



SACENDU



Research Brief, Vol 5 (2b), 2002

Monitoring Alcohol and Drug Abuse Trends in South Africa (July 1996 - June 2002)

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Phase 12

Foreword

The 12th report back meeting of the South African Community Epidemiology Network on Drug Use (SACENDU) took the form of regional meetings in Cape Town (9 October), Port Elizabeth (PE) (15 October), Pretoria (16 October) and Durban (17 October). These meetings were attended by about 170 persons.

SACENDU was established in 1996 by the Medical Research Council of South Africa (MRC) and the University of Durban-Westville's School of Psychology with technical support from the US National Institute on Drug Abuse (NIDA). Financial support for this project was initially provided by the United Nations Development Programme (UNDP) via the Programme on Substance Abuse of the World Health Organization (WHO/PSA). Financial support for Phase 12 was provided by the Gauteng Department of Social Services and Population Development, and the Mental Health and Substance Abuse Directorate of the national Department of Health.

SACENDU is a network of researchers, practitioners and policy makers from five sentinel areas in South Africa (Cape Town, Durban, PE, Gauteng Province and Mpumalanga Province). Members of SACENDU meet every six months to provide community-level public health surveillance of alcohol and other drug (AOD) use trends and associated consequences through the presentation and discussion of quantitative and qualitative research data. Through this initiative SACENDU provides descriptive information on the nature and pattern of AOD use, emerging trends, risk factors associated with AOD use, characteris-

tics of vulnerable populations, and consequences of AOD use in South Africa.

The SACENDU initiative has several specific objectives:

- To develop networks of local role players in the substance abuse area.
- To identify changes in the nature and extent of AOD abuse and emerging problems (i.e. to act as an early warning system).
- To identify changes in alcohol and other drug-related negative consequences.
- To inform policy, planning and advocacy efforts at local and other levels.
- To stimulate research in new or under-researched areas that are likely to provide useful data to inform policy/planning decisions.
- To facilitate South Africa's full participation in international fora focusing on the epidemiological surveillance of drug abuse.

Treatment centres: Site summary

In Cape Town the most common primary substances of abuse reported by the 23 specialist treatment centres participating in the project between January - June 2002 were alcohol, the cannabis (dagga)/Mandrax (Methaqualone) "white pipe" combination, and cannabis (together comprising 83% of all admissions) (Table 4). The proportion of patients in treatment for alcohol abuse has remained fairly stable over the past two years. The proportion of persons in treatment for the abuse of the dagga/Mandrax combination has also remained

Continued on page2

Table of Contents

Foreword	1	Implications for future research and policy	12
Treatment centres: Site summary	1		
Findings by drug of use/abuse	3		

fairly stable over the past 2 years (20%-25%). The proportion of patients with heroin as their primary substance of abuse remained fairly stable, while the proportion of patients with cocaine or crack as their primary substance seems to be decreasing slightly since the second half of 2001. Figures for other primary substances of abuse remained stable. Overall, 1 608 patients were treated across all 23 treatment centres in the 1st half of 2002, a slight increase compared to the second half of 2001.

In Durban the main primary substance of abuse was alcohol, followed by cannabis on its own, then cocaine/crack (together comprising 94% of all admissions). Admissions where cannabis or the cannabis/Mandrax combination is the primary substance of abuse have remained fairly stable, and admissions where cocaine/crack is the primary substance of abuse have increased slightly (Table 4). A total of 718 patients were treated in the three treatment centres included in Durban and a fourth centre in Underberg.

In PE the main primary substances of abuse reported by the treatment centres from January - June 2002 were alcohol followed by the cannabis/Mandrax combination and cannabis alone (together comprising 94% of admissions). A decrease in patients presenting for alcohol abuse was noted and an increase in patients treated for cannabis or Mandrax related problems. Proportions are similar to those experienced in the 1st half of 2001. During this period 431 persons were treated at the SANCA PE and Welbedacht centres, a slight increase over the previous period.

Editorial Note: Please note that some of the data reported for Port Elizabeth refers to the SANCA treatment centre only (such as the substance type breakdowns by race, gender and details on age).

In Gauteng Province, which includes the metropolitan areas of Johannesburg and Pretoria, 2945 admissions to 17 treatment centres were recorded in the 1st half of 2002. Treatment demand has increased slightly from 2 676 patients in the previous reporting period. In the case of 54% of patients the primary substance of abuse was alcohol. Apart from alcohol, the most common primary substances of abuse were

cannabis alone (24%), heroin (7%), cocaine/crack (6%), and cannabis/Mandrax (5%). All proportions have remained fairly stable compared to the previous reporting period. Heroin seems to have established itself as the third most common primary substance of abuse (after alcohol and cannabis).

In Mpumalanga the main primary substance of abuse reported by the treatment centres between January – June 2002 was alcohol followed by cannabis (together comprising 86% of admissions). Data from the previous six-month period indicates that a decrease in the proportion of patients with cannabis/Mandrax as their primary substance of abuse has occurred, and an increase in patients with heroin as their primary substance of abuse. During this period 419 persons were treated at the four treatment centres included in the study (i.e. Swartfontein, Themba (now Mkondo), SANCA Witbank, and SANCA Nelspruit). This number remained fairly stable when compared to the previous period.

Treatment issues

First time admissions: The proportion of first time admissions to treatment centres in Cape Town, Durban, PE, Gauteng and Mpumalanga was 67%, 84%, 83%, 65% and 73% respectively. These proportions have remained fairly stable. First time admissions provides a crude estimate of the incidence of drug abuse.

Referrals: Across all sites, the most common sources of referral to specialist treatment centres were "self/family/friends". In Cape Town, PE, Durban and

Mpumalanga this was followed by "work/employer". In Gauteng "social services" was the second most common source of referral. (Table 1). Referral sources have remained fairly stable over time and across sites.

Gender: Across all sites between 81% (in Gauteng) and 85% (in Durban) of patients were male, but gender differences were noted for various primary substances of abuse (see under specific drugs below). It appears that women are still not adequately represented in treatment centre statistics. This probably reflects an unmet service need as well as the fact that substance abusing males may act out more and may thus be more likely to be encouraged or forced to go into treatment.

Race: Black-Africans continue to be under-represented in the treatment population in all five sites (Table 4), however the proportion of Black-African patients in treatment increased in slightly in Durban and Cape Town during the 1st half of 2002. Furthermore, 51% of all patients younger than 20 years in Gauteng were African, while only 22% of those older than 19 years were African. In Cape Town 23% of patients younger than 20 years were African compared to 11% of those who were 20 years or older. Thus there is an indication that there is better access to and utilization of treatment facilities by young African people compared to the adults.

