

**Youth  
Substance  
Abuse**

**Baseline Study Report on  
In selected Secondary  
and High Schools**



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for **Lesotho Network on  
Anti-Smoking**  
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## Preface

The World Health Organization attributes some 4 million deaths a year to tobacco, a figure that is expected to rise to 8.4 million deaths a year by 2020. By that time, 70% of these deaths will be occurring in the developing countries. This epidemic is totally preventable---and the key opportunities for prevention are childhood and adolescence. According to the Centers for Disease Control and Prevention, if young people do not begin to use tobacco before the age of 20, they are unlikely to initiate use as adults. Thus preventing tobacco use among young people is critical to ending the epidemic of tobacco use.

The government of Lesotho has committed itself to prevention of smoking related diseases. This mandate is enshrined in the Lesotho Constitution – article 27 (1) under Protection of Health section and further articulated in chapter III section 36 – Lesotho Constitution. Lately, the Health Sector Reforms Plan also encapsulates the management of common mental health problems such as substance abuse.

It is through these instruments that the Health Education Division of the Ministry of Health and Social Welfare spearheaded the Anti-smoking initiative in partnership with the Seventh Day Adventist Church in 1982. These efforts have led to national awareness on smoking and health, hence public places such as banks in Lesotho, United Nations Offices, Post Offices, Telecomm Lesotho, Maseru City Council, and some hotels enforce a no-smoking policy.

The Lesotho Network on Smoking and Health<sup>1</sup> advises national authorities on issues pertaining to smoking and health, and coordinates all anti-tobacco programmes nationally. Its main objective is to foster a smoke-free culture of Basotho youth and adults. The Network coordinates a smoke-free schools initiative - sponsored by the World Health Organization and the Ministry of Health. This effort was launched on the 12<sup>th</sup> World No-tobacco Day (May 1999), and aims to prevent tobacco use at its pivotal point - during adolescence. Strategies used include communication of smoking and health-related messages through various media targeting youth, identification of focal teachers to facilitate anti-smoking clubs in schools, peer-to-peer education, and promotion of positive alternatives through sports activities.

Based on a limited school-population, this survey attempts to understand the social environment of youth, identify the main risk factors that encourage tobacco use, and develop strategies to reduce the unacceptable burden of disease associated with tobacco.

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<sup>1</sup> Community Alcohol Rehabilitation Project; Christian Health Association of Lesotho; Lesotho Highlands Development Authority; Lesotho Medical Association; Lesotho Nursing Association; Ministry of Defense; Ministry of Gender, Youth & Women Affairs; Ministry of Health & Social Welfare (Health Education Division & Mental Health Section); Ministry of Trade & Industry; National University of Lesotho; Seventh Day Adventist Church; Thaba Bosiu Blue Cross Center; World Health Organization;

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The reports, **National Household Survey on Drug Abuse (NHSDA). 1999** (Substance Abuse and Mental Health Services Administration (SAMHSA); Office of Applied Studies). **Preventing Tobacco Use among young people - A report of the Surgeon General.** Atlanta, Georgia, and **Tobacco use by Youth: A surveillance report from the Global Youth Tobacco Survey project.** (Bulletin of the World Health Organization. 2000) were closely consulted during the preparation of this document. Reports consulted during the preparation of specific sections are acknowledged under the references section.

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## 1. Introduction

According to the World Health Organization (WHO), alcohol, tobacco and drug related problems in Africa are becoming more and more a Public Health concern<sup>1</sup>. Lesotho is experiencing this growing threat similarly. In 1999, 65% of 62 street children who were followed up at a street kid project of the Lesotho Girl Guides Association used alcohol, cannabis and glue as follows: 3% alcohol, 8% cannabis, 23% glue, 18% alcohol and cannabis, 5% alcohol and glue and 8% cannabis and glue<sup>2</sup>.

Clinical data from psychiatric institutions shows that mental and behavioral disorders due to alcohol and cannabis are among the first three common psychiatric disorders. Out of 4096 patients who visited the Psychiatric Unit of Queen Elizabeth II (Q. E. II) hospital between January and July 2001, 197 (4.8%) were treated for drug related problems. Of these patients, 52% were alcoholic while 48% were treated for other drug dependence problems. Young people aged 30 years and below comprised 5% of the alcoholic and 44% of the drug dependent patients. The majority of these young persons (83%) were male<sup>3</sup>.

