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...the nature and extent of drug ...and social responses

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Drug abuse problems in countries of the Andean subregion

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ABSTRACT

The scarcity of epidemiological data makes it difficult for an accurate and comprehensive assessment to be made of the drug abuse situation in countries of the Andean subregion. Available evidence, however, indicates that in Bolivia, Colombia and Peru prevalence and incidence rates of drug abuse, particularly of the abuse of basic cocaine paste, are relatively high. Studies indicate that in Bolivia 4–5 per cent of youth are habitual cocaine users and that in Colombia drug abuse was in 1984 the seventh leading cause of psychiatric morbidity. A survey in Peru shows that 37 per cent of secondary school students use drugs, while 27 per cent of the respondents used basic cocaine paste as their first drug. It appears that the abuse of basic cocaine paste has spread evenly across urban social classes. The illegal cultivation of the coca bush has drastically increased in countries of the Andean subregion. For example, it is estimated that more than 135,000 hectares of coca bush are cultivated in Peru, producing approximately 135,000 tonnes of coca leaves a year, while the amount needed for legitimate purposes in that country is estimated at 10,000 tonnes a year. In the same country, seizures of basic cocaine paste increased from 4,755 kg in 1980 to 7,168 kg in 1983, and of macerated coca leaf from 2,570 kg in 1979 to 27,822 kg in 1984. The demand for illicit cocaine has substantially increased in the world. It is estimated that the total amount of illicit cocaine consumed in the world was 33–45 tonnes in 1981 and 50–61 tonnes in 1983.

Introduction

In all countries of the Andean subregion, drug abuse is recognized as being primarily a health problem, and this has prompted the adoption of a variety of measures to cope with drug problems. The basic document for the Hipólito Unanue Agreement (Andean subregion) and its protocol, as well as the first and third meetings of the ministers of health of this subregion, emphasized the need for the member countries to deal with the problems of drug abuse.

This article briefly reviews the problems of the abuse of drugs, excluding alcohol and tobacco, in countries of the Andean subregion.

Current situation

Three Andean Pact countries, Bolivia, Colombia and Peru, have a relatively high incidence and prevalence of the abuse of basic cocaine paste, which is also called coca paste. It is difficult to quantify in exact terms the extent of the problem, which varies considerably within a given country and from one country to another. According to estimates, the consumption of illicit cocaine in the world was 33–45 tonnes in 1981 and it increased to 50–61 tonnes in 1983. These figures indicate that cocaine is being produced in increasing quantities in Bolivia, Colombia and Peru, as is also suggested by the seizure of drugs there and in Brazil and Argentina. In these countries, an increasing number of cocaine-dependent persons seek treatment. For example, in Colombia, more than 500 users of cocaine receive help each month from the Antioquia Psychiatric Hospital, while 4.4 per cent of the out-patients at Cali are users of cocaine paste; it is estimated that 4–5 per cent of the youth in Bolivia are habitual cocaine consumers [1].

Current drug abuse problems in the Andean subregion are summarized below by country [2].

Bolivia

In conformity to the provisions governing the control of dangerous substances, the police have been responsible for drug abuse preventive programmes. Medical doctors and other health personnel involved in programmes for drug abuse prevention and treatment of drug-dependent persons are incorporated in the programmes carried out by the police.

Primary prevention of drug abuse is directed towards school pupils, but its results, as well as the value of information brochures that are provided, need to be evaluated by pedagogical and scientific methods. The police are responsible for research studies on drug abuse prevention and for epidemiological studies of drug abuse, but the results of these studies are not brought to the attention of members of the medical profession outside the police framework.

An article of the Drugs Act requires hotels, brothels, clinics and other institutions that come into contact with drug abusers to inform the police about such individuals. When a drug user comes to the attention of a medical doctor, the doctor usually changes the diagnosis of drug abuse to protect the patient.

The main production centre is Cochabamba, where from 60,000 to 100,000 families are employed. In this area as well as in the northern part of the country, cocaine paste and cocaine hydrochloride are illegally produced. A peasant receives the equivalent of $10–$15 a night to participate in the initial process of production; he is also given a drug to work better under such conditions. Cocaine paste and cocaine hydrochloride are mainly abused by inhabitants of urban areas such as Cochabamba, where approximately 2,000 abandoned children are involved in selling the drug, but they also consume it. At Sucre and La Paz, the abuse of cocaine paste is evenly distributed among the urban middle and upper classes.