Employment, marital status, education: In Gauteng, Cape Town and PE about a third of patients in treatment are employed full-time, whereas in Durban and Mpumalanga about half are employed full-time. The proportion of

Table 1: Selected referral sources (January - June 2002) (Column % add up to 100)

Source	Cape Town	Durban	PE	Gauteng	Mpumalanga
Self/family/friends	39%	41%	38%	60%	41%
Work/employer	15%	27%	21%	9%	26%
Social services/welfare	12%	10%	5%	12%	5%
Doctor/psychiatrist/nurse (aka health professionals)	10%	8%	11%	4%	3%
Hospital/clinic	4%	2%	7%	2%	2%
Court/correctional service	7%	5%	7%	3%	16%
Schools	4%	5%	9%	7%	5%
Church/religious body	3%	< 1%	2%	1%	2%
Other e.g. radio	4%	2%	1%	1%	1%

patients who are students/pupils is increasing in all sites and ranges from 10% in Mpumalanga to 22% in PE. Across sites between 40% and 56% of patients have never been married, and over 70% of patients in all sites have some secondary school education.

Mode of use: Smoking remains the most common mode of use for substances other than alcohol. Injection drug use is still low across sites but in Cape Town 45% of patients with heroin as their primary substance of abuse reported injecting as a mode of use and in Gauteng 42%.

Age of patients: Across sites the average age of persons seen by treatment centres was 32-35 years and has remained fairly stable (Table 2). However, major age differences were noted for different substances. Persons whose primary substance of abuse is alcohol are substantially older than persons having

other primary substances of abuse. Conversely, patients whose primary substances of abuse are cannabis, heroin or Ecstasy tend to be younger than persons who have cocaine as their primary drug of abuse. The proportion of patients younger than 20 years is also remains high in most sites, with between a fifth and a quarter falling in this age group in Gauteng, Cape Town, Durban and PE (Figure 1).

Sources of payment

The most common source of payment in Cape Town, Gauteng, PE and Durban was "family". In Gauteng this was followed closely by the "state". In Durban and PE 20% of patients had "medical aid" as their source of payment, the highest proportions of all the sites. In Mpumalanga the most common source was the state followed by the employer.

FINDINGS BY DRUG OF USE/ABUSE

Alcohol

Specialist treatment centres

Alcohol is still the most common primary substance of abuse among patients seen at specialist treatment centres across all five sites, accounting for 71% of admissions in Mpumalanga, 65% of admissions in Durban, 54% of admissions in Gauteng, 45% of admissions in PE and 48% of admissions in Cape Town (Table 4). The proportion of alcohol-related admissions remained fairly stable in all sites except PE where a decrease from 58% in the 2nd half of 2001 occurred.

The mean age of patients seen at treatment centres who had alcohol as the primary substance of abuse was 37 years in PE, 38 years in Durban, 41 years in Gauteng, and 40 years in Cape Town and Mpumalanga. This is substantially older than the mean age for other drugs (see Table 2). Such patients are also more likely to be male. The proportion of patients in Cape Town with alcohol as the primary substance of abuse who were female was 21%, 20% in Gauteng, 13% in Durban, 23% in PE and 15% in Mpumalanga. 52% of patients treated for alcohol abuse in Cape Town were Coloured, whereas in Gauteng 68% were white. In Mpumalanga 47% were African and 49% were white. In PE 41% were African and 40% were Coloured. In Durban 31% of the patients having alcohol as their primary substance of abuse were Indian and 33% were Black (Table 6).

Figure 1: Treatment demand trends - % of patients <20 years

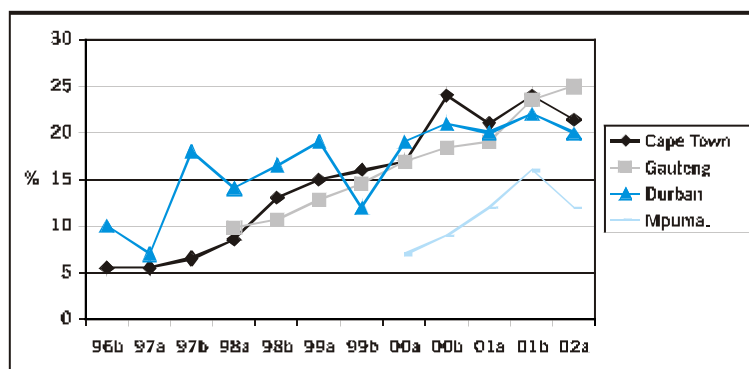


Table 2: Mean age of patients in treatment centres by selected primary drugs of abuse (January - June 2002)

Substance	Cape Town	Durban	PE*	Gauteng	Mpumalanga
Alcohol	40	38	37	41	40
Cocaine/crack	30	29	36	28	27
Cannabis/Mandrax	26	25	25	21	28
Heroin	24	-	-	23	25
Ecstasy	22	22	23	20	23
Cannabis	19	21	20	19	23
All substances	32	33	29	32	35

* Data from SANCA PE only (i.e. excluding Welbedacht treatment centre)

Psychiatric treatment

Alcohol-related diagnoses are common among psychiatric inpatients seen in Cape Town, accounting for 22% of discharge diagnoses at Stikland Hospital. At the Elizabeth Donkin Psychiatric Hospital in PE 7% of patients had an alcohol-related discharge diagnosis. In Gauteng at TARA Hospital 8% of discharge diagnoses were alcohol-related (although most had 'alcohol with another psychiatric diagnosis'). This figure has remained fairly stable. Some patients (10%) were also diagnosed with a combination of 'alcohol, other drug and psychiatric diagnosis'.

Other studies

Via the MRC's Crime Violence and Injury Lead Programme's National Injury and Mortality Surveillance System (NIMSS) alcohol-related mortality was assessed in four of the SACENDU sites for 2001. Between 36% and 60% of all non-natural death cases tested for alcohol had blood-alcohol concentrations (BAC) greater than or equal to 0.05g/100ml. Durban had the lowest proportion with BACs greater than or equal to 0.05g/100ml and PE had the highest proportion. Transport and homicide cases were more likely to have BACs greater than or equal to 0.05g/100ml than suicide cases. Pedestrian casualties were most likely to have BACs greater than or equal to 0.05 in all sites (Table 3).

during 2002 found that 30% of the primary school pupils (grade 6 and grade 7) surveyed had tried alcohol at least once and 23% were 'still drinking alcohol'. Figures for the high school students (grade 8 – grade 11) were similar, with 31% having tried alcohol and 25% reporting that they 'still drink'. The reported mean age of initiation to alcohol was 10 years for the primary school and 13 years for the high school students.