Alcohol and cannabis intoxication, alcohol and cannabis dependence, and alcohol and cannabis induced psychotic disorders are some of the primary reasons for admission at Mohlomi Psychiatric facility, where an average of 6 patients are admitted per month with these manifestations. The alcoholic patients are mainly adults aged 30-45 years, while patients with cannabis-related problems are young people aged 17-35 years, 80% of whom are male. The cost of detoxification (medications, bedding, and feeding, excluding staff salaries) works out to about M5, 000 per patient on average<sup>4</sup>.

The treatment of these conditions is generally lengthy with a minimum duration of six months. The three-stage recovery model consists of detoxification (4-6 weeks hospital inpatient treatment), followed by rehabilitation at Thaba Bosiu Blue Cross Center, or the Morija Community Alcohol Rehabilitation Project (CARP), which both provide treatment and counseling for people of all ages who become dependent on alcohol and other drugs, and continuing care on an outpatient basis at a psychiatric facility. As such, the treatment of psychoactive substance misuse is quite demanding both in terms of staff and finance<sup>2</sup>. These costs are borne through the general tax revenue as treatment costs for mental health problems are fully subsidized.

Tobacco use leads to many medical problems directly and indirectly. Smoking is primarily associated with cancers of the larynx, of which the ENT department of Q.E. II Hospital sees 2-3 cases per week. Most of these patients are males aged 40 years and over, 90% of whom are chronic smokers. The department also sees at least 5 cases of chronic laryngitis per week among patients aged 20-30 years, and at least 30 cases per day of allergy-related conditions (primarily rhinitis), among all age groups. The last two conditions are linked to exposure to passive smoking and other environmental pollutants<sup>5</sup>.

Tobacco use is primarily associated with periodontal disease, halitosis and cancers of the mouth. Over a period of one year from July 2000 the oral health department of Q.E.II Hospital detected 13 cases of squamous cell carcinoma, of which 8 (62%) were chronic smokers. Over 90% of the patients were males aged 50 to 70 years<sup>6</sup>.

The surgical department of the hospital detects 15-20 lung cancers per year. Cancers of the lung are the most common after cancers of the throat, cervix, breast, and prostate. Most patients are aged 40 years and over and have a history of smoking. Males and females are equally represented<sup>7</sup>.

Lesotho has high incidence of peripheral vascular disease (PVD), which has relatively low risk of death but causes substantial disability as affected limbs are at higher risk of amputation and infection. On average the surgical department of Q.E. II Hospital performs two amputations per month as a result of PVD. Patients are mostly males aged 40 years and more with a history of smoking<sup>7</sup>.

Growing evidence indicates that children are smoking more and starting to smoke at younger ages. The majority of smokers start before age 18, often in childhood or adolescence. In the high-income countries, eight out of ten people start to smoke in their teens. In the low and middle-income countries where data is available, it appears that most smokers start by the early twenties, but the trend is toward younger ages. A similar decline in the age of starting has been observed in the high-income countries. If these patterns continue, tobacco use will result in the deaths of an estimated 250 million children and young people alive today, many of them in developing countries<sup>8</sup>.

Tobacco use imposes enormous economic costs. It is estimated that countries lose 0.7% to 2% of GDP annually due to tobacco. These costs include the additional health costs from treating sick smokers and victims of environmental tobacco smoke, lost productivity as a result of tobacco-related illness, and loss of foreign exchange from importing tobacco<sup>9</sup>.

## 2. Objectives

The aim of this study was to acquire pre-intervention baseline data on substance use among students in 38 secondary and high schools. The schools – attached as annex B - are based in the lowland districts of Maseru, Berea, Mafeteng and Leribe. Based on criteria of ease of access, the schools were selected by the Ministries of Health and Education to participate in the smoke-free schools pilot programme.

