Risky sexual behaviours of high-school pupils in an era of HIV and AIDS

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Objective. To identify risky sexual behaviours and demographic factors that place high-school pupils at risk of HIV and AIDS.

Methods. A cross-sectional study was undertaken to explore factors influencing the sexual behaviour of high-school pupils (mean age 15.4 years; SD 1.11). Structured self-reported questionnaires were completed by all grade 10 pupils (N=805) at all the Wentworth, Durban, public high schools.

Results. Significant gender differences in sexual practices were reported, such as males being more likely to engage in sexual activity than females (OR 4.92; p<0.001). More males (24.8%) initiated sex before age 12, compared with more females (30%) who initiated sex between 16 to 20 years of age (p<0.001). Significantly more males preferred older partners than females (p=0.002), more females were forced to have sex than males (p =0.009), and more males used alcohol on the last occasion of sex than females (p=0.04). Religious affiliation and parental supervision were found to have a significant effect on sexual activity among pupils.

Conclusions. High-school pupils are at high risk of HIV and AIDS, yet they continue to engage in risky sexual behaviours. Preventive efforts therefore need to be aggressively up-scaled and redirected towards specific risky practices, taking gender differences into account. Contextual factors such as religious norms and parental supervision also require greater attention. Risky sexual behaviours are reflective of a broader crisis in society.

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Overview

The high and increasing prevalence of HIV/AIDS among youth in South Africa suggests that prevention efforts need to be re-examined. Condom promotion, STI programmes, the HIV and AIDS Life Skills intervention, and mass media communications have been deficient in reducing the incidence of HIV. HIV prevalence among youth in the 15 - 24 age group was 10.3%, but has increased among females to 16.9% and decreased among males to 4.4%.[1] Youth in South Africa nevertheless continue to practise risky sexual behaviours.[2] Many have had their first sexual experience by age 14 or younger, even though the legal age of consensual sex is 16.[3] The 'fertility conundrum', whereby girls have to demonstrate their fertility before marriage, is evident in many African cultures, and further perpetuates the early age of sexual activity among youth.[2]

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Gender disparities have an impact on gender power imbalances and age-mixing.[4,5] Among adolescents in Mthatha (previously known as Umtata) in Eastern Cape Province, boys defined 'masculinity' in terms of the number of sexual partners, choice of main partner in terms of her desirability to other males, and ability to control their girlfriends – often by force. Males who were celibate were pressurised by peer groups to be sexually active, or else it was assumed they were 'scared' of women.[6]

The escalating high incidence of sexual abuse, violence and rape among children of all ages, reinforces gender-based violence in relationships.[7] Nationally, 1.5% of adult females reported having been raped before the age of 15,[3] and the Human Sciences Research Council reported in 2003 that 15% of South African rape victims were under 12 years of age. In a number of studies of South African secondary school pupils, 72% of pregnant teenagers, and 60% of teenagers who had never been pregnant, reported that they had had coercive sex[4] – statistics which recur in other studies.[8,9]

Similarly, Thai male adolescents felt that girls' refusal to have sex was an expression of playing 'hard to get', and not that they did not want sex.[10] In addition, a strong correlation was reported to exist between gender-based violence (GBV) and HIV and AIDS among students at two middle schools in Thailand where, even in steady dating relationships, 43% of Thai adolescents reported engaging in some form of sexual violence, and 5% had raped their girlfriends and performed anal sex.[10]

In addition, adolescent relationships with older partners are risky because the latter often have a history of multiple relationships. Negotiating of safe sex practices is diminished,

and exchanging money or gifts for sex further increases the likelihood of more coercive sex.[4] In South Africa, girls aged 15 - 19 years reported having had partners 5 and more years older than themselves.[5] Mexican females had partners who were 3 years older than themselves.[11] These findings are consistent with over 45 quantitative studies on partner age differences of 15 - 19-year-old-girls in sub-Saharan Africa, where having male partners 6 or more years older than themselves was reported.