A survey conducted by Pretorius (Department of Psychology, University of the Free State) during 2002 amongst 302 grade 11 learners in the Eastern Cape (East London and surrounding areas) found that 64% had used alcohol at

male in-school youth reported current use of alcohol. Figures for females were substantially lower with 23% of the out-of-school females and 20% of the in-school females reporting current use of alcohol.

A community survey conducted amongst young adults aged 18 to 22 years in Durban found significant correlations between the use of alcohol and certain risky sexual behaviours. For example there was a positive correlation between the use of alcohol and number of sexual partners. Alcohol use was also associated with delinquent behaviour and the use of cannabis and tobacco. A second household survey amongst adolescents aged 12-17 years in Durban

Table 3: Percentage of non-natural deaths with BACs \geq 0.05g/100ml for 2001

	No. of mortuaries	Overall	Homicide	Suicide	Transport	Pedestrians	Drivers
Cape Town	2	54	57	37	56	68	55
PE	3	60	65	37	68	75	67
Gauteng	7	36	36	29	42	52	43
Durban	3	33	34	24	37	43	35

Source: Crime Violence & Injury Lead Programme, MRC (NIMSS)

A cross-sectional community survey conducted among 90 adolescents aged 11-17 years in nine communities in Cape Town in August 2002 found that a third of the adolescents had been drunk at least once. The risk of having been drunk was associated with being white, having peers who drink and with being exposed to public drunkenness on a daily or at least weekly basis. Attendance at religious services (at least weekly) was found to be a significant protective factor against drunkenness. The survey was conducted by the Medical Research Council's Alcohol and Drug Abuse Research Group.

A survey conducted by Bridges, a drug abuse prevention NGO, in five primary schools and two high schools in the Helderberg region of the Cape Metropole

least once. Of the students that did use alcohol 25% were classified as 'abusing alcohol' and 23% were classified as being 'dependent'.

A recent survey among 1318 grade 10 learners in southern rural KwaZulu-Natal (KZN) high schools conducted by Taylor (Department of Community Health of the Nelson R. Mandela School of Medicine) found that overall 52% had used alcohol at least once. However, of the female students only 26% had used alcohol at least once. Overall 13% reported weekly drinking.

Another survey conducted amongst 2205 adolescents by Adejumo (School of Nursing, University of Natal), in rural northern KZN found that 50% of the male out-of-school youth and 32% of

yielded similar findings. Both surveys were conducted by the Medical Research Council's Alcohol and Drug Abuse Research Group in collaboration with Mount Sinai School of Medicine, New York.

In May 2002, the University of Kentucky HIV and Alcohol Prevention in Schools (HAPS) Project conducted a baseline survey of 1279 Grade 8 and 9 learners in 5 comparable schools in Pietermaritzburg township areas. Results indicated that 31% of Grade 8 learners and 38% of Grade 9 learners have ever used alcohol. Of learners who had sex within the past 3 months (29%), 48% said they did not use a condom during last sex. Learners also displayed lack of knowledge about several key HIV-related facts.

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Cannabis (dagga) and cannabis/Mandrax

Specialist treatment centres

Cannabis or cannabis/Mandrax ("white pipes") were the second most common primary substances of abuse among patients seen

at specialist treatment facilities, together accounting for 35% of admissions in Cape Town, 27% in Gauteng, 48% in PE, 24% in Durban and 16% in Mpumalanga (Table 4). These proportions remained fairly stable when compared to the previous 6 months in Cape Town, Gauteng and Mpumalanga, but decreased in Durban and increased in PE. These substances

were also commonly reported as secondary drugs of abuse. Persons seen in specialist treatment centres who had 'white pipes' as their primary substance of abuse tended to be older than those who had cannabis alone as their primary substance of abuse in Cape Town and PE (by 5-6 years), with the cannabis patients being an average of 19-20 years (Table 2). Data from specialist treatment

centres suggests that the use of these substances is mainly a male phenomenon. In Cape Town and Gauteng only 5% of patients whose primary substance of abuse was 'white pipes' were female, and 9% of patients whose primary substance was cannabis on its own were female. The corresponding percentages for Durban were 7% and 9%, 0% and 12% for Mpumalanga, and 7% and 9% for PE. In Cape Town 54% of patients with cannabis as their primary substance of abuse were Coloured, 23% were Black/African and 19% were white. Similarly in PE 59% were Coloured, 22% Black and 12% were White. In Gauteng 53% were Black/African and 30% were white (Table 6). Cannabis patients in Mpumalanga were mainly Black/African (50%) or white (44%). Patients whose primary substance of abuse was the 'white pipe' combination were predominantly Coloured in Cape Town and PE, Indian in Durban, and Black/African in Gauteng.

The most common primary substance of abuse for patients younger than 20 years in all sites is cannabis. In most sites the second most common primary substance for these patients is the cannabis/Mandrax combination.

Arrests, seizures & price

The proportion of arrests for dealing in cannabis ranged from 22% of arrests in Cape Town to 55% of arrests in PE. In comparison to the 2nd half of 2001, an increase in the proportion of arrests for dealing in cannabis was noted in PE, while the proportions in the other sites remained fairly stable. In terms of seizures the largest amount seized/found between January – June 2002 was in PE, 695 093kg (Table 8). Seizures of cannabis increased slightly in Durban and Gauteng.

The proportion of arrests for dealing in Mandrax (as compared to other drugs) increased in Durban, but remained fairly stable in the other sites (Table 6). Seizures recorded by SANAB increased in Gauteng (to 1.8 million tablets) but decreased or remained stable in the other sites.

The Forensic Science Laboratory (FSL) in Pretoria recorded a total of 2 616 588 Mandrax tablets seized between January - June 2002, representing a slight increase over the previous period. The FSL in the Western Cape recorded a decrease in Mandrax seizures: 23 345 tablets compared to over 100 000 in

the previous period. At the Eastern Cape FSL 7 306 Mandrax tablets were recorded during January – June 2002 compared to 10 964 during July – December 2001. The FSL in KZN reported receiving 714 cases of Mandrax and a total of 10 831 tablets during January – June 2002. A case often involves the seizure of multiple tablets. Compared to the 2nd half of 2001 a decrease in Mandrax seizures was noted. The Pretoria FSL reported that 8 cases involving Mandrax were sent to their lab from Mpumalanga and a total of 317 Mandrax tablets were analyzed during January – June 2002.

