported that they used a condom with their last sexual intercourse. This is slightly higher than the percentage (40.5%) reported by Peltzer (2000) in a study among senior secondary pupils in the rural areas of South Africa and that reported by Taylor et al. (2003) (45.4%). This finding contrasts with the 20% of females reporting consistent condom use in Karim et al.'s (2003) study in Ghana. In their review of South African literature, Eaton et al. (2003) also noted

that the majority of sexually active young people use condoms irregularly. The low rate of condom use in all these studies and especially the current study is of great concern, as a large percentage of these learners (82.5%) indicated that they knew what the consequences of unprotected sex were. The majority of these learners (78.9%) also indicated that they were informed about HIV/AIDS at school.

Eaton et al. (2003) state that there is uncertainty about the proper use of condoms among South African youth and this could explain the low rate of condom use. Serious misconceptions are also held by youth. For example, that hormonal contraceptives offer protection against HIV infection and that the same condom may be used more than once. All of these point to the fact that there is a serious gap in knowledge as to effective condom usage. Additional areas of concern highlighted by Eaton et al. (2003) with regards to the use of condoms is the lack of communication or interaction with adults especially at health care centres and the lack of access to condoms in the respondents' communities.

Despite their keen awareness of the health consequences, learners still engaged in risky sexual behaviours. This is in agreement with Romer and Hornick's (1992) argument that young people might have the knowledge of risky behaviours but that it does not necessarily mean that they will adopt healthier behaviour. They further argue that the social environment will inevitably support alternative and more risky responses that people can adopt even though these responses may be consistent with people's knowledge.

Reporting religious affiliation was a protective factor associated with sexual risk behaviours in the present study. According to Mason and Windle (2001) religious influences have typically been given scant attention in reviews of risk and protective factors for adolescent use.

## **CONCLUSION**

Results of this study confirm that many high school girls engage in sexual risk behaviours that could lead to short-term and long-term consequences related to their overall health and wellness as well as educational achievement. The high number of learners who engage in these

risky behaviours is a pointer to the fact that preventive programmes need to be more effectively implemented or intensified. This study also emphasised the need to provide learners with information and skills at an early age, even at primary school level, which may assist them in decreasing risk behaviours. Taylor et al. (2003) agree with this view by stating that interventions targeting learners at high school may occur too late for those already sexually active. The school community should therefore co-operate in providing learners with integrated positive experiences, which promote and protect their health, including both formal and informal curricula in health.

It is recognised that both males and females are vulnerable to sexual risk behaviours, but when one examines the context of women's and girls' lives, the impact of individual health risks can become cumulative and are compounded by gender relations. The heightened adverse health effects of these risk behaviours for female learners and the unique risk associated with being female point to the need for gender-specific prevention efforts.

Prevention efforts that do not target gender leave adolescent women at even greater risk.

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