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ABUSE OF NARCOTIC AND PSYCHOTROPIC SUBSTANCES

The Director presents this report in response to Resolution XLI of the XXVII Meeting of the Directing Council. The document provides an overview of the current drug abuse situation, the national and regional programs aimed at drug abuse control, and the gravity of related social, political and economic consequences of drug abuse. It discusses some of the reasons why data on drug abuse is difficult to obtain. Findings of several epidemiological surveys on drug abuse are reviewed. The report emphasizes the importance of setting up data collection systems to monitor the situation continuously. The regulation and control of psychotropic substances is discussed, and a rationale is presented for including regulatory activities within the rubric of drug abuse prevention. It is proposed that Governments strengthen psychotropic drug regulation and control activities as part of a general effort to improve systems of pharmaceutical drug control and drug supply management. In addition, the report discusses the financing of drug abuse activities and proposes that Governments continue collaborating with the Organization in seeking extrabudgetary funding. However, the importance of including drug abuse in national health plans and the biennial PAHO program and budget is also recognized.

SOCIAL AND PUBLIC HEALTH PROBLEMS ASSOCIATED WITH THE USE AND ABUSE OF PSYCHOTROPIC AND NARCOTIC DRUGS IN THE AMERICAS

Introduction

In response to Resolution XLI, adopted at the XXVII Meeting of the Directing Council, the Director advised Member Governments of the need to collaborate in the collection and analysis of relevant information on drug abuse. Official replies were received from only seven countries, and of those seven, only three offered fairly complete data. Given the paucity of data on drug abuse in the Region, it is not surprising that so few Ministries responded to this request.

Therefore, to prepare this document, we have used every information source available to us, including published research monographs, unpublished communications from investigators working in the field, data from existing treatment services, as well as information from other Regions which may be pertinent.

While every effort was made to do a comprehensive search, it is recognized that some useful data may have been overlooked. However, this document is not intended to be a review of the literature, but rather an overview of the situation, which of course includes an assessment of the type and quality of information available.

An important aspect of measuring drug abuse and its impact is the fact that drug abuse has many social, political and economic consequences which defy measurement by traditional techniques. As one reviews this material, it is necessary to keep in mind that:

- i) the are no known "cures" for drug abuse;
- ii) there are no known preventive measures which will give 100% "protection" against drug abuse;
- iii) there are no known vectors or agents involved in the transmission of drug abuse;
- iv) better water supplies, sanitation and living conditions have no effect on reducing the problem;
- v) although the interventions which are most effective in controlling drug abuse go far beyond the scope of traditional health care, the health sector can make an important contribution.

In the course of this discussion, some of the critical health sector inputs in prevention will be examined.

Methodological Difficulties in Assessing Drug Abuse

One of the most fundamental problems in assessing the extent and nature of drug abuse is the definition of the concept and its operational-ization. Definition of the terms "drug abuse," "drug dependence," and "drug addiction" has been the subject of considerable controversy in recent years. The negative sentiments evoked when these terms are applied to an individual, and the legal implications connected with non-medical drug use are some of the obstacles to the collection of reliable, valid epidemiological data.

From a public health point of view, it is important that a <u>broad</u> definition be adopted so that the whole spectrum of health and social problems can be fully appreciated and taken into account.

The people who arrive at treatment centers requesting services are only one very small part of the whole picture and perhaps these individuals are not at all representative of the affected population. Generally, these persons are extreme cases, people who oftentimes suffer from multiple mental health problems, are in "voluntary" treatment to avoid prosecution, or have been placed in treatment by the judicial system. Existing treatment centers in Latin America, by and large, serve this group of cases. There is little or no attention given to the rest of the affected population—which includes many different kinds of people from all walks of life.

For example, the middle-class, middle-aged housewife who takes pills to wake up or to lose weight, more pills to calm down and still more pills to fall asleep may have become very dependent on these drugs but she is unlikely ever to be counted in the statistics on drug abuse.