The price of cannabis remains at about R1 per gram. The price of Mandrax tablets varies from R25-R40 in most sites. A slight increase in the price of Mandrax was noted in PE in the first half of 2002, where tablets were now reported to cost between R50 and R60.

Other studies

The survey conducted in rural northern KZN found that 37% of the male out-of-school youth and 18% of male in-school youth had tried cannabis at least once. Figures for females were substantially lower with 12% of the out-of-school females and 4% of the in-school females reporting lifetime use of cannabis. Furthermore 27% of the male out-of-school youth reported that they currently

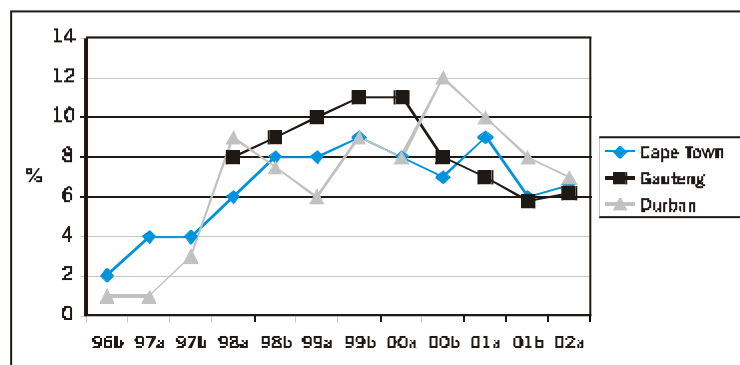
10% of the primary school pupils had tried cannabis and over 25% of the high school students had tried it. Most of the high school students who had tried it went on to report that they "still use cannabis".

The University of Kentucky HIV and Alcohol Prevention in Schools (HAPS) Project found that twelve percent of Grade 8 learners and 14% of Grade 9 learners have used dagga.

Cocaine/Crack Specialist treatment centres

The proportion of patients at specialist treatment centres whose primary substance of abuse was cocaine powder/crack remained stable in all sites (Table 4). The proportion of patients in Cape Town, Durban, PE, Gauteng and Mpumalanga who had cocaine/crack as their primary drug of abuse was 7%, 7%, 1%, 6% and 2% respectively (Figure 2). Cocaine powder is primarily snorted, and crack is smoked. In Cape Town 14% and in Gauteng 15% of all patients had used crack/cocaine either as their most frequently used substance, or their second, third or fourth most frequently used substance. In Gauteng cocaine/crack was the 3rd most commonly reported secondary drug of abuse after cannabis and alcohol.

Figure 2: Proportion (%) of persons in treatment with cocaine as their primary drug of abuse



use cannabis and 12% of the in-school males.

The survey conducted in southern rural KZN found that almost 20% of the male students had used cannabis at least once, compared to less than 5% of the female students.

The Bridges primary and high school survey conducted in the Helderberg district of Cape Town found that almost

In Cape Town, Gauteng, Durban and Mpumalanga the mean age of persons in treatment whose primary drug of abuse is cocaine powder or crack was 27 to 30 years (Table 2). In Cape Town 26%, in 33% Durban, and in Gauteng 34% of patients whose primary substance of abuse was cocaine powder were female. Crack followed a similar trend. The majority of patients with cocaine/crack as their primary substance of abuse were white in all sites (Table 6).

Arrests, seizures & price

The proportion of SANAB arrests for dealing in cocaine ranges from 3% of all arrests in PE to 31% of all arrests in Gauteng (Table 7). Durban showed a decrease in the proportion of arrests for dealing in cocaine/crack in the 1st half of 2002, whereas figures remained stable in Cape Town and Gauteng. Seizures of cocaine, however, increased in all sites compared to the previous reporting period (Table 8). Seizures of cocaine reported by the FSL in Pretoria increased from 22.6kg in the 2nd half of 2001 to 57kg in the 1st half of 2002. The number of cases processed also increased from 300 in the 2nd half of 2001 to 467 in the first half of 2002. The Western Cape FSL reported another substantial increase in cocaine seizures from about 166kg in the second half of 2001 to 312kg in the first half of this year. At the FSL in KZN an increase in cocaine seizures was reported: 5.9kg were sent to this lab for analysis during January – June 2002 compared to 1.7kg in the 2nd half of 2001. The FSL in PE processed 22 cases of cocaine with a total mass of 307g during January – June 2002, a decrease compared to the previous period. The Pretoria FSL recorded 6 cocaine cases from Mpumalanga in the 1st half of 2002, totalling 7 grams. The price of cocaine/crack varies due to various factors such as purity, but has remained fairly stable in sites where data was available. The price ranges from R200-R300 per gram for cocaine powder and from R35-R100 per crack rock in most sites. PE reports substantially higher prices for crack (R250 per rock).

Other studies

The Bridges primary and high school survey conducted in the Helderberg district of Cape Town found that less than 1% of respondents reported ever having used cocaine or crack.

The survey conducted by the School of Nursing, University of Natal, in northern KZN found that 7% of male out-of-school youth and 5% of in-school males reported having used cocaine at least once. The corresponding proportions for female students were 4% and 2% respectively. Furthermore, 6% of the out-of-school males reported that they currently use cocaine. In the survey conducted in southern rural KZN almost 10% of the male students reported having tried cocaine or crack compared to about 2% of the female students.

Over-the-counter and prescription medicines

Specialist treatment centres

Between 2% and 4% of patients seen at specialist treatment centres in Cape Town, Durban, PE, Gauteng, and Mpumalanga from January – June 2002 had over-the-counter (OTC) or prescription medicines (PRE) listed as their primary substance of abuse. This is fairly similar to the previous six-month reporting period. In Gauteng and Mpumalanga about 60% of patients who had over-the-counter or prescription medicines as their primary substance of abuse were female, and in Cape Town, Durban and PE over two thirds were female. Substances abused included benzodiazepines, analgesics, Codeine products, Valium, Grandpa headache powder, Rohypnol, and Stilpayne.

Psychiatric treatment

Almost 30% of the patients treated at Gauteng's TARA hospital psychiatric ward during January – June 2002 who had an alcohol or drug related diagnosis, had benzodiazepines or OTC medicines as a substance of abuse.

Seizures

SANAB (PE) reported that 22 tons of Schedule 4 medicine tablets were seized in the 1st half of 2002 and SANAB in Durban reported that about R1.4 million worth of various medicines were seized in the same period.