Treatment is mainly provided in three special clinics located at La Paz, Santa Cruz and Cochabamba. The personnel of these clinics need to increase their experience and skills in treating drug addicts. Though a rehabilitation centre at Cochabamba has not yet been completed, it already has professional staff. A number of abandoned children who are not dependent on drugs are currently being housed at the centre.

Since 1982, the Directorate for Mental Health has organized four seminars under the sponsorship of the World Health Organization with a view to including the treatment of drug-dependent persons as part of primary health care. Professors of the medical faculties and the representatives of the Ministry of Health and the Bolivian Society of Psychiatry have participated in these seminars. In addition, a National Mental Health Programme has been approved and is ready for implementation.

In order to cope with drug problems more effectively, the author is of the opinion that the health sector should take responsibility for all aspects of drug abuse prevention and treatment programmes.

Colombia

The legal provisions of 1974 established the National Drug Council and created the Technical Prevention Council, which advises the National Drug Council and other bodies on the matter of drug abuse prevention. The National Drug Council is presided over by the Minister of Justice; the health sector is represented in the Council by the Minister of Health or the Vice-Minister. The Council formulates policies, plans and programmes for combating drug problems.

Comprehensive prevention activities, enforcement operations and a $5 million crop-substitution programme in the southern area of Cauca and Sierra Nevada de Santa Marta are currently being carried out. Co-operation agreements in the area of drug control have been made with a number of other countries in South America; some European countries are interested in reaching similar agreements.

The Directorate for Mental Health of the Ministry of Health has instituted a programme to deal with drug abuse and alcoholism. In 1979, State-operated drug dependence services were set up in psychiatric hospitals and the psychiatric wards of general hospitals. There are now 16 such services, three of which are private. In 1984, the programme for drug abuse prevention comprised 45,000 individuals; 2,040 health professionals completed the course for the treatment of drug dependence.

As for drug demand, approximately 90 per cent of the drug-dependent persons who received consultation or completed treatment during 1983 and 1984 were in the "15–44-year" age group; more than 85 per cent of them were male. In 1983, drug dependence was ninth among the 10 leading causes of psychiatric morbidity, and in 1984, it was seventh. Bazuco (an intermediate product of cocaine), alcohol, marijuana and tranquillizers were among the substances most abused.

The current programme for the reduction of drug demand has the following objectives:

(a) To involve an increasing number of mental health personnel throughout the country in training for crisis-intervention strategies;

(b) To prepare a census of institutions devoted to help and care for drug-dependent persons in order to extend assistance and training to them;

(c) To carry out research on attitudes, beliefs and practices in a large sample of households;

(d) To expand the network of laboratories specializing in drug detection to include all 13 states within the country.

The National Health Institute serves as the national reference headquarters for activities related to the prevention and reduction of drug abuse, preparing an inventory of the educational material produced and disseminating information, mainly on international meetings. The Institute is expected to systematize the register of drug addicts, which is still maintained manually, and to monitor the implementation of provisions of international conventions and agreements.

Ecuador

The Directorate for Mental Health was set up in Ecuador in 1980, but since then it has been converted into a Division within the Directorate for Epidemiological Control and Monitoring. The Division has organized programmes for dealing with the following subjects: the development of human services and resources; alcoholism and drug dependence; the monitoring of the mental health of children and teenagers; and the protection of the mental health of workers and families.

The programme for drug abuse control includes activities aimed at promoting and protecting people's health and developing a comprehensive national system for the treatment of drug-dependent persons, including early treatment and rehabilitation. Since 1983, the programme has been operated in co-operation with the various sectors of the public administration, in which the Office of the Public Prosecutor plays a co-ordinating role, taking precedence over the Ministry of Health.

Since 1982, a number of activities aimed at preventing and reducing drug abuse have been carried out, including:

(a) Meetings with organized groups of people, an activity that started in the frontier provinces;

(b) Two diagnostic studies of drug abuse;

(c) Work in co-operation with the educational sector, such as the insertion of the subject of drug dependence into the school curricula;

(d) Conventions on drug abuse prevention;

(e) The operation of specialized drug dependence units in the provinces of Cuenca, Quito and Guayaquil, where the problem is most acute; plans for the establishment of two additional units.