Risky sexual behaviour is further compounded by the use of alcohol and drugs, which is consistently reported in the literature as being associated with sexual victimisation of adolescents.[12] Furthermore, early initiation into alcohol consumption is also associated with increased risk of experiencing attempted or actual forced sex among schoolgoers in South Africa.[7]

Religious adherence may play a 'gatekeeping' role in delaying sexual activity; in the USA, frequency of religious attendance was associated with delayed initiation of sexual intercourse.[13] However, girls who attended religious services weekly during early adolescence did not differ from those who attended less frequently with regard to use of contraception at first intercourse, having a child by age 20, or more than one sexual partner in the previous year.[13] Similarly, among Anglican youth in the Western Cape, the proportion who were sexually active was similar to that of the general population (38%).[14] This implies that church-based youth do not behave significantly differently from their larger peer group. Moreover, sexually active church-based youth appeared to have a higher rate of multiple partners (66%) than reflected in the SA Youth Risk Behaviour Survey (48%).[14] The mores of Christianity therefore seemed not to particularly dissuade youth from sexual activity.

The presence of a supervisory parent at home may discourage early sexual experimentation.[15-18] Among pupils at six USA secondary schools, more than half of sexually active pupils reported that they had sex at home after school. A strong correlation was reported between the number of hours that youth were unsupervised and their sexual activity. Low parent-child attachment and decreased monitoring of behaviours played a role in risky sexual behaviours of adolescents. Open lines of communication and knowledge of adolescents' whereabouts, together with a trusting parental relationship, are important in reducing high-risk behaviours. In particular, stricter and more consistent family discipline may serve to deter risky sexual behaviour.[18]

The present study was intended to identify risky sexual behaviours and demographic factors among a cohort of South African high-school pupils, that predispose them to HIV and AIDS.

Methods

Study design

A cross-sectional descriptive and analytical study was undertaken in 2004, as a prelude to a larger intervention trial, in Wentworth, a suburb of Durban, KwaZulu-Natal. It included diverse population and socio-economic groups with limited community resources. All three public high schools in Wentworth were included in the study.

Sampling

The school was regarded as the primary sampling unit; as such, all pupils in grade 10 at all three high schools were included in the study. Grade 10 pupils were selected as the target group because they had completed 2 years of Life Orientation and therefore had knowledge of AIDS and prevention measures. Pupils who attend these high schools are not specifically from the Wentworth community, as a large proportion of students commute from township locations as far away as the South Coast and central city. The sample is therefore representative of many other high schools in South Africa with a similar mix in populations of pupils.

Procedure

Ethical clearance for this study was obtained from the University of KwaZulu-Natal Medical School, Durban. Permission to conduct the study was obtained from the KwaZulu-Natal Department of Education, the schools' governing bodies and the school principals. Written informed consent was obtained from parents and pupils.

Study questionnaire

A structured, self-administered questionnaire was handed to participants during school hours for completion. Confidentiality and anonymity were ensured, as questionnaires were coded to increase the accuracy of self-reporting. Pupils were informed of the nature of the study in terms of HIV/AIDS prevention. The definition of sexual intercourse included vaginal, anal and oral penetration. Trained volunteers assisted with the administration of questionnaires. Learners were encouraged to complete the questionnaire but had the option to refuse participation. The questionnaire was adapted from the original Youth Risk Behaviour Surveillance System from the Johns Hopkins Bloomberg School of Public Health Sexual Behaviour Survey. Subsequently, the questionnaire was piloted and adapted to increase reliability and validity.

Study variables

The sociodemographic variables included questions on age, sex, race, religion and employment of caregiver. The sexual behaviour variables comprised the following questions: 'Have you ever had sexual intercourse?', 'How old were you when

you had sexual intercourse for the first time?', 'Do you prefer sexual partners that are older than you?', 'Have you ever received money or gifts from your partner before or after sexual intercourse?', 'Has anyone forced you to have sex?', 'Did you use alcohol the last time you had sex?', 'The last time you had sex, did you and your partner use a condom?' and 'Do you use a condom at every sexual experience?' Cronbach's alpha for all measures except intentions had satisfactory internal consistency as alpha >0.7. For the intention questions, low internal consistency was found.

Analysis

Data were collected, coded and analysed using the SPSS (11.5; Chicago, USA) computer program. Cross-tabulations between exposures and outcomes were adjusted for the effect of school using Mantel-Haenszel chi-square analysis for dichotomous variables. Logistic regression analysis was used to examine independent predictors for sexual activity.

Results

Tables I and II tabulate demographics and sexual behaviour, and gender and sexual behaviour, respectively.

Table I shows that males were 4.92 times more likely to have sex than females ($p<0.001$). Regarding religious affiliation, African traditional religion compared with Christianity was a significant risk indicator for sexual activity. Pupils who practised African traditional religion were 2.3 times more likely to engage in sexual activity than those who practised Christianity ($p=0.02$). Furthermore, pupils were more likely to have sex when both parents were absent from the home and working than when only the father worked and the mother was at home.

