

Risk-taking behaviour of Cape Peninsula high-school students

Part V. Drug use

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Abstract The prevalence of a wide range of risk-taking behaviour among high-school students in the Cape Peninsula, South Africa, was investigated. In this article, the results for drug use are presented. Cluster sampling techniques produced a sample of 7 340 students from 16 schools in the three major education departments. A self-administered questionnaire was completed in a normal school period. Estimates for each education department were weighted to produce an overall estimate. Cannabis was the illicit drug most widely used; 7,5% had smoked cannabis, and 2,4% had done so in the previous 7 days. A small subgroup (1,6%) of students had smoked cannabis and methaqualone (Mandrax) together. Reported lifetime use of injectable drugs was 0,5%, and 10,9% had sniffed solvents, 2,6% having done so in the previous 7 days. There were different trends according to gender, standard, and language(s) spoken at home. Of particular note was the small proportion of Xhosa-speaking females who were involved with drug use. The results suggest that the majority of drug use among school students is experimental. A small number of adolescents abuse drugs and are at risk for its associated problems; intervention is indicated for this group.

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Substance use among South Africans has been a subject of considerable interest and speculation.^{1,2} Past media claims of an imminent 'drug epidemic' have been lacking in empirical validation.^{1,2} There is, however, no recent research aiming to determine whether the relatively low prevalence of drug use previously documented in South Africa still applies. Internationally, drug use patterns are known to shift dramatically. Trends in the past 2 decades in the USA illustrate this well. Although prevalence rates of cannabis use reached a plateau in the late 1970s³ and early 1980s,^{4,5} and subsequently declined,⁶ there has been an increase in the use of cocaine, 'crack',⁶ and multiple drugs.⁴ The influence of international shifts on drug use patterns in South Africa is unknown. Its distance from the world's leading drug markets and the strict nature of local drug laws⁷ do nevertheless suggest that a different pattern might be expected in South Africa. It is also possible that an increase in drug use has

occurred as a result of local sociopolitical changes, rapid urbanisation, and high unemployment levels. There is, however, little research investigating the extent of the current problem in South Africa. Official statistics tend to underestimate the extent of drug use.¹ Although the onset of drug use occurs almost exclusively in young people,^{1,6,8,9} prevalence data applicable to all local subgroups of this population are not available. It was therefore decided to include drug use as part of a larger study in which risk-taking behaviour among Cape Peninsula high-school students was investigated.¹⁰

Methods

The methodology of the larger study of which this work forms a part has been described in detail elsewhere.¹⁰ The study population was defined as all Cape Peninsula high-school students. Cluster sampling yielded a sample of 7 340 students from 16 schools in the three major education departments. A self-administered questionnaire was completed by each student under conditions approximating those of examinations. Means were weighted to account for the fact that different proportions of students were selected from each education department.

The questionnaire items dealing with drug use were as follows: (i) have you ever smoked dagga on its own? (ii) have you ever smoked dagga and Mandrax together (white pipes)? (iii) have you ever sniffed glue, petrol or thinners? (iv) have you ever used injectable drugs (mainlining)? (v) have you ever used any other type of drug? If a student answered 'yes' to an item, he or she was asked how many times that substance had been used in the previous 7 days.

Results

Cannabis (Table I)

Of the total sample, 7,5% (95% confidence interval (CI) 5,7 - 9,3) reported that they had ever smoked cannabis. More males than females for each standard and language group had smoked cannabis and there was a trend of increased lifetime use with standard. The proportion of Xhosa-speaking females who had used cannabis was particularly small.

Of the sample, 2,4% (95% CI 1,8 - 3,0) reported using cannabis at least once in the past 7 days. More males than females reported recent use for each standard and language group. For both genders variation between the standards was not marked. A relatively large proportion of Xhosa-speaking males reported recent cannabis use.

A relatively large proportion of Xhosa-speaking males reported smoking cannabis on 4 or more occasions during the previous 7 days; 5,9% (95% CI 3,9 7,8) of this group reported having done so, compared with less than 1,8% of every other standard/gender and language/gender group.

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TABLE I
Percentage (with 95% CIs) of students who have used cannabis, by standard and home language(s), and gender (N = 7 340)*