The plan for the period until 1988 is based on a study that, *inter alia,* shows an increase in drug use among young people who do not attend secondary school and among women, as well as greater involvement with drugs among young people in the "17–18-year" age group, who are usually introduced to drugs by their friends. Among the more important activities projected for this period is greater participation of the health sector in drug abuse control programmes, which should include the establishment of detoxification and rehabilitation units in hospitals and of out-patient clinics for early treatment in mental health units, as well as the development of the epidemiological monitoring system.

Peru

Peru has promulgated new legislation designed to combat drug abuse and illicit drug trafficking and to reduce cultivation of the coca bush [3], and it is a signatory to the international drug control treaties [4–7]. The excessive use of alcoholic beverages and the chewing of coca leaves dates back to the colonial period. Since the 1960s, the use of psycho-active drugs has spread to involve nearly all age groups and social classes. Epidemiological studies in Peru that have attempted to assess the magnitude of the drug abuse problem have certain flaws, such as the small size of the population covered by the studies; insufficient attention given to cultural factors; and the use of different methods. Consequently, the results of the studies carried out are difficult to compare. In addition, few studies have been carried out and the results of many studies are out of

date. The officially supported epidemiological research that began six years ago has been discontinued. The above-mentioned flaws are very similar to those observed in studies of mental health problems in general.

As early as 1975, a well-designed study on the mental health situation in Peru made mention of the apparent spread of cocaine consumption among young people in urban centres [8]. In line with this warning, in 1977, drug abuse, mainly cocaine paste smoking, was responsible for 4.9 per cent of all admissions to the Valdizán Mental Hospital at Lima, one of the two major mental hospitals in the country; in 1980, the corresponding figure was 22.1 per cent. In 1972, in the same hospital, only 0.8 per cent of all the in-patients were drug-dependent persons, but the proportion increased to 15.5 per cent in 1981 [9].

According to Jeri [10], the drug abuse sections of the psychiatric wards of State-operated general and psychiatric hospitals and private clinics appear to be completely filled. The same author has estimated that drug-dependent persons occupy 10–15 per cent of the beds in State-operated psychiatric hospitals [10].

According to public information, coca-growing areas exceed 135,000 hectares, which produce approximately 135,000 tonnes of coca leaves a year, or more than 13 times the amount needed in the country for legitimate purposes. Thus, the licit demand for coca leaves is estimated at 10,000 tonnes a year, and this figure is adequately covered by the production of the registered growers. During the period from 1979 to 1984 there were 6,419 arrests for illicit trafficking and 12,385 for drug use, while from 1974 to 1978 there were only 4,596 arrests of this nature. According to information from the police, seizures of basic cocaine paste increased from 4,755 kg in 1980 to 7,168 kg in 1983; and seizures of macerated coca leaf increased from 2,570 kg in 1979 to 27,822 kg in 1984. The significance of these figures for Peruvian society is obvious, especially in terms of the increased availability of drugs among Peruvian youth.

Prevalence studies carried out in the 1980s show that alcoholism ranks first as a problem of substance abuse, followed by legal psychotropic substances, basic cocaine paste and volatile solvents [10–12]. Epidemiological research [11] indicates an increasing trend in the use of basic cocaine paste. As for surveys of secondary school students, Oliver and Llerena reported in a survey in 1978 that 24.4 per cent of the respondents used drugs, with basic cocaine paste being the starting drug in 22.09 per cent of the cases; Oliver reported in 1981 that 28 per cent of females used drugs, and in 1984, 37 per cent of both males and females used drugs, with basic cocaine paste being the starting drug in 27 per cent of the cases.

One of the few studies of drug use among the general population was carried out in 1979 by Carbajal and others in a sample of 2,167 households

at Lima. The drugs most widely consumed were tobacco and alcohol, while the use of coca leaf was reported by 5.4 per cent and basic cocaine paste by 1.34 per cent of the respondents in the sample [13]. The fact that the use of illicit drugs was considered an illegal act leading to punishment by law enforcement and courts of law might have influenced the sincerity of the respondents' answers, resulting in underreporting of the illicit drug use.

On the basis of his own studies and other investigations, Oliver estimated that in February 1985, there were approximately 60,000 drug addicts at Lima and Callao, accounting for 4.1 per cent of the total number of drug users, of whom some 80 per cent were using basic cocaine paste [14]. He also estimated that 500 kg of basic cocaine paste was consumed each month in metropolitan Lima and Callao alone during 1985.