The specific objectives of the study were to:

- Determine the extent of substance abuse among secondary and high school students.
- Establish factors that influence students' smoking behavior.
- Find out the most common substances of abuse in this cohort of students.
- Determine the students' age of smoking initiation.
- Determine level of knowledge about substances of abuse.
- Determine reasons for smoking.
- Establish the existence and awareness of antismoking programmes in secondary and high schools.

## 3. Methodology

A stratified random sampling procedure was used to select students, where the strata were classes of enrollment (Forms A, B, C, D, and E). From each school a sample size of 30% of the total school enrollment, or 6% from each class was chosen at

random. This procedure yielded a sample size of 4377. Students were allocated numbers in each class, which were randomly selected to make up the 6% required. The sample was drawn from groups of full-time students, and only those born or brought up in Lesotho, to minimize the effect of cultural background on substance use.

The questionnaire - attached as Annex A - was pre-tested among 24 students at 4 schools not included in the study sample.

Approval and consent to participate in the study was obtained from the principals of the schools concerned and the students themselves. All heads of schools but one granted permission and data was collected in February 2000. The Ministry of Education had issued letters of introduction for research coordinators to present as means of identification at the schools they were assigned to collect data from.

The research coordinators read and explained questionnaire instructions, and remained in the classrooms to clarify queries arising as students completed the anonymous and self-administered questionnaires. Upon completion they collected the questionnaires for processing at the Statistics Unit of the Ministry of Health.

Over 95% of students responded to all questions. About 0.3% did not indicate gender, while 0.5% did not indicate whether they were current smokers (defined as current use of cigarettes, dagga, glue, benzene, or Mandrax). The data was analyzed on EPIINFO, which was used to compute descriptive statistics for the main variables of interest and test for associations. Tests were considered statistically significant if their p values were less than 0.05.

#### 4. Demographic characteristics

About half of the students were enrolled in Forms A and B, and the rest in Forms C to E. Their ages ranged from 10 to 25 years, with a median of 16. Half the students aged less than 15 years were enrolled in Form A. The 16-20 years cohort was evenly distributed between Forms B to E. Over 70% of those aged over 20 years were enrolled in Forms D and E. Table 1 and figure 1 summarize the distributions of students by age, gender and class of enrollment.

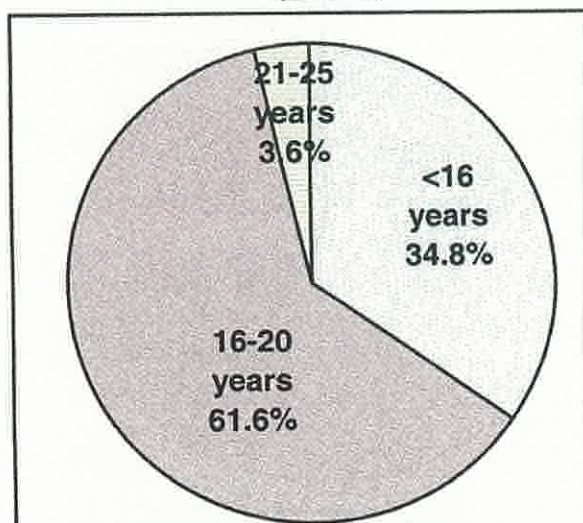
**Table 1: Distribution of students by gender and class of enrollment**

Class	No. of Students by Gender	Total No. of students	Percent	Median Age
FORM A	Female 700 (54.3%) Male 589 (45.7%)	1296	29.7%	15
FORM B	Female 630 (54.7%) Male 521 (45.3%)	1155	26.4%	16
FORM C	Female 321 (53.2%) Male 282 (46.8%)	603	13.8%	16
FORM D	Female 409 (50.5%) Male 401 (49.5%)	812	18.6%	18
FORM E	Female 259 (51.6%) Male 243 (48.4%)	502	11.5%	18
Total	Female 2323 (53.2%) Male 2040 (46.8%)	4368	100.0%	16



**Figure 1. Age Group Distribution**

(n=4346)



Although male and female students in the sample were almost equally represented in the proportions 47% and 53% respectively, 65% of those aged less than 16 years were female, while 70% of those aged over 20 years were male.

