

ABSTRACT

Patterns of Substance Use and Abuse Among Post Primary Students in Jamaica : National Adolescent Student's Drug Survey

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This dissertation presents the results of the 1997 survey conducted of 7996 ninth, eleventh and thirteenth grade post primary in-school adolescents located in 50 all-age, new secondary, technical and high schools nationwide. The sample was nationally representative of all students at each of the three grade levels in schools throughout Jamaica and reflected an exact duplication of a similar study done in 1987. This duplication of methodology enabled us to compare trends of drug use, 1987 versus 1997.

The specific objectives of the study were to identify the patterns and trends of substance use, reasons for substance use, perceptions of availability, and attitudes relating to these substances and their effects. The study also sought to evaluate the role of alcohol and tobacco (cigarettes) as precursors to further drug use, i.e. as gateway drugs.

Between 1987 and 1997, the percentage of students who had smoked cigarettes in their lifetime has declined significantly from 29.1% to

27.2%. Use in the past 30 days (current use) also declined albeit only by 0.3 percentage points. However, lifetime prevalence among the younger age group (grade 9) increased significantly ($p<0.05$) while current use remained the same. Grades 11 and 13 showed significant reduction in lifetime use (six percentage points) for grade 11 ($p<0.0001$) and 16.3 percentage points for grade 13 ($p<0.0001$). Again current use remained the same for grade 11 but showed a non-significant increase for 13th grade.

Smoking rates among males were twice as high as among females (6.4% versus 3.5%) and males had a higher prevalence (current and lifetime) rate for smoking among all grade levels. Currently one in twenty-five students smoke one or more cigarettes daily and 1 in 125 smoke half-pack or more per day.

Alcohol use remained very high even though there was a significant decrease of 5.4 percentage points (from 76.3% to 70.9%). Current use also showed a significant decrease from 33.7% to 28.8%. However, 14.9% of students currently have four or more drinks on the same occasion once or twice in the past month and 2.9% had four or more drinks on the same occasion once or twice in the past month. These rate patterns were highest for the lowest grades and lowest for the highest grades.

The percentage of students who used marijuana in their lifetime, in the past year and in the past 30 days increased dramatically for all three grades. Specifically the percentage of students who used marijuana in their lifetime increased from 19.8% to 26.9% overall, from 17.9% to 25.6% for ninth

graders, from 22.7% to 29.0% for eleventh graders and from 17.2% to 22.5% for thirteenth graders. On average 7.7% of students were currently smoking marijuana. Marijuana represented 80% of the illicit drug use. The use of cannabis tea declined overall among students as well as among the three grades except in the case of 13th graders' current use which increased by 2.1 percentage points, but not significantly.

The percentage of students who reported using crack in their lifetime and in the past year increased significantly, lifetime prevalence from 1.5% to 1.9% ($p < 0.05$) and in the past month from 0.3% to 0.9% ($p < 0.0001$). Thirty-day prevalence showed a non-significant decrease of 0.1 percentage points. Lifetime, annual or 30-day increases or decreases among the grades were non-significant except for an increased annual prevalence among eleventh graders of 1.0 percentage points ($p < 0.0001$).

Lifetime and thirty-day prevalence of cocaine decreased significantly (albeit by < 1.0 percentage points). Annual prevalence overall showed a non-significant increase from 0.4% to 0.6% . Ninth graders showed a significant decrease ($p < 0.05$) for current use, for eleventh graders, both lifetime and current use showed significant decreases but annual prevalence showed an increase. There was no cocaine use reported for thirteenth graders in this survey.

The key finding from the study was the significant increase in marijuana use overall (19.8% to 26.9% for lifetime use and 4.1% to 7.7% for

current use). Seventy-nine per cent of students discontinued smoking marijuana in 1987 compared to only 29% in 1997.

The important findings from the study with regards to gateway drugs were: cigarette smoking (both lifetime and current) was statistically correlated with the use of other drugs; lifetime as well as current use of alcohol was also correlated with the use of other drugs, but cigarette use was more highly correlated with other drug use. Current ganja smokers were 13 times likelier to be current cigarette smokers, crack users 50 times more likely and non-prescription amphetamine users 18 times more likely to be current cigarette smokers.

In general, a higher proportion of males than females were involved in illicit drug use except in the case of inhalants. A pattern of increase prevalence with increase age was observed for alcohol, ganja-smoked and ganja (tea) .

Among all students the peak grade (age) for initiation of most drugs tended to be before 7th grade (10-12 years) and initiation rates gradually decreased as grade level increased except in the case of marijuana-smoked and non-prescribed tranquilizers which peaked again by 9th grade. Perceptions of great risk of harm was low for the licit drugs as well as for occasional use of ganja. Users of alcohol and cigarettes were at increased risk for using other illicit drugs.

The study concluded that drug use prevalence (current use) decreased for the most part with the exception being marijuana, non-

prescribed amphetamines and tranquilizers. However, because of the relatively high prevalence of cigarettes and alcohol use, and the earlier age of initiation of use, there is reason for public health concern.

Two important conclusions came out of this study with regards to the gateway theory: the earlier Jamaican adolescents starts using cigarettes, alcohol and marijuana, the greater the likelihood that they will use other illicit drugs. Also, the more frequent they use cigarettes and alcohol the greater the likelihood that they will use other illicit drugs. Cigarettes and alcohol were clearly identified in this study as gateway drugs.

The main recommendations to be made include:

- the present prevention education program in schools should be evaluated in light of the findings of this study and decentralized to all schools in Jamaica.
- A comprehensive school-based prevention program that begins as early as kindergarden and extend through the primary and secondary grades should be developed and implemented in our schools.
- Every effort should be made to use the findings of this survey to effect policies towards drug prevention education programmes.
- A comprehensive study needs to be done looking at the epidemiology of inhalant abuse among our in-school adolescents.