It is very important that Government officials and epidemiological researchers come to some agreement on what is meant by drug abuse and what constitutes "a problem." Without the adoption of a basic working definition, there will be considerable confusion at the policy and technical levels and difficulties in communicating with the public.

All of the primary and secondary research methods for assessing the extent of drug abuse have shortcomings. Suffice it to say, therefore, that it is necessary to use more than one method of data collection and analysis. The different methodologies, while contributing to the overall picture when appropriately analyzed, also can be used to serve specific data needs. The following is a list of such methods and applications which might be made:

Case history studies of patient contacts, diagnoses, and treatment regimens:

Uses: Monitoring physicians' prescribing practices and the consumption of drugs by different types of patients.

Prescription audits:

Uses: Detection of trends in prescription of psychoactive drugs over time.

3. Surveys of drug abuse among households:

<u>Uses:</u> Prevalence estimates; identification of high risk groups; definition of prevention strategies and measurement of the impact of prevention activities.

4. Surveys of students

<u>Uses:</u> Prevalence estimates among youngsters; measurement of youth attitudes; definition of prevention strategies.

5. Monitoring drug abuse deaths and medical emergencies:

<u>Uses:</u> Detection of trends in the incidence of acute negative health consequences of misuse/abuse of specific substances over time; surveillance.

6. Drug abuse treatment center data:

Uses: Indicators of drug abuse patterns which are becoming more common.

7. Participant/observer studies:

Uses: Gives researchers an in-depth perspective of drug abuse lifestyles.

8. Criminal justice system data:

<u>Uses:</u> Indicators of illicit drugs using activity levels and information on the availability and consumption of drugs.

None of the countries in Latin America utilizes the entire spectrum of methodologies detailed above. In fact, most of the countries have no ongoing mechanism whatsoever of monitoring drug use trends or the related social and public health consequences.

The lack of attention to the collection and analysis of drug abuse-related data in most of the countries provides favorable conditions for increased illicit drug trafficking. By the time the authorities determine that a problem exists, it is much more difficult to bring it under control.

Epidemiology of Drug Abuse

The data presented in Annex I were collected from a variety of surveys conducted in recent years. This is by no means an exhaustive list of published and unpublished research. However it does provide some insights into the extent and magnitude of drug abuse in the Region.

Most of the reported research is based on surveys of high school students or households. Both of these survey methods underestimate drug abuse because the drug abuser is more likely than the non-drug abuser to be living outside the family/home environment and/or to have dropped out of school.

It is difficult if not impossible to compare the findings from these studies because a variety of measures of drug use were employed. Furthermore, the drugs used are usually grouped by categories by the investigators, making it impossible to examine particular drugs of interest. For example, methaqualone has been and continues to be a serious problem in several countries. However, from the data in Annex I, it would be difficult to arrive at this conclusion. Problems related to the use of inhalants and coca derivatives such as coca paste and cocaine also are very prevalent and serious, but may not appear so from these data.

In any case, it can be seen that drug abuse is widespread in most of the populations studied. The primary drugs of abuse are marijuana, the sedative-hypnotics, amphetamines, cocaine paste, and inhalants. Many regular drug users consume more than one substance at a time. The age range of the affected population is very broad and includes a sizeable percentage of adults, particularly adult women. Because many of these studies do not include children below secondary school age, we have little data concerning children under 12 or 13. However, given the natural history of drug abuse and the data provided by teenagers, it is evident that much drug use begins at an early age--commonly 7 or 8 years. Few, if any preventive programs are designed to reach these youngsters, many of whom lack a permanent residence and do not attend school.

Assessing Public Health and Social Problems

By far the greatest limitation of the studies presented in Annex I is the fact that few of the investigators use additional data sources to provide insights and interpretations of what the data mean. For example, if 10 per cent of the teenagers have used sedative-hypnotics and 4 per cent use them regularly, how many of these youngsters are "dependent" on the drugs, how many are experiencing social or psychological problems related to their drug use, and what short- or long-range social and health consequences might result? While one could speculate on these questions, there simply are no clear-cut answers.