A number of factors influenced sexual behaviour among high-school pupils. These factors included coercion to have sex, alcohol use on previous sexual occasions, preference for older partners, receiving gifts or money for sex, and age at first sexual occasion. A significantly higher percentage of female pupils (>8%) were forced to have sex, compared with male pupils (1.9%). More males became sexually active at a younger age: about a quarter became sexually active before reaching their teens. More females initiated sex when they were older. In both groups, many pupils initiated sex before age 16 (the legal age of consensual sex). A statistically significant association was found between gender and alcohol use at last occasion of sex, with about a third of males using alcohol compared with a fifth of females. Over half of the male pupils (56.6%) preferred older sexual partners, compared with 40.8% of females. Preference for older partners was significantly associated with gender ($p=0.02$), more so for males than females. A higher percentage of males (40%) than females (36.2%) received money or gifts for sex; however, this difference was not statistically significant ($p=0.69$).

Discussion

The study identified significant gender differences associated with risky sexual behaviours among high-school pupils, including more females who reported forced sex, more males who used alcohol at last sex, preference for older partners, and accepting money and gifts for sex. More males initiated sex at younger ages, compared with females. Strong correlations

Table I. Association between demographic variables and sexual activity among pupils after controlling for school (*N*=759)

Factor	B (SE)	*p*-value	OR	95.0% CI for OR Lower	Upper
Male v. female	1.593 (0.196)	<0.001	4.918	3.347	7.226
African Traditional v. Christianity	0.822 (0.361)	0.02	2.275	1.120	4.619
Both parents employed v. father only employed	0.679 (0.269)	0.01	1.972	1.165	3.338

B = beta (the coefficients in the model); SE = standard error of beta.

Table II. Gender differences in sexual behaviour among grade 10 sexually active Wentworth pupils (*N*=759)

Sexual behaviour	Females % *N*=96	Males % *N*=169	*p*-value
*Forced to have sex	8.3	1.9	0.009
Age of first sex (yrs)			
9 - 12	9.6	31.3	
13 - 15	57.5	57.4	<0.001
16 - 20	32.9	11.3	
*Alcohol use at last sex	20.0	33.5	0.04
*Prefer older partners	40.8	56.6	0.002
*Received gifts/money for sex	36.2	40.0	0.69

*Controlled for school using Mantel-Haenszel.

were reported between religious adherence and parental supervision, and sexual activity.

Gender role theory maintains that individuals will behave in a way that is consistent with cultural norms and expectations of each gender. Beliefs that promote male dominance, female sexual submissiveness, and violence, as reflected in this study, therefore contribute to unsafe sexual practices.[12]

A significant number of Wentworth pupils (9.6% of females and 31.3% of males) reported that they had had their first sexual experience before age 12, with a higher prevalence between 12 and 15 years. This high-risk behaviour was also reported among secondary school pupils in Cape Town, where 10.8% of females and 23.2% of males were sexually active in grade 8.[19] Adolescents who begin sexual activity early are more likely to have more sexual partners and therefore greater exposure to the risk of HIV. UNAIDS (2004) reported that urbanisation, poverty, exposure to conflicting ideas about sexual values and behaviour, and encouraging premarital sexual activity among adolescents may be factors contributing to early sexual initiation of young people globally. A recent survey among adolescents in KwaZulu-Natal suggested that receiving 'health shocks' – for example, the death of a loved one – are risk factors for sexual debut. Adolescents in a household that experienced a recent death were 20% more likely to have debuted sexually, while those who experienced a recent severe illness were 13% more likely to have debuted sexually. The Wentworth pupils might therefore have experienced emotional shocks as a result of illness or death within their family and social circles, which in turn inclined them to be more sexually active and ignore the risk of contracting HIV and AIDS. Similar findings were reported among secondary school pupils in the Midlands in KwaZulu-Natal, in which discrepancies between awareness and behaviour were indicated.[20]

The high incidence of sexual abuse among young children in South Africa indicates that, for many, their experience of early sexual initiation might be from coercion – more so among females than males.[3,7] Forced sex may also be related to misconceptions about sexual violence, such as males reporting that they do note perceive sexual violence as including unwanted touching and forcing sex with someone whom one knows.[7] Compounding this attitude is that the low conviction rates in South Africa for rape seem to encourage the abuse of youth, promote the early age of sexual initiation, and exacerbate the HIV epidemic in South Africa.[21] Similarly, in other African countries such as Kenya and Zambia, girls reported that they had been 'tricked' or 'persuaded' into their first sexual experience.[8]