Club drugs: Ecstasy, Speed (Methamphetamine), and LSD

Specialist treatment centres

The proportion of persons using specialist treatment services whose primary drug of abuse was Ecstasy, LSD, or Speed remains low across all sites. No more than 2% of patients reported Ecstasy as their primary substance of abuse across the five sites. Ecstasy was reported as a "second and third most frequently used substance" by several persons attending specialist substance abuse treatment facilities in Cape Town, Durban and Gauteng, especially those younger than 20 years. The patients in treatment where the primary drug of abuse was Ecstasy were mostly white, except in Cape Town where they were

Coloured or white (Table 6). Over 70% of Ecstasy patients were male in all sites.

Arrests, seizures & price

The proportion of SANAB arrests for dealing in Ecstasy have remained fairly stable in all sites, although a slight increase did occur in Cape Town compared to the 2nd half of 2001. Seizures of Ecstasy increased in all sites with Durban, Gauteng and PE having the highest number of tablets ever seized in a single six-month period. Over 165 000 tablets were seized in Gauteng during January – June 2002. Proportions of arrests for dealing in LSD and seizures of LSD decreased or remained stable in all sites. The price of an Ecstasy tablet varies between R35 and R120 depending on factors such as the site and availability. Prices appear to be stable.

The Pretoria FSL reported receiving over 100 000 tablets of amphetamine-type stimulants (ATS) (most of which are MDMA). This figure remained on a par with the amount recorded in the previous period. The KZN FSL also recorded a slight increase in seizures of ATS tablets in the 1st half of 2002. About 10 000 tablets were seized in the second half of 2001 compared to 11 195 in the first half of 2002. The Western Cape FSL also recorded an increase in ATS seizures in the 1st half of 2002. Over 28 000 tablets were seized in this period compared to about 6 000 in the previous period. The PE FSL processed 8 272 ATS tablets, also an increase over the previous six months. Seizures of ATS in Mpumalanga remained fairly low. Reported seizures of LSD decreased in all sites. About 200 units of LSD were processed at the Pretoria lab, 119 at the Western Cape lab and none at the other two labs. In the 2nd half of 2001 over 1 200 units were recorded at the Pretoria FSL and over 5 000 at the Western Cape FSL.

Other studies

Very few students in the Bridges school survey in Cape Town and the two surveys in KZN reported ever having used Ecstasy. A survey conducted by RaveSafe at a recent rave in Gauteng found that 85% of the 54 respondents had tried Ecstasy. Of these almost a quarter reported weekly use of Ecstasy. About 70% had also tried LSD, however only 3% reported weekly use. Speed had been tried by about a quarter of the respondents.

Heroin

Specialist treatment centres

In Cape Town and Gauteng 7% of patients in specialist treatment centres had heroin as their primary drug of abuse, which represents a slight increase in Cape Town and an overall increase over the last 5 years in both sites (Figure 3). In Mpumalanga 4% of patients had heroin as their primary substance of abuse, also an increase over previous periods (Table 4). Less than 1% of patients in Durban had heroin as their primary drug of abuse and no patients in PE were recorded as having heroin as their primary drug of abuse. The mean age of persons seen by treatment centres in Cape Town, Mpumalanga and Gauteng who had heroin as their primary substance of abuse was 23-25 years (Table 2). Heroin appears to be less of a male phenomenon than drugs such as

cannabis and Mandrax. In Cape Town and Gauteng about a quarter of patients with heroin as the primary substance of abuse were female. Furthermore proportions of female patients with heroin as their primary drug of abuse are higher amongst female patients younger than 20 years (1/4) than for those who are 20 years or older (1/16) (Figure 4).

Intravenous use by patients with heroin as their primary drug of abuse seems to be stable in Cape Town with about half (45%) of heroin patients in Cape Town reporting *some* injecting versus 42% in Gauteng, where the figure increased from 36% in the previous period. In Mpumalanga almost half of the 15 heroin patients reported injecting as a mode of use. Over 95% of patients with heroin as their primary substance of abuse were White in Gauteng (Table 6). In Cape Town about 84% were white, 10% Coloured and 5% Black/African. In

Mpumalanga all patients were white, except two patients who came from Mozambique. In Cape Town 8% and Gauteng 10% of all patients reported the use of heroin, as either a 1st, 2nd, 3rd, or 4th most frequently used substance. In Cape Town 65% of heroin patients who were younger than 20 years were female in the 1st half of 2002. At a private treatment centre in Pretoria 45% of patients seen during January – June 2002 had heroin as their primary substance of abuse, although this centre has the reputation of dealing with heroin withdrawal.

Arrests, seizures & price

The proportions of arrests for dealing in heroin remained fairly low and stable in Cape Town and Gauteng. No arrests for dealing in heroin were made in PE and Durban. In Gauteng seizure indicators for heroin showed an increase. Some heroin (95g) was also seized by SANAB in Durban. The KZN and Pretoria FSLs recorded increases in heroin seizures. The largest amounts continue to be processed by the Pretoria lab (6kg in the 1st half of 2002). Seizures remain very low in Mpumalanga (0.5g in the 1st half of 2002) and PE (0.06g in the 1st half of 2002). The price of heroin ranges from R120-R350 per gram, with cheaper prices generally being reported in Cape Town.

Other studies

The survey of in-school and out-of-school youth in northern rural KZN found that 4% of the in-school and 3% of the out-of-school youth reported having used heroin at least once. Proportions for the female students were three to four times lower than those for the male students.

Other substances

Other substances abused by patients receiving substance abuse treatment included thinners, glue and petrol (inhalants).

There were isolated reports regarding the use of methcathinone (also known as CAT — a synthetic stimulant) in Gauteng, and crystal methamphetamine ('ice') in Cape Town.