Suffice it to say that these studies demonstrate that a drug problem exists. To learn more about the nature of that problem, a variety of other kinds of research is needed, such as those mentioned previously.

The World Health Organization organized an Expert Committee on the Implementation of the Convention on Psychotropic Drugs in 1980 to review the methodology for assessing the public health and social problems associated with the use of psychotropic drugs. The lack of uniform and reliable data in this field was cited by the Committee as the principal obstacle to assessing the public health and social problems associated with particular drugs. Therefore, the Committee urged that mechanisms be established to facilitate the monitoring of use and related problems. It should be noted that several WHO Expert Advisory Panels have met over the past three years to review the abuse potential and problems related to several groups of pharmaceuticals. Very little information for these meetings has been made available from countries in our Region. Almost all of the information reviewed by these Panels comes from the more developed countries and therefore scheduling recommendations are based on the more developed countries' situation and needs. The Expert Advisory Panel meeting in September 1982 will discuss a large group of benzodiazepines, and again, as in the past, very few of this Region's Member Governments have offered relevant data for the Committee's consideration.

The content of the responses given by some of the Governments of the Region, however, deserves some mention. To paraphrase one respondent: "There is no information on the non-medical use of these substances. They do not appear among the causes of admission to our drug abuse services in the psychiatric hospitals." Another country said, "Although one can infer that drug abuse does occur in this country, especially among students. . . at present, we don't believe that the benzodiazepines constitute social or public health problems . . ."

In short, since there is no data, the inference is that there is no problem. One might ask just what evidence might be necessary to indicate the presence of "a problem."

This year, PAHO is collaborating with WHO and investigators in Argentina, Mexico, and Panama on a new project which might provide some new insights on the assessment of social and public health problems related to the use of alcohol and psychotropic and narcotic substances. This project is similar to an effort begun by PAHO three years ago to set up a surveillance and monitoring system of medical emergencies and deaths.

Drug Abuse and Drug Regulation

Several of the countries in the Region have high-level interministerial committees which review and set national drug abuse policies.

These committees can provide an important forum for discussion and for the intersectoral exchange of information, facilitating decision-making, policy formulation and strategic planning. For the most part, these committees concern thenselves with broad issues, but tend to focus much of their attention on illegal drug traffic, an area in which action by the law enforcement sector can have an immediate and very visible impact. Although the Health Minister is almost always a member of such committees, inputs from the health sector are generally quite limited—first, because of the lack of health data on drug abuse; second, because of difficulties in interpreting the data; and third, because action in the health sector may be viewed as relatively less effective, less dramatic and less visible. This is especially true in countries where the role of the public health sector is limited to treatment and rehabilitation.

However, there are effective strategies which can be successfully implemented by the Ministries of Health and which do, indeed, have a measurable impact. In particular, drug regulation is an important means of controlling the supply of psychotropic and narcotic substances. such, it is a very basic and effective strategy of drug abuse prevention which merits immediate attention. At present, most of the Region's of Health have not established formal mechanisms coordination between their mental health authorities (who generally national drug abuse programs) and their drug regulatory authorities (who generally are responsible for new drug approvals, registrations, import and export, and record-keeping in compliance with international drug control treaties). Furthermore, in budgeting and programming for drug abuse activities, drug control is not generally viewed as drug abuse prevention. Finally, several countries of the still have not signed and implemented the international conventions on psychotropic drugs and narcotic substances.

Drug regulation systems are inadequate in many of the countries of There are insufficient resources and countries are working with cumbersome, antiquated records systems. There are few countries in the Region which can report their data on controlled substances with any degree of confidence. situation translates This into: i) conditions for diversion of raw materials and pharmaceutical products from legal to illegal channels; and ii) an environment where legally manufactured and marketed dependence-producing substances are sold over the counter in pharmacies. Disorganization in procedures at the national level, the lack of supervision of retail outlets and manufacturers, and/or insufficient personnel to audit the situation properly can contribute to an oversupply and overavailability of some psychotropic drugs, and severe shortages of others.