## **5. Estimates of Substance Use**

The results compare the extent of substance use among young people by age, gender and class of enrollment.

### **5.1. General Substance Use**

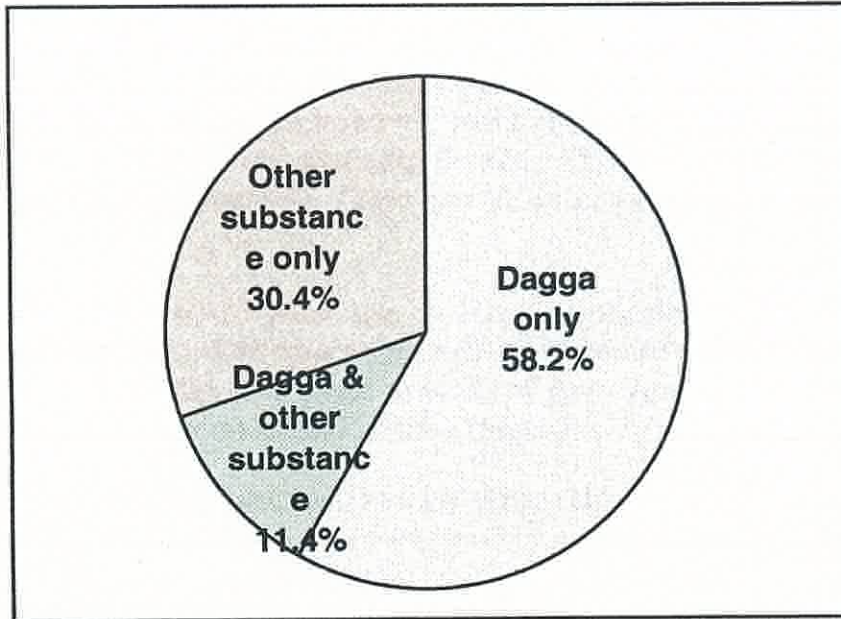
Of the 4357 students who indicated substance use status, 364 (8.4%) reported that they have used an addictive substance of abuse including tobacco before. Of these, 276 (76%) were current users. This is a prevalence of 6.3% for this group of youth. Boys were significantly more likely than girls to have ever used substances (14% of all males vs. 3% of females). Boys were also more likely than girls to be current users of any substance. Of the current users 78% were males.

About two-thirds (62.9%) of youth who ever used substances started before the age of 16 years. This represents 3.9% of all students. Of the female students who ever used substances, a slightly higher proportion began before 16 years of age compared to their male counterparts (72% vs. 61% respectively).

### **5.2. Psychoactive Substance Use**

Among the 276 youth who reported current use of substances, 79 use drugs. This represents 1.8% of the sample of youth interviewed. Dagga is the most commonly used substance. It is used by 70% of current drug users, or 1.3% of this group of youth. About 58% of current drug users consumed only dagga, 11% used dagga and another drug. The remaining 30% used a drug but not dagga (Figure 2).

Figure 2. Types of substances used by drug users.



Of the 24 users of psychoactive substances other than dagga, 10 (42%) were using glue, 9 (38%) were consuming Mandrax, and the rest (20%) were using benzene. These figures represent, respectively, 0.23%, 0.21%, and 0.11% of this group of youth.

### 5.2.1. Age

Psychoactive substance use was highest among the 21-25 year olds (3.2%), followed by the 16-20 year olds (1.9%), and 10-15 year olds (1.5%). Patterns of substance use vary by age. The primary psychoactive substance used by all age groups is dagga, and consumption increases with age. It is used respectively by 50%, 76%, and 80% of the 10-15, 16-20 and 20-25 year old drug users. Use of benzene and Mandrax declines with age. Prevalence of benzene inhalation is 9% among the 10-15 year old drug users, and 4% among the 16-20 year olds. None of the 21-25 year olds reported use of benzene. Mandrax tablets are consumed by 14% of the 10-15 year olds drug users and 12% of the 16-20 year olds; 21-25 year olds do not use it (Figure 3).

Figure 3. Substances used by youth drug users by age