	Males	Females
Lifetime use†		
Standard		
6	4,1 (2,6 - 5,5)	0,9 (0,0 - 1,8)
7	7,2 (5,5 - 8,8)	3,4 (1,5 - 5,3)
8	12,2 (8,5 - 15,9)	4,2 (2,3 - 6,1)
9	17,5 (12,1 - 22,9)	6,9 (3,8 - 10,1)
10	18,2 (14,0 - 22,4)	9,0 (6,6 - 11,3)
Language(s)		
Afrikaans	8,2 (6,1 - 10,2)	3,1 (2,1 - 4,0)
Afrikaans and English	10,7 (7,4 - 14,0)	4,6 (2,9 - 6,3)
English	14,8 (10,2 - 19,5)	8,5 (5,4 - 11,7)
Xhosa	14,7 (12,8 - 16,6)	0,8 (0,4 - 1,1)
Recent use‡		
Standard		
6	2,6 (1,6 - 3,6)	0,3 (0,0 - 0,5)
7	3,6 (2,3 - 4,9)	1,0 (0,2 - 1,8)
8	4,8 (3,2 - 6,4)	2,1 (0,5 - 3,7)
9	4,3 (1,8 - 6,7)	1,8 (0,9 - 2,7)
10	3,4 (0,7 - 6,1)	1,3 (0,5 - 2,2)
Language(s)		
Afrikaans	2,7 (1,8 - 3,6)	1,1 (0,6 - 1,7)
Afrikaans and English	3,2 (1,5 - 4,8)	1,4 (0,8 - 2,0)
English	3,3 (1,3 - 5,3)	1,8 (0,9 - 2,7)
Xhosa	10,0 (7,1 - 12,9)	0,7 (0,1 - 1,2)

* 154 missing responses.

† 'Lifetime use' defined as 'ever used'.

‡ 'Recent use' defined as 'at least once in previous 7 days'.

Cannabis and methaqualone (Mandrax) (Table II)

Of the total sample, 1,6% (95% CI 0,9 - 2,4) reported having used cannabis and methaqualone together.

Of Xhosa-speaking males, 2,3% (95% CI 1,5 - 3,3) reported smoking cannabis and methaqualone together at least once in the past 7 days. Other than this subgroup, less than 1% of the sample reported recent use.

TABLE II
Percentage (with 95% CIs) of students who have smoked methaqualone and cannabis together, by standard and home language(s), and gender (N = 7 340)*

	Males	Females
Lifetime use†		
Standard		
6	1,7 (0,9 - 2,4)	0,3 (0,0 - 0,6)
7	1,8 (1,1 - 2,6)	0,8 (0,1 - 1,5)
8	3,7 (1,0 - 6,5)	0,5 (0,0 - 1,1)
9	3,2 (1,7 - 4,8)	1,0 (0,3 - 1,6)
10	3,7 (1,0 - 6,6)	0,8 (0,0 - 1,6)
Language(s)		
Afrikaans	2,3 (1,0 - 3,6)	0,2 (0,0 - 0,5)
Afrikaans and English	3,0 (1,2 - 4,8)	1,3 (0,6 - 2,0)
English	3,1 (0,0 - 6,2)	1,1 (0,3 - 2,0)
Xhosa	3,1 (2,1 - 4,1)	0,2 (0,0 - 0,4)

* 200 missing responses.

† 'Lifetime use' defined as 'ever used'.

Injectable and other drugs

Reported lifetime use of injectable drugs was 0,5% (95% CI 0,3 - 0,7); of the total sample, 0,2% (95% CI

0,1 - 0,3) had used them at least once in the previous week.

Reported use of other drugs such as cocaine, opium, LSD and heroin was extremely rare.

Solvents (Table III)

Of the sample, 10,9% (95% CI 7,0 - 14,7) had previously sniffed glue, petrol or thinners. More males than females for each standard and language group reported lifetime use. Increased lifetime use with standard was reported for both genders. The incidence of solvent use was highest among students whose home language was English. Few Xhosa-speaking females reported ever having sniffed solvents.

Of all the students, 2,6% (95% CI 1,8 - 3,3) reported sniffing solvents at least once in the past 7 days. Few Standard 10 students reported recent episodes of solvent use. English-speaking students and Xhosa-speaking males had relatively higher rates of solvent use. Very few Xhosa-speaking females reported recent solvent use.

In terms of heavy solvent use, 0,5% (95% CI 0,3 - 0,8) indicated that they had sniffed solvents 3 or more times in the past 7 days.

TABLE III
Percentage (with 95% CIs) of students who have sniffed solvents, by standard and home language(s), and gender (N = 7 340)*