It has been observed that supplies of psychotropic drugs on the essential drugs lists can be very erratic, particularly at the primary health care level. Last year, as part of a project on the management and supply of drugs at the primary health care level, a team of researchers examined stocks at health centers in five Latin American countries and detected some interesting patterns. For example, several of the centers had literally thousands of units of diazepam and at the same time lacked critical, life-saving items such as certain antibiotics. In some health centers, paraprofessional personnel were prescribing and dispensing controlled substances with little or no medical supervision. In others. controlled substances were routinely kept on open shelves with little or no security. Not only do these conditions present important and obvious risks, but also there are direct costs to the health care system, quite apart from that of drug abuse. The management of pharmaceuticals at all levels in the health care system needs urgent attention--to control costs, reduce wastage, and ensure that essential drugs are available when and where they are needed. Although an ad hoc group in PAHO is attempting to address this issue, there are insufficient resources for dealing with this problem comprehensively.

Deficiencies in the regulation, supply and management of pharmaceuticals have cost the Governments of the Region very considerable sums of money and have aggravated drug abuse problems. The few studies which have been conducted are mostly anecdotal, but still they serve to illustrate the costs of poor drug management.

Clearly, technical cooperation in this area is urgently needed. Psychotropic drug control does not occur in a vacuum—it is based squarely and firmly on the existing infrastructure for general pharmaceuticals management and control. Until that infrastructure is in place and operating effectively, psychotropic drug control cannot advance appreciably.

Medical Use of Psychotropic and Narcotic Substances

The problem of over-prescribing of psychoactive substances by physicians has been reviewed by several WHO Working Groups and Expert Committees. Unfortunately there is very little data from our Region on this aspect of the drug abuse problem. The overall rankings of sales volumes for the various categories of pharmaceuticals do indicate that the psychotropic drugs, particularly the benzodiazepines, are being prescribed very frequently. Given the epidemiology of communicable diseases in the developing countries of the Region, the fact that psychoactive drugs rank among the top 3-5 categories of drugs in sales volume would seem to indicate either that our estimates of the prevalence of mental disorders have been too conservative or that many physicians are improperly prescribing psychoactive drugs. A study by Scott would lend credence to the latter explanation. Scott looked at psychoactive drug prescribing in one small Latin American city over a period of six months. He found that general practitioners and gynecologists were the most frequent prescribers of psychoactive drugs, while the psychiatrists, who as a group might be expected to use more of these drugs, were much less likely to prescribe psychoactive substances for their patients. total volume of prescriptions for psychoactive substances over the six-month period exceeded that of antibiotics.

It is important that additional research on drug utilization be carried out in other countries. This type of research can then serve as a basis for planning promotional campaigns aimed at educating both the physician and consumer about the risks and benefits of using psychoactive drugs. In countries such as Canada, Sweden, and Finland such efforts have resulted in changing prescription patterns. The WHO Working Group on the Convention on Psychotropic Substances recommended that WHO develop guidelines on the appropriate use of these substances in medical practice. The Organization is now exploring the interest of the Member Governments in collaborating in the preliminary research needed for such an initiative.

Prevention and Treatment Programs

Very few countries in the Region have organized services for drug abuse patients and, where such services do exist, they are usually understaffed, underfinanced and lack clear definitions and objectives of their role.

Over the past four years, a few countries began initiatives to set up specialized institutions for drug abusers—usually located far from the community in which patients live. These institutions were set up under an outdated model of care which was based on a number of assumptions, including the idea that the drug abuser was somehow a "socially contaminating" factor, i.e., a person who should be isolated from the "normal" population. In some countries, considerable amounts of money were spent on construction of facilities and specialized personnel, with the assumption that drug abusers should be hospitalized for long periods of time. In addition, considerable investment was made in occupational rehabilitation, sheltered workshops, etc., with the assumption that drug abusers needed to be rehabilitated for the working world.