Figure 3: Proportion (%) of persons in treatment with heroin as their primary drug of abuse

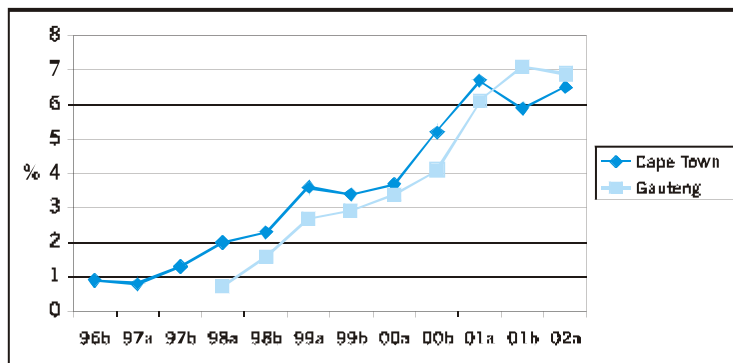


Figure 4: Proportion (%) of female adults and youth (<20 years) in treatment whose primary drug of abuse is heroin (Cape Town)

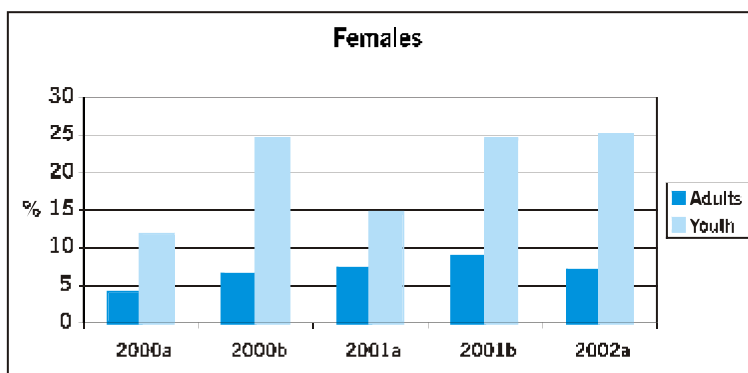


Table 4: Primary substance of abuse: by site and six month period (%)

Site	Period	Alcohol	Cannabis	Cannabis/ Mandrax	Cocaine/ Crack	Heroin	Ecstasy	OTC/ PRE.	Other	N
Cape Town	96-b	81	4	9	2	1	0	2	2	1954
	97-a	82	5	7	4	1	<1	2	<1	2103
	97-b	78	6	9	4	1	1	1	<1	2160
	98-a	74	5	10	6	2	<1	2	<1	2301
	98-b	64	9	14	8	2	<1	2	<1	1361
	99-a	56	9	20	8	4	1	2	<1	1527
	99-b	50	15	20	9	3	<1	2	1	1550
	2000a	48	12	23	8	4	2	4	1	1695
	2000b	51	13	19	7	5	1	3	<1	1696
	2001a	46	12	21	9	7	2	4	2	1571
	2001b	46	12	25	6	6	1	2	2	1561
2002a	48	14	21	7	7	2	2	1	1608	
Durban	96-b	73	10	10	1	<1	<1	1	4	338
	97-a	69	9	7	1	<1	<1	1	11	311
	97-b	62	21	6	3	1	1	3	2	601
	98-a	61	16	11	9	1	3	2	0	817
	98-b*	69	20	6	1	0	0	<1	3	242
	99-a	57	30	<1	6	1	1	1	3	682
	99-b	65	23	<1	9	<1	0	1	1	607
	2000a	57	25	6	8	1	1	2	1	883
	2000b	60	20	<1	12	<1	1	4	2	679
	2001a	59	21	1	10	<1	3	3	4	585
	2001b	58	26	7	8	<1	1	<1	<1	774
2002a	65	22	2	7	<1	2	2	<1	718	
PE	97-a	58	23		<1	<1	<1	5	13	316
	97-b	66	20		<1	<1	<1	3	9	416
	98-a	74	22		0	0	<1	3	<1	380
	98-b	68	23		1	0	0	8	1	361
	99-a	55	30		2	1	0	11	1	341
	99-b	63	29		1	0	0	7	0	328
	2000a	55	36		1	0	<1	8	0	252
	2000b	65	26		1	0	<1	4	4	312
	2001a	48	45		3	0	1	3	<1	393
	2001b	58	36		1	0	1	4	<1	398
2002a	45	19	29	1	0	1	4	<1	431	
Gauteng	98-a	69	11	5	8	<1	<1	4	3	2125
	98-b	68	12	4	9	2	<1	4	2	2372
	99-a	67	10	4	10	3	<1	4	1	2741
	99-b	63	14	5	11	3	<1	3	2	2613
	2000a	60	19	2	11	3	<1	3	1	2741
	2000b	60	21	1	8	4	1	4	2	2673
	2001a	54	21	6	7	6	<1	4	2	2838
	2001b	52	24	5	6	7	<1	4	2	2676
2002a	54	22	5	6	7	<1	4	2	2945	
Mpuma- langa	99-a	76	13	1	3	<1	<1	3	2	325
	99-b	76	15	2	2	<1	<1	1	1	376
	2000a	71	12	2	5	1	1	5	3	315
	2000b	77	14	0	4	1	1	2	0	408
	2001a	70	20	1	2	2	2	2	2	389
	2001b	69	15	3	2	1	2	5	3	389
2002a	71	16	<1	2	4	1	3	3	419	

* Data for the Newlands Treatment Centre only. Row % add up to 100.

Table 5: Comparison of proportion of patients in treatment (January – June 2002) with census data – by site¹

		African	Indian	Coloured	White
Cape Town	Population ¹	26%	2%	50%	22%
	In treatment	14%	2%	52%	32%
Durban	Population ¹	55%	24%	4%	17%
	In treatment	29%	31%	10%	30%
Port Elizabeth	Population ¹	57%	1%	24%	18%
	In treatment	25%	2%	51%	23%
Gauteng	Population ¹	70%	2%	4%	23%
	In treatment	29%	3%	8%	60%
Mpumalanga	Population ¹	89%	1%	1%	9%
	In treatment	42%	2%	3%	53%

¹ Statistics South Africa, 1996 Census

Table 6: Primary substance by race (columns per site add up to 100%)

	Alcohol	Cannabis	Cannabis/ Mandrax	Crack/ cocaine	Ecstasy	Heroin
Cape Town						
Black/African	15%	23%	15%	5%	0%	5%
Coloured	52%	54%	75%	29%	45%	10%
Asian/Indian	1%	1%	1%	5%	3%	2%
White	33%	19%	9%	59%	45%	84%
Durban						
Black/African	33%	21%	33%	8%*	0%	0%
Coloured	9%	14%	7%	0%*	10%	0%
Asian/Indian	31%	37%	40%	25%*	30%	0%
White	28%	25%	20%	67%*	60%	100%
#E#						
Black/African	41%	22%	14%	0%	0%	-
Coloured	40%	59%	75%	25%	0%	-
Asian/Indian	1%	8%	1%	0%	0%	-
White	18%	12%	11%	75%	100%	-
Gauteng						
Black/African	21%	53%	55%	5%	8%	3%
Coloured	5%	14%	20%	8%	0%	2%
Asian/Indian	3%	3%	3%	10%	8%	1%
White	68%	30%	22%	78%	83%	95%
Mpumalanga						
Black/African	47%	50%	0%	11%	0%	13%
Coloured	3%	3%	50%	11%	0%	0%
Asian/Indian	2%	3%	0%	11%	0%	0%
White	49%	44%	50%	67%	100%	87%