	Males	Females
Lifetime use†		
Standard		
6	7,3 (4,2 - 10,3)	7,2 (3,9 - 10,5)
7	11,6 (7,0 - 16,3)	9,1 (5,7 - 12,6)
8	11,9 (7,4 - 16,4)	9,1 (5,9 - 12,3)
9	16,8 (10,4 - 23,2)	10,4 (3,3 - 17,5)
10	16,8 (11,5 - 22,1)	12,6 (7,3 - 17,9)
Language(s)		
Afrikaans	7,4 (5,8 - 9,0)	4,9 (3,1 - 6,8)
Afrikaans and English	10,4 (7,0 - 13,8)	10,2 (7,3 - 13,2)
English	23,5 (20,8 - 26,2)	20,1 (16,1 - 24,1)
Xhosa	8,1 (3,4 - 12,9)	0,8 (0,6 - 1,0)
Recent use‡		
Standard		
6	3,2 (1,8 - 4,6)	2,1 (0,5 - 3,6)
7	3,7 (2,1 - 5,4)	3,6 (2,0 - 5,1)
8	3,2 (2,3 - 4,0)	2,2 (0,9 - 3,6)
9	3,2 (1,4 - 5,0)	1,6 (0,4 - 2,7)
10	0,4 (0,0 - 1,1)	0,8 (0,0 - 1,6)
Language(s)		
Afrikaans	1,5 (0,7 - 2,3)	1,4 (0,9 - 2,0)
Afrikaans and English	2,9 (1,5 - 4,4)	2,4 (1,4 - 3,3)
English	5,0 (4,3 - 5,7)	4,0 (2,7 - 5,4)
Xhosa	4,1 (1,1 - 7,1)	0,1 (0,0 - 1,6)

* 180 missing responses.

† 'Lifetime use' defined as 'ever used'.

‡ 'Recent use' defined as 'at least once in previous 7 days'.

Discussion

The consistently large disparity between the extent of lifetime and recent use indicates that for the majority of Cape Peninsula adolescents most drug use is of an experimental and temporary nature. Drug use is confined almost exclusively to cannabis and solvents, and other illicit drugs are shown to be used rarely among this population. Frequent drug use is also uncommon and, with the exception of a subgroup of Xhosa-speaking male cannabis smokers, frequent users of any drug consistently comprise less than 1% of the total sample.

The findings show that males tend to be more involved with drug use than females. Furthermore, for both genders the proportion of adolescents who have experimented with cannabis and solvents increase with age. Variations in drug use also exist between the language groups. In this regard the ratio between lifetime and recent use among these groups is noteworthy. Although a considerable number of non-Xhosa-speaking males have previously smoked cannabis, a far smaller proportion have used the drug recently. Conversely, among Xhosa-speaking males the difference between the prevalence of lifetime and current use is smaller; this suggests a more entrenched pattern of use. Among females, fewer students of any language group have been involved in lifetime or recent episodes of drug use. English-speaking females report the highest lifetime prevalence of cannabis and solvent use. In contrast to their male counterparts the extent of drug use among Xhosa-speaking females is extremely low. The small percentages reported for cannabis and methaqualone, and injectable drugs preclude the drawing of reliable conclusions.

Of all subgroups it emerges that Xhosa-speaking males are possibly most at risk for continued drug use and its negative consequences. Their behaviour goes further than experimentation. The relatively small proportion of Xhosa males who are involved in methaqualone use provides little reassurance, since our findings reflect drug use only among a school-going population, and prevalence rates may be higher among absentees and dropouts.^{5,10}

Our study endorses earlier findings^{1,2,7,11,12} that the extent of drug use among South African adolescents is considerably lower than suggested by media sentiment. Furthermore, for all drugs the extent of use among Cape Peninsula adolescents is markedly less than observed in Australia and the USA.^{4,6,13-17} Even with respect to use of cannabis, a drug freely available in South Africa, prevalence is far lower than reported elsewhere. For example, in a national survey conducted among adolescents in the USA, 59% of students had previously used cannabis, 29% had used it in the previous month, and 6,3% were using it on a daily basis.⁴ In light of the increased international prominence given to the phenomenon of multiple drug use,^{4,6} the extremely small proportion of 'hard' drug users found both in this study and in other local research,^{1,2,7,11,12} indicates that a similar trend has not evolved among South African school-going adolescents.

Drug abuse is generally recognised as arising out of a complex interaction of sociocultural and personality factors.⁹ Despite its illicit nature, drug use in itself does not constitute abuse for the majority of adolescents but rather a developmental phenomenon. In most cases it is a short-lived experimentation.^{6,8,18} It has not been established whether any specific drug education programme would have the desired effect on behaviour. Owing to an inherent adolescent curiosity, these programmes could have a paradoxical effect in that experimentation might be encouraged.¹ There may nevertheless be a need for some form of preventive activity, since the prevalence of drug use is known only to peak in early adulthood.¹ Where school-based preventive programmes are offered, drug awareness should be incorporated as part of a

general life-skills education.

There is, however, a subgroup of adolescents for whom drug use has clearly exceeded the limits of curiosity. Intervention should be aimed at this group, who are at risk for more serious drug-related disorders. In this regard, schools should be assisted to identify those adolescents in need of intervention as early as possible and refer them to the appropriate centres. An important task is also identification of those adolescents who have progressed further down the continuum of drug stages^{4,19,20} and who may already have dropped out of school as a result of heavy use. Individuals from this group are most likely to present at drug rehabilitation centres with serious drug abuse problems (D. Wilson — personal communication).

Please see the first article in this series¹⁰ for acknowledgements.

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