Now, two or three years after these efforts were undertaken, most of them consume large per patient expenditures for very small numbers of people. Recidivision and abandonment of treatment are high. In short, the return on investment for the particular Government is low.

In reviewing other alternatives, Governments should consider the development of community-based services which are fully integrated into the existing general health services system. The kinds of services which have been most cost-effective are those which utilize the existing general health services system for very brief inpatient detoxification and treatment, followed by referral to outpatient services in the community and outside the traditional medical context. These types of services are particularly well-suited to adolescents, and are low-cost because large numbers of highly specialized personnel are not required. One organizational form which has been quite successful combines other services for adolescents together with drug abuse services. Another model utilizes ex-drug abusers as "counselors."

As reported by the Director at the XXV Meeting of the Directing Council in 1977, adolescents are an underserved population in most of the countries of the Region. They often fail to come under maternal and child health services because they are too old, and yet they are too young to be included in many of the programs oriented toward adults. As noted in that same report, adolescents constitute a growing percentage of the population of developing countries—countries whose future economic and technological development will depend heavily on these youngsters. Youth Ministries have been established in some countries precisely because of the preoccupation of some Governments with this group. The health and social patterns established during youth set the stage for the health and social patterns a generation to come.

Because of the multisectoral nature of drug abuse and its political, cultural and economic implications, it is essential that Ministries of Health recognize that isolated medical approaches are totally ineffective and extremely costly. Unfortunately, drug abuse program directors often have very short-sighted, limited visions of their role. A case in point is a communication recently received from one such program director in response to some technical suggestions posed by a consultant. Paraphrasing his reply, he said, "our job is treatment and rehabilitation... we don't have the resources to undertake prevention activities in the community. That is someone else's responsibility...." So, while literally thousands of people are at risk, are seeking guidance and very elemental kinds of assistance, the drug abuse program in his country concerns itself with a very limited number of severe cases.

It should be mentioned that PAHO is continuing its collaborative activities with the WHO Collaborating Centers in the Region, as well as the Inter-American Institute of the Child, UNESCO, and ILO. Many of these collaborative efforts are directed toward prevention activities, particularly among children and youth.

Financing of Drug Abuse Activities

Although many countries still need to carry out baseline epidemiological research to define the nature of their drug abuse problem, the majority of the countries in the Region are at a stage in program development where they need to build up their infrastructure and carry out activities related to specific prevention and treatment services. This means that, for the most part, sources of funding for research, such as the U.S. National Institutes of Health and the Canadian International Development Research Centre (IDRC), would not be appropriate.

There is considerable bilateral funding occuring between the United States of America and several Latin American countries, principally focused on law enforcement. However, in at least one case this bilateral cooperation has been extended into the field of crop substitution and rural development. In informal talks with one donor country, it was determined that the donor would be willing to consider health sector funding if the recipient countries would request assistance in this area. In particular, there is considerable receptivity to provide technical cooperation in drug regulation, pharmaceuticals supply management, and other critical areas mentioned previously in connection with prevention. Other countries which have bilateral programs include some European countries and Canada.

The United Nations Fund for Drug Abuse Control (UNFDAC) is the major source of financing for technical cooperation in drug abuse prevention and treatment activities. This support has been very modest. Although the projects funded by UNFDAC sometimes have an overall time horizon of 2-5 years, budget commitments are for only one year at a time, which tends to lead to piecemeal programming and planning because there is no guarantee that multi-year projects can be continued. It should be noted that UNFDAC depends on relatively modest contributions which fluctuate from year to year, which limits UNFDAC's flexibility on funding commitments. As reported to the Directing Council two years ago, the UNFDAC projects in this Region have been relatively small in size and scope as compared with projects in other Regions.