* - refers to crack only (cocaine powder: in Mpumalanga 100% Coloured, in Durban 92% white and 8% Indian)

- Data from SANCA PE only (i.e. excluding Welbedacht treatment centre)

Table 7: Arrests for dealing: by drug and site (row % add up to 100)

Area	Period	Cannabis/ hash	Mandrax	Cocaine/ Crack	Ecstasy	Heroin	LSD	Speed	Other	Total (N)
Cape Town	96b	40%	40%	19%	2%	<1%	0%	0%	0%	200
	97-a	54%	27%	10%	4%	<1%	3%	1%	0%	236
	97-b	49%	30%	7%	6%	4%	2%	1%	<1%	231
	98-a	42%	15%	22%	8%	8%	3%	1%	1%	158
	98-b	29%	28%	25%	11%	5%	2%	<1%	0%	168
	99-a	39%	24%	25%	3%	6%	3%	0%	0%	174
	99-b	33%	29%	29%	6%	4%	<1%	0%	0%	311
	2000a	25%	37%	25%	7%	<1%	2%	<1%	3%	296
	2000b	25%	26%	26%	14%	4%	4%	1%	1%	214
	2001a	24%	15%	27%	22%	<1%	5%	<1%	6%	162
	2001b	29%	26%	26%	15%	1%	2%	1%	0%	255
	2002a	22%	24%	23%	22%	2%	1%	1%	4%	239
Durban	97-a*	66%	9%	11%	9%	0%	0%	5%	<1%	227
	97-b*	52%	14%	22%	3%	2%	4%	2%	2%	187
	98-a	0%	7%	21%	14%	0%	36%	7%	4%	123
	98-b	6%	10%	81%	2%	0%	0%	0%	0%	96
	99-a	15%	26%	38%	19%	0%	2%	0%	0%	53
	99-b	3%	73%	18%	4%	<1%	1%	<1%	0%	1634
	2000a	27%	18%	42%	4%	1%	0%	0%	8%	90
	2000b	20%	34%	22%	7%	3%	1%	1%	13%	77
	2001a	24%	52%	20%	2%	0%	1%	0%	2%	116
	2001b	27%	40%	23%	4%	0%	0%	0%	5%	162
2002a	26%	64%	6%	2%	0%	0%	0%	5%	196	
PE	97-b	37%	55%	2%	2%	0%	2%	0%	3%	160
	98-a ^	48%	25%	10%	4%	0%	<1%	<1%	<1%	180
	98-b ^	54%	24%	14%	4%	0%	0%	0%	2%	91
	99-a ^	43%	22%	30%	3%	0%	<1%	0%	2%	156
	99-b ^	42%	21%	7%	22%	0%	4%	0%	3%	94
	00-a ^	34%	23%	25%	11%	0%	6%	0%	1%	73
	00-b ^	41%	42%	12%	3%	0%	1%	0%	1%	298
	01-a ^	52%	32%	6%	7%	0%	0%	0%	3%	126
	01-b ^	21%	29%	11%	38%	0%	2%	0%	0%	243
	02-a ^	55%	32%	3%	8%	0%	0%	0%	3%	176
Gauteng	97-b	70%	12%	14%	2%	<1%	1%	<1%	0%	417
	98-a	40%	20%	15%	10%	3%	5%	6%	0%	423
	98-b	35%	28%	14%	18%	2%	4%	0%	0%	363
	99-a	43%	24%	13%	13%	2%	4%	1%	0%	461
	99-b	55%	19%	13%	9%	1%	2%	1%	0%	578
	2000a	40%	13%	23%	16%	4%	4%	<1%	0%	626
	2000b	45%	7%	22%	11%	6%	7%	0%	2%	567
	2001a	29%	16%	33%	11%	2%	8%	1%	0%	291
	2001b	31%	7%	34%	17%	9%	3%	<1%	0%	277
	2002a	27%	16%	31%	18%	7%	2%	<1%	0%	424
Mpumalanga	99-a	92%	5%	1%	1%	0%	<1%	0%	<1%	168
	99-b	90%	2%	1%	4%	0%	3%	0%	0%	159
	00-a	91%	3%	2%	1%	0%	1%	0%	2%	123
	00-b	85%	6%	5%	2%	0%	1%	0%	0%	212

* - Dealing and possession; ** - only for Speed ; ^ Represents SANAB and Organised Crime Unit (OCU) data