Having partners who were a few years older than the subjects in this study significantly increased the risk of HIV infection.[5] Older partners generally have higher earning power than same-age partners, and pupils might have sought relationships that were profitable. Contrary to other findings,[2] this study showed that male pupils also sought relationships with older partners. 'Sugar-daddyism' (the pairing of middle-aged men with young girls)[2] may need to be expanded to incorporate the existence of 'sugar-moms' as well. While females may seek emotional or material support, males may additionally be motivated by physical pleasure and social standing.[22]

Negotiating safe-sex practices is hindered in relationships of mixed ages; as a consequence of the exchange of money or gifts, this increases exposure to coercive sex.[2,23,24] Furthermore, Wentworth pupils indicated that a large percentage of them exchanged money or gifts for sex, which might be due to pupils securing such basic needs as food, school fees and shelter; or this commerciality might be reflective of a culture of materialism in which cellphones, eating out and wearing luxury clothing are perceived as necessities.[2]

Another risky behaviour is the use of alcohol before sex, as it reduces one's cognitive abilities to consider protective sex, and increases susceptibility to coercive sex.[7] Higher percentages of alcohol use were reported among pupils in this study compared with national figures (13.8%); however, similar gender trends were found, with more males than females using alcohol before sex.[3]

Gender was found to be a significant predictor of risky sexual behaviour in this study. Some cultural mores in South Africa place high value on preserving virginity while others do not. Sexual culture, gender roles and mores are often rooted in religious belief systems, and may be the reason that African traditional religious groups were twice as likely, relative to Christian religious groups, to engage in sexual activity. For young Zulu men, early fatherhood is an affirmation of masculinity and strength. However, a factor that may offset the influences of culture and religion is that adolescents tend to feel diminished interest in religious activity, as a consequence of their emerging sense of autonomy and identity.[25] Eastern Cape pupils reported that having multiple partners was related to the ancestral practice of polygamy, a cultural belief which dictates that men are household heads and model their fathers' behaviour of having babies 'around every corner'.[26] African traditional religions may therefore be influenced by cultural integration and child-bearing customs.[13] However, African culture allows relationships with the practice of *ukusoma* (sex between the thighs with no penetration), which has been replaced in recent times by penetrative sex.[27]

The social mores of Christianity had a protective influence on pupils in this study, which was also the case among Zambian female adolescents from a number of different Christian denominations, who reported that religious affiliation conduced to delayed sexual initiation.[28] However, since Christianity in general preaches abstention rather than condom use (which is an approach at odds with reality), these

youth may be at increased risk of HIV infections once they became sexually active.[28] Contrary results were reported in other studies,[13,14] which suggests that the role of religion in adolescent sexuality requires further exploration.

Parental supervision was found in this study to significantly affect sexual activity, which is supported in other research findings.[15-18] Children from families in which both parents worked were twice as likely to engage in sexual activity compared with those in which only the father worked. This indicates that the presence of a supervisory caregiver or parent could deter early sexual experimentation. Greater efforts therefore need to be directed at parent groups to address this issue on a broader scale.

The youth of South Africa are trapped in risky sexual behaviours which pile on top of each other in a morass of dictating gender norms and coercive sex. Religious groups and parents need to take a more aggressive role in these issues. Inadequate protection and care for children is a violation of basic human rights as well as a foremost factor in the AIDS epidemic in South Africa. The United Nations Convention on the Rights of the Child states that institutions, services and facilities are responsible for the care and protection of children, particularly regarding safety and health.[29] As a democratic society, we must give priority to the human rights of our children; also of paramount importance is the maintenance of our norms and values, which are the foundation of our society. A collaborative approach to AIDS prevention therefore needs to be implemented among all sectors of our society. Risky sexual behaviours are symptomatic of a society in crisis.

Limitations

This study relied on self-reported questionnaires; pupils might have consciously or unconsciously misreported behaviours in ways that they considered to be socially desirable. To increase the validity of self-reported behaviour, confidentiality and anonymity was assured using various measures. To reduce potential inaccuracy of self-reported questionnaires, adolescents were asked to recall their behaviours over a relatively short period of 3 months. However, the study was confined to one cohort of high-school pupils in one locale in South Africa, and therefore any generalisation of the findings should be considered with caution.

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