Some of the criteria used in UNFDAC financing decisions include:
i) objective and/or subjective measures of the magnitude of the country's drug abuse problem; ii) the level of Government commitment to dealing with the problem, as reflected by its own investment in personnel, plant and equipment, etc., and iii) the technical quality and soundness of the proposed project. PAHO has cooperated with several countries, including Bolivia, Brazil, Colombia, Ecuador, Paraguay, and Peru, in the preparation of UNFDAC project proposals, and in most cases, the proposals were accepted by UNFDAC in part or in their totality. PAHO's role here has primarily been that of providing technical advice and assisting in project formulation and execution.

Unfortunately, many of the UNFDAC country projects to date have been very limited, not only in terms of their size and scope, but also with respect to their underlying objectives. Those countries interested in submitting UNFDAC country project proposals in the future should consider the development of broad-based multisectoral approaches rather than continuing to formulate programs, based on limited medical models.

Organizing for Effective Drug Abuse Control

To date, the majority of countries with drug abuse programs have included drug abuse within the general mental health program. In addition to drug abuse, the mental health programs must support a number of very costly activities including the maintenance, treatment and rehabilitation of large numbers of institutionalized persons over long periods of time. Although these activities are necessary, it should be recognized that they consume large budgetary outlays which do not always produce very positive results relative to their costs.

In most countries, there are no "earmarked" resources within the mental health program, exclusively dedicated to drug abuse. As a result, resources which might have been used for drug abuse activities are diverted to other "more urgent" and immediate problems. The time that the mental health program director can devote to drug abuse is also limited. Finally, the perspective that he or she has on drug abuse prevention and control is colored by the fact that he or she is trained to deal with mental illness. It should be clear that while drug abuse has a mental illness component, this is just one component among a number of other factors, including social, pharmacological, and economic issues far removed from the traditional domain of the mental health professional.

There are essentially two approaches which can be taken: first is to organize drug abuse activities as part of the mental health program, recognizing that there is a natural tendency to deal with drug abuse with the traditional tools of the mental health trade. Included in this approach is the basic assumption and expectation that somehow the responsible officer will liaison with social welfare, law enforcement, laboratories, and pharmaceutical drug regulation authorities, as necessary. So far, this approach has not produced very encouraging results. Some of the reasons have been discussed in this paper. To summarize, it is evident that effective coordination, although highly desirable, is not taking place, particularly where formal mechanisms for such coordination are absent. Since budgetary and program decisions are made in accordance with priorities identified within each health program, it is not realistic to expect that the individual programs such as drug control, epidemiology, laboratories, etc., wil dedicate resources to drug abuse objectives, given that drug abuse is not one of their principal concerns.

A second tactic is to set up a separate and special drug abuse initiative within the Ministry of Health, with its own resources which would be invested, in turn, in existing health programs such as mental health, epidemiology and drug control. For example, if it were decided that a drug abuse program should give priority to drug control in 1983, proportionately more of the time and resources of the drug abuse office would be invested in the Ministry's drug control program, providing, for example, budgetary outlays to cover the costs of additional trained personnel for the supervision and auditing of pharmacies. This approach offers substantial advantages because it provides for accountability in the drug abuse field. Resources can be expended in accordance with drug abuse objectives and priorities to maximize the return on investment. Program evaluation would be simplified because specific objectives, activities, outputs and expenditures would be linked. Most importantly,

the information for decision-making would be centralized in one office which could then take appropriate and informed action in response to particular conditions. This capability is vital to drug abuse control. Without it, little measurable progress can or will be made.

Conclusions

Drug abuse is a serious social and public health problem in the Region. The nature and extent of drug abuse should be carefully studied and monitored. To do this effectively will require the development of surveillance systems which can identify specific problems with specific substances early enough to permit effective prevention and control activities.

Effective prevention requires both a reduction in demand and availability or supply of psychoactive and narcotic drugs. The important role of the medical profession in shaping patient expectations and demand for psychoactive drugs should be recognized. Efforts should be made to make physicians more aware of the risks and benefits of prescribing these substances.