Response to the drug abuse problem

To understand better the development of national programmes for the prevention and reduction of drug abuse, reference should be made to the recent development of psychiatric services. Since 1950, there has been a shift from custodial-type psychiatric care focusing on large mental hospitals to the psychiatric services of general hospitals and community programmes. However, the services within the general hospital have not developed or expanded as expected, and the community programmes have remained dependent on individual initiatives and efforts. This explains why there has been a fragmentary response to the drug problem by the health sector [15, 16].

Response by the health sector

Health activities dealing with drug abuse have been supported since the late 1970s by Decree Law 22095 and the General Drug Act [3], as well as the technical and financial assistance provided by the United Nations Fund for Drug Abuse Control (UNFDAC); the Pan American Health Organization, Pan American Sanitary Bureau, Regional Office of the World Health Organization; and, more recently, the Government of the United States of America.

Under the General Drug Act, a national body has been established to formulate drug control objectives and policies and to monitor and co-ordinate the activities of the sectors involved in drug control, such as farming, economic affairs, education, domestic affairs, health, industry and the judiciary.

The United Nations Fund for Drug Abuse Control has assisted in developing multi-sectoral programmes for the prevention of drug abuse, the treatment and rehabilitation of drug addicts, the suppression of illicit drug trafficking, and coca-crop reduction and substitution. As a result of

the recent support of the Government of the United States in the area of health, the following activities have been initiated: drug abuse prevention groups set up by parents' associations; the dissemination of publications concerning drugs and drug use; and the establishment of an information and documentation centre.

An assessment of the programmes undertaken by the health sector since 1975 shows that the achievements have been rather modest, even though a considerable amount of effort has been made.

In the early 1980s, a national plan was drawn up that appropriately defined the problem and determined objectives, but the proposals generated by the programme were too broad and, consequently, have not been easy to implement in a systematic fashion [17]. The preventive programme has not been co-ordinated with the health sector; it has been assumed by voluntary groups or institutions that have carried out preventive activities on their own.

The Ministry of Health has begun with the establishment of juvenile centres to promote drug abuse prevention and provide early assistance for drug abusers [18, 19].

The most notable rehabilitation service is provided at the Ñaña Rehabilitation Centre at Lima, which has been in operation since 1979. It has become a high-level training centre, but its scant coverage and complex therapeutic system does not yet provide an adequate response to the need for this service; its new community programme should help to solve this important problem [20].

The training programme in Peru has primarily focused on personnel involved in health administration, who must also assume leadership with regard to proposals and activities, while the training of other health professionals has received less emphasis [21].

In accordance with the provisions of international drug control treaties and Peruvian legislation, the following 10 narcotic substances, which are used to prepare 30 pharmaceutical products, are controlled: cocaine, dextromoramide, fentanyl, morphine, opium, pethidine, codeine, pholcodine, diphenoxylate and dextropropoxyphene. In addition, 48 psychotropic substances, which are used in 97 pharmaceutical preparations, are controlled. The control of narcotic drugs covers purchase, inspection of processing, review of prescriptions, industrial and individual consumption, and withdrawal and destruction of balances not used. The control of psychotropic substances, being less stringent, covers purchase and sale on presentation of a prescription. It is hoped that computerization will help in controlling both narcotic drugs and psychotropic substances; the equipment for this is already available [22].

Response by the educational sector

The educational sector has assumed the major responsibility for preventive activities and has drawn up a national plan with the following objectives:

(a) To introduce education concerning drugs and drug use into secondary school curricula;

(b) To train teachers and parents in drug education;

(c) To prepare educational material;

(d) To organize committees in certain educational areas to tackle drug abuse problems through consciousness-raising;

(e) To open up and promote possibilities for healthy leisure time activities [23–25].

Venezuela

A 1984 law on drug control requires medical doctors to report drug users; it also requires judges to order security measures, including treatment, for confirmed drug users. The abuse of basic cocaine paste and production of cannabis are recognized as a problem only in certain frontier areas, but illicit drug trafficking poses a serious problem for the country. The abuse of cannabis ranks first among the illicit drugs, but alcohol is the most widely used dependence-producing substance. The programmes for drug control are mainly oriented towards drug law enforcement activity.