Table 8: SANAB seizures for dealing and possession, January 1997 to June 2002

Area	Period	Cannabis (kgs)	Mandrax (tabs)	Cocaine (g)*	Crack (rocks)	Ecstasy (tabs)	Heroin (g)	LSD (units)	Speed (tabs)
Cape Town	97-a	2 882	154 373	146 598	69	779	6	171	110
	97-b	5 018	68 322	7 890	20	3 260	660	224	23
	98-a	3 325	12 646	19 543	1 110	3 393	334	2 045	50
	98-b	1 892	44 480	12 369	2 566	24 207	52	108	74
	99-a	474	30 156	7 860	1 338	716	1120	161	7
	99-b	5 432	15 093	2 527	3 376	1 610	365	71	0
	2000a	1 848	30 087	4 461	2 245	22 686	44	83	5g
	2000b	3 286	75 979	8 793	1 325	7 614	13	181	114g
	2001a	1 211	19 414	58 650	834	5 983	279	170	51g
	2001b	27 059	24 516	4 197	788	11 494	27	5 016	8g
2002a	3 495	12 850	351 490	827	17 849	37	68	36	
Durban	97-a	36 088	1 597	267	-	216	0	180	90
	97-b	3 821	870	241	-	72	10	105	28
	98-a	10 592	4 295	833	-	712	0	4 026	1
	98-b	716	102 130	1 442	-	139	0	0	0
	99-a	30 339	1 600 000	250	318	729	3	274	6
	99-b	2 141	460kgs ¹	23	53kgs ²	1 223	4	492	31
	2000a	1 210	3 278	89	262	559	8	13	0
	2000b	12 381 ³	915	2 066	661	459	15	92	64
	2001a	2 516	1 074 009	109	385	254	0	2	0
	2001b	1 473	20 181	737	638	18 988	0	6	0
2002a	4 605	2 138	3 752	512	77 707	95	0	0	
PE*	97-a	12 638	386	11	11	28	0	0	0
	97-b	3 289	5 291	54	21	179	0	135	0
	98-a	2 904	21 093	648	59	376	0	130	2
	98-b	2 243	16 369	91	45	299	0	0	0
	99-a	2 412	1 513	28.5	120	296	0	36	0
	99-b	2 639	1 296	69	78	421	0	336	0
	2000a	772	657	58	32	835	0	273	0
	2000b	2380	1 971	299	1	1324	0	285	1gm
	2001a	20 570	11 128	181	34	2 914	0	0	0
	2001b	1 360	7 940 ⁴	30	39	1 923	0	106	0
2002a	695 093	7 606	313	87	5 010	0	0	0	
Gauteng	97-a	2 910	2 493	52 125	-	92	2	22	125
	97-b	5 682	15 365	84 165	-	15 437	5	392	157
	98-a	11 074	548 325	150 543	-	14 037	1 015	94	115
	98-b	1 311	52 301	433 976	-	19 903	1 229	1 115	0
	99-a	654	57 640	74 362	2 206	7 555	2 100	275	125
	99-b	1 029	23 105	116 192	4 840	3 425	1 410	176	87
	2000a	3 080	499 238	47 516	1538	116 856	642	477	200g
	2000b	3 090	32 929	65 379	1357	49 217	12 333	1 250	0
	2001a	2 562	31 115	57 681	619	11 119	3 131	1 090	272
	2001b	2 285	1 889	68 863	1 598	11 745	1 162	371	168
2002a	4 251	1 817 018	135 006	833	165 470	5 929	318	2 231g	
Mpuma- langa	99-a	310 537	17 362	32.5	68	30	0	1	0
	99-b	3 344 400	1 479	3.5	0	249	0	123	0
	2000a	65 295	36 048	260	5	127	10	110	0
	2000b	3 673	51 229	580	136	227	2	172	0

* PE data includes SANAB and OCU from 1998

1 - Approximately equal to 920 000 tablets

2 - Approximately equal to 530 000 rocks

3 - 11.5 tonnes of hashish seized

4 - Two containers of Mandrax weighing over 5.5 tons were also seized

Note: Data for Mpumalanga not available from 2001 due to closure of local SANAB office

Description of SACENDU

Alcohol and other drug (AOD) or drug only sentinel surveillance systems have been set up in various regions of the world. Such surveillance systems comprise a network of stakeholders from within a certain location (e.g. city, state or province) and across locations who collect information on AOD use patterns and consequences on an ongoing basis and report back such information at regular intervals. Most of the sentinel sites within these systems have been urban based.

SACENDU currently comprises three large port cities in South Africa (Cape Town, Port Elizabeth and Durban) and the provinces of Gauteng and Mpumalanga.

Data sources have included:

- **Primary/secondary substances of abuse** reported by clients at admission to specialist AOD treatment facilities
- **The proportion of substance abuse related admission/discharge diagnoses** reported by acute psychiatric treatment facilities
- **AOD-related deaths** reported by mortuaries
- **AOD-related trauma unit admissions** collected via self-report measures and biological markers (breath alcohol measures and urine testing)
- **Arrest, seizure, composition and price data** obtained from local branches of the South African Narcotics Bureau (SANAB), the Organised Crime Units (OCU), Crime Information Analysis Centre (CIAC) and the Forensic Science Laboratory (FSL)

- **AOD use behaviour and associated consequences** reported through surveys of high school students and persons attending primary health care clinics.
- **AOD-related crime** via self-report (AODs) and urinalysis (drugs only) from persons arrested for a variety of crimes ("arrestees")

Note:

1. The above quantitative data are complemented by qualitative research (individual and/or focus group interviews) with sex workers, persons attending rave parties, street children and drug dealers.
2. Most drug users use multiple drugs. Treatment admission data are influenced by admissions policies of treatment centres and treatment availability and should not be confused with prevalence of drug use. Police arrest/seizure data often reflect law enforcement policy rather than levels of abuse.

SACENDU

Implications for future research and policy

Selected implications for policy/practice

During the Phase 12 (January – June 2002) regional report back meetings of SACENDU a number of recommendations were made with regard to specific interventions needed to address substance abuse and substance abuse policy in general.

- Increase treatment options for youth, and disadvantaged sectors of the population.
- Increase treatment options for heroin users.
- Initiate early intervention programmes aimed to delay the onset of AOD use among young persons and continued use among experimental users. Do not forget out-of-school youth.
- Reduce heroin use among young, white, urban females, and cannabis use among all youth.
- Initiate multi-faceted strategies to decrease the tolerance to alcohol abuse in society (including public drunkenness).
- Decrease access to alcohol and alcohol marketing by young persons (enforce sales and marketing regulations and work with parents and liquor industry).
- Recognize the role of religious organizations in protecting youth from substance use/abuse.
- Support adolescents to resist drug use and their families to assist them in this process.

- Prioritise city-level efforts to reduce alcohol related injuries and deaths.
- Work with shebeens, taverns, and bars to improve environment in their establishments (toilets, lightening, food) and reduce unacceptable behaviour (youth access to alcohol, drug peddling, and sexual behaviour).
- Increase random testing of drivers for alcohol and drugs, and public education around road and substance use.
- Increase protection of schedule medicines (and smuggling of illegal stocks).
- Address role of alcohol abuse in HIV prevention efforts.

Selected issues to monitor

Phase 12 of the SACENDU Project highlighted several conditions/factors that need to be carefully monitored over time:

- Availability and use of heroin in disadvantaged areas.
- Age of first drug use.
- Use of crystal methamphetamine, methcathinone, and pethidine.
- Comorbidity of substance use and mental illness.
- Mixing of alcohol with drugs.
- Heavy alcohol use among drivers.
- High levels of substance use among whites.

Selected topics for further research

At the SACENDU meetings in October 2002 various topics for research were identified. These included:

- Is the age of first use of alcohol declining? Why?
- Why do people seek treatment for

- substance abuse?
- In what ways do alcohol and crack cocaine lead to violent behaviour?
- What is the nature and extent of poly-substance abuse?
- What is the purity of drugs? What contaminants are evident in drugs on the streets?
- What are the family related variables that protect adolescents from substance use?
- What are the antecedent factors (individual, family) influencing substance use among young persons?
- Explore interventions to reduce alcohol and drug related risky sexual behaviour.
- Do people drive under the influence of alcohol and drugs or are there distinct populations?

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