Repressive action and strict psychoactive drug regulation also offer important benefits for drug abuse prevention by reducing availability. Yet few of the countries in the Region have adequate drug management and regulatory mechanisms in place. Development of a solid infrastructure in pharmaceutical drug management and regulation should be undertaken as a priority.

Treatment programs in the Region should be reoriented to provide low-cost, community-based services to large numbers of persons at risk. Experience thus far with the traditional medical-rehabilitative models of treatment has shown them to be costly and largely ineffective. The use of innovative, non-medical approaches to treatment should be supported and pilot-tested in several countries. In particular, Governments are urged to make effective use of private sector resources in the development and management of innovative programs, particularly those programs with a preventive orientation.

International and bilateral financing for projects is available to those countries which wish to work in this area. It is important that the health sector participate fully in bilateral drug abuse projects, which heretofore have been exclusively the concern of the law enforcement sector. Countries which intend to seek technical cooperation should be prepared to make a commitment and contribute resources of their own to this area.

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COUNTRY	SOURCE	POPULATION	FINDINGS
Dominica	Dr. Ta'eed, unpublished	Survey of boys aged 12-18 years enrolled in secondary school	75% have smoked or currently smoke marijuana
Mexico	Castro and Valencia, (1978)	Representative random sample of 10,000 + students aged 14-18 years in Mexico.	Highest rates of consumption were found among prescription drugs. About 1.9 per cent of students admitted using amphetamines, 1.6 per cent use marijuana, 1.2 per cent, barbiturates and .9 per cent take stimulants
	Lafarga (1972)	Sample of 642 students at a private university in Mexico City	20 per cent had used marijuana; .7 per cent had used hallucinogens
	Cabildo et al (1974)	497 preparatory and vocational students in Mexico City aged 16-18 years	17.5 per cent had used marijuana, amphetamines, or hallucinogens
	De la Fuente (1972)	223 students aged 18-25 years from the National University of Mexico	10.4 per cent had used marijuana; 10.7 per cent had used inhalants; 1.2 per cent had used hallucinogens
	Carranza (1972)	7,800 secondary school students in Mexico City aged 13-20 years	15 per cent had used some drug
	Wellish and Hay (1974)	229 secondary students in Mon- terrey aged 15-18 years	12.9 per cent had used marijuana; 4.7 per cent had used inhalants; .9 per cent had used opiates or cocaine
	Medina Mora <u>et al</u> (1978)	Household interview survey among persons aged 14+ years in six cities in Mexico	Rates of use of marijuana wary from .3 per cent to 6.7 per cent; rates of use of inhalants wary from .01 per cent to 1.2 per cent; rates of use of hallucinogens wary from .2 per cent to 1.1 per cent; rates of use of barbiturates wary from .8 per cent to 6.0 per cent; rates of use of amphetamines wary from 1.0 per cent to 4.1 per cent; rates of use of anxiolytics wary from 8.9 to 24.6 per cent; La Paz, Monterrey and Mexicali showed higher rates on the average than Mexico City
	Castro-Sariñana and Collazos (1979)	4,059 students aged 14-18 years in Mexico City	10 per cent of population said they experienced problems related to drug or alcohol use; 3.6 per cent had drug-related problems; 28.5 per cent of those using drugs or alcohol had problems
	Natera (1977)	6,630 patients at Mexico's 27 Youth Centers (Centros de Integración Juvenil)	52 per cent of patients had problems related to the use of inhalants