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Drug use among university students in the State of São Paulo, Brazil

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ABSTRACT

A survey of drug use carried out from April 1984 to May 1985 at the University of São Paulo, Brazil, showed that of 2,475 undergraduate students surveyed, 588 respondents, or 23.8 per cent, abused drugs at some time in their lives. Drug use was somewhat more common among males (25.3 per cent) than among females (21.5 per cent). Among the drug users, the use of cannabis ranked first (41.2 per cent), followed by amphetamines (27.4 per cent), cocaine (12.2 per cent), tranquillizers (12.2 per cent), barbiturates (5.6 per cent), morphine and heroin (0.8 per cent) and lysergic acid diethylamide (0.5 per cent). Of the total number of respondents, 10 per cent were current habitual drug users, while 13.8 per cent had at some time been drug users but were no longer using drugs at the time of the survey. Of 23 post-graduate students surveyed, 10 respondents, or 43.5 per cent, used either cannabis, amphetamines or tranquillizers.

Introduction

Many research studies of drug use among students have been carried out in different countries and at different levels of education. Surveys have been conducted on drug use among secondary school students in Mexico [1], Mexico and Canada [2], Nigeria [3, 4] and Zambia [5] and among university students in the State of Minas Gerais, Brazil [6, 7].

There has not been enough information available on the nature and extent of drug use among university students in the State of São Paulo, Brazil, to help those responsible for making policy decisions or planning drug abuse preventive measures. In an effort to contribute to the better understanding of the extent of drug use in this population, a survey of drug use was carried out from April 1984 to May 1985 at the University of São Paulo. The results of the survey are summarized in this article.

Method

The survey of drug use undertaken among students on the campus of the University City at São Paulo covered 2,475 undergraduate students from nine faculties and 23 post-graduate students. A questionnaire was distributed to students for completion after lectures at the university. While the questionnaire was being distributed, it was made clear to the students that the survey was anonymous and confidential.

Results

Drug use among undergraduate students

Of the 2,475 undergraduates surveyed, 588 respondents, or 23.8 per cent, claimed to have abused drugs at some time in their lives, while 1,887, or 76.2 per cent, claimed to have never abused drugs. Of the students who used drugs, 247 respondents, or 10 per cent of the total number of respondents, were current habitual drug users, while the remaining 341 students, or 13.8 per cent, stated that they were no longer using drugs at the time of the survey. Among the respondents who had stopped using drugs, the highest percentage was in the age group "over 25 years" and the lowest was in the age group "under 20 years".

Table 1 shows the drugs used by the students and the extent of their use. Among the drug users, the use of cannabis ranked first (41.2 per cent), followed by amphetamines (27.4 per cent), cocaine (12.2 per cent), tranquillizers (12.2 per cent), barbiturates (5.6 per cent), morphine and heroin (0.8 per cent) and lysergic acid diethylamide (0.5 per cent). By comparison, Murad [6, 7] found that 24.1 per cent of those students questioned in the State of Minas Gerais, Brazil, abused drugs; the use of amphetamines ranked first among users (39.6 per cent), followed by cannabis (30.6 per cent), tranquillizers (12.6 per cent), cocaine (10.1 per cent), barbiturates (7.3 per cent) and lysergic acid diethylamide (1.8 per cent).

Table 1

Number and percentage of respondents who used drugs, by substance

Substance	*Number of users*	*Percentage*
Morphine	3	0.5
Heroin	2	0.3
Cocaine	72	12.2
Cannabis	242	41.2
Lysergic acid diethylamide	3	0.5
Amphetamines	161	27.4
Barbiturates	33	5.6
Tranquillizers	72	12.2

It should be noted that 22.5 per cent of the drug users in the survey used two, three or more substances.

Table 2 shows that of the undergraduate students who used drugs, 37.1 per cent were females and 62.9 per cent males, but the sex-specific percentage rate of drug use was 25.3 per cent for males and 21.5 per cent for females. The latter indicates a relatively small difference in the rates of drug use for male and female students.

Table 2

Distribution of non-users and users of drugs, by sex

Sex	*Number of non-users*	*Percentage*	*Number of users*	*Percentage*
Female	795	42.1	218	37.1
Male	1 092	57.9	370	62.9
Total	1 887	76.2	588	23.8

Drug use among post-graduate students

The post-graduate group was made up of 23 students who were enrolled in a course entitled "Study of Brazilian problems". In this group, 10 respondents, or 43.5 per cent, used either cannabis, amphetamines or tranquillizers, but the number of respondents was too small to permit any general conclusions.

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