Ecuador

, Chile

POPULATION

SOURCE

COUNTRY

Peru

Oliver and Llerena (1979)	12,000 male secondary students in Lima aged 11-22 years	20 per cent had consumed drugs; 6 per cent were regular users; 1.6 per cent were "addicted"; 22 per cent users said they can't give it up; 41 per cent used "pasta básica de cocafna" or mixtures of psychotropics
Jerf <u>et al</u> (1979)	Representative sample of 2,167 households in Lima	14.6 per cent used tranquilizers regularly; 5.5 per cent used coca leaves regularly; 4 per cent used amphetamines regularly; 3 per cent used marijuana regularly; 2.6 per cent used hypnotics regularly; 1.3 per cent used coca paste regularly; The greatest use of amphetamines, tranquilizers and hypnotics occurred among persons over 25 years
Division of Mental Health (1982)	Total population in drug treatment programs, 1981, throughout the country. (About 50 per cent of these programs began functioning in 1981)	8,112 persons under treatment for drug abuse in 1981; Drugs most frequently used by patients include combinations of marijuana, coca paste, barbiturates, amphetamines, tranquilizers, etc.; Mandrax/quaaludes rank high on the list of drugs used singly
Universidad de Antioquia (1977)	Factory workers in Medellfn in 1977	Drugs are used by 35 per cent of the men and 38 per cent of the women. Persons over 30 years are more likely than any other group to take drugs
Universidad de Antioquía (1980)	Patients in Medellín in treatment	95 per cent used marijuana; 74 per cent used sedative-hypnotics
Ruiz and Sixto et al (1980)	16,092 secondary school students in Antioquia	10 per cent consumed drugsa M/F ratio of 3:5; 70 per cent of users used multiple drugs; 3.5 times as many males as females use drugs
Ministerio de Salud (1974-1975)	84,000 students in the Province of Santiago	5-11 per cent take drugsmost common in coed schools; alcohol most preferred drug
Florenzano <u>et al</u> (1980)	Adolescents at four schools in different socioeconomic areas	16.7 per cent had tried marijuana; 7.3 per cent smoke marijuana now; 2.5 per cent use tranquilizers; 1.9 per cent use stimulants; middle and upper class youths use more drugs
DINACTIE (1982)	High school students	40 per cent believed drugs could be obtained easily; lo per cent were users of psychotropic drugs, particularly the sedative-hypnotics and stimulants; 7 per cent were users of marijuana

Colombia

Colombia

SUMMARY OF PAHO DRUG ABUSE ACTIVITIES AND FUNDING SOURCES, 1982-1983

REGIONAL H	PROJECTS	Regular Budget US\$	Extrabudgetary Funds US\$	Source of Funds
<u>Ongoi</u>	ing			
AMRO-1575	Alcohol and Drug Abuse Personnel (1 P.4 and 1 G.4) Duty travel Courses and seminars Consultants	149,100 20,500 - -		PAHO/WHO Regular
AMRO-1575	VEDA Project (Drug Abuse Surveillance and Feasibility Study) Personnel Staff duty travel Contractual services Supplies and materials Program support costs		7,000 37,030 3,000 14,814	U.S. Dept of State
Prop	osed (1983)			
AMRO-1502	Drug Abuse Training Course (1983) Seminar for Spanish-speaking countries on treatment methods		25,000	UNFDAC
AMRO-1504	Safe Use of Psychotropic Drugs Seminar for Caribbean countries (1983)		15,000	UNFDAC
COUNTRY P	ROJECTS			
BRA-1501	Epidemiology of Drug Abuse Development of methodology for drug ab epidemiological studies in Brazil; car out an epidemiological study in Rio de	ry	22,600	UNFDAC
Ongo	ing (1982)			
COL-1501	Prevention and Treatment of Drug Abuse Development of human resources; epidemiological and operations researc advisory support for 10 new treatment centers funded by the Ministry of Heal	h;	108,000	UNFDAC

COUNTRY P	ROJECTS	Regular Budget US\$	Extrabudgetary Funds US\$	Source of Funds
PAR-1501	Assessment of Drug Abuse Carry out epidemiological research as a baseline for the development of prevent and treatment services		18,080	UNFDAC
PER-1501	Prevention and Treatment of Drug Abuse Advisory support for the development of community-based treatment services; Reorganization of the Drug Control offi in Ministry of Health and implementatio of an information system.	ce	103,000	UNFDAC