# *Special Report*

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# Epidemiologic Report on the Use and Abuse of Psychoactive Substances in 16 Countries of Latin America and the Caribbean[1]

One of the responsibilities of the World Health Organization (WHO) and the Pan American Health Organization (PAHO) is the collection and dissemination of information on both currently prevalent and emerging health problems. Particularly important among these problems, by reason of its growing magnitude, is the use and abuse of psychoactive substances. WHO is the technical agency of the United Nations charged with implementing the health-related aspects of international treaties on narcotics and psychotropic substances.

As part of this responsibility, PAHO convened an August 1987 meeting in Buenos Aires of the Advisory Group on the Epidemiology of Drug Abuse which had as an aim the undertaking of a precise and practical study of the magnitude of the problems of drug abuse and drug trafficking and their consequences throughout the Region for individuals and society. At this meeting, establishment of an extensive system for compiling and evaluating data on the subject was proposed, and this task was assigned to PAHO and the Organization of American States (OAS), in conjunction with other specialized agencies, such as the South American Agreement on Narcotic Drugs and Psychotropic Substances (ASEP). These organizations received a specific mandate to set up an inter-American data bank on alcoholism and drug abuse.

One of the strategies derived from the meeting, and one that responded to a request contained in Resolution XVII of the XXIX Meeting of the PAHO Directing Council, was a proposal to prepare epidemiologic profiles of psychoactive substance use in the countries of the Americas, as well as assessments of the countries' responses to problems related to this use.

In order for the necessary information to be compiled in a homogeneous manner, a data collection guide was prepared and distributed to 16 countries in the Region. Each country was requested to collect data in the following areas: socio-demographic and economic indicators relative to the production and marketing of psychoactive substances, the diversion of such substances from licit channels, levels of consumption, health indicators

[1]This report is a summary of a paper entitled "Perfiles epidemiológicos nacionales sobre consumo de alcohol y otras drogas en América Latina," by Lenn Murrelle, Rodrigo Escalona, and Ramón Florenzano, Center for Alcohol Studies and Department of Psychiatry, University of North Carolina, Chapel Hill, North Carolina, U.S.A. The paper was presented at the II Meeting of the PAHO/WHO Study Group on Public Health Problems Related to Alcoholism and Drug Abuse, held in Miami, Florida, 31 January–3 February 1989.

that showed the effects of illicit consumption, the sociocultural framework, government or health sector responses to problems related to the improper use of such substances, rehabilitation and social reintegration of drug-dependent individuals, primary prevention, research, and education and training.

Analysis of the data collected in the 16 countries participating in this stage of the project was assigned to a group of researchers at the Center for Alcohol Studies and the Department of Psychiatry of the University of North Carolina School of Medicine in Chapel Hill, North Carolina, U.S.A. The present report summarizes the data collected. The omission of one or more of the categories referred to above means that such information either was not available or was unreliable.

# ARGENTINA

## Production and Marketing of Psychoactive Substances

The most important psychoactive substances produced in the country are alcoholic beverages, tobacco, and some psychotropic medications. With regard to alcohol, 121,392,277 liters of distilled beverages were produced in 1986, which equals 28,537,483 liters of absolute alcohol, for an increase of 23.5% over the previous year. Beer production for that year was 544,590,000 liters, the approximate equivalent of 27,229,500 liters of absolute alcohol.

Most wine produced is for the domestic market. According to data from the National Viticulture Institute, authorized production of wine for domestic consumption reached a total of 1,856,691,100 liters in 1986, or 213,404,476 liters of absolute alcohol.

Tobacco production for 1984–1985 was estimated at 63,220 tons. In 1983 the area occupied by tobacco crops was 3.8% of the total surface devoted to industrial crops and 0.02% of the total agricultural area of the country. The production of cigars and cigarettes declined in 1980 by 10.1% compared to 1975.

Approximately 90% of the production of psychoactive medications in Argentina is carried out with imported raw materials. Some of the drugs produced are exported, but the market is very small. At the present time the Ministry of Health and Social Action does not maintain statistics on the production and marketing of psychoactive medications. There is no evidence that clandestine production exists. The Government has the responsibility for coordinating the licensing system for the licit production and control of narcotics and psychotropic medications.

There is no state monopoly on the production or importation of alcoholic beverages, tobacco, or psychotropic substances.

A medical prescription is required for the sale of psychoactive drugs. Requirements for the dispensing of drugs vary according to the list on which a substance appears. Forgery of prescription forms has been detected.

Argentina has a special administration, the Department of Psychotropic Substances and Drugs, which is responsible for enforcing the provisions of the 1961 Single Convention on Narcotic Drugs and the 1971 Convention on Psychotropic Substances.

Surprise attacks have occurred on mobile units that distribute manufactured drug products, which are then resold illegally.

## Consumption

In 1986, the annual per capita consumption of alcoholic beverages for the population 15 years of age and over was estimated at 12.8 liters of absolute alcohol, of which 1.3 liters was in distilled beverages, 1.3 liters in beer, and 10.2 liters in wine. In that same year the consumption of distilled spirits increased by 23%, and that of beer by 27%.

It is estimated that a third of the country's adult population smokes habitually. Although in recent years the proportion of smokers has stayed at a constant level, a slight reduction in numbers has been observed among males, whereas a considerable increase has been detected among women.

According to data provided by the Argentine Ministry of Agriculture and Livestock, cigarette sales in 1984 reached 1,772 million packs, while annual per capita consumption was 1,220 cigarettes. Per capita consumption has increased by 30% since 1947.

There is no official information available on the use of psychoactive medications.

## Health Indicators

Of the 266 patients hospitalized for improper use of drugs in the municipal hospitals of the city of Buenos Aires and discharged during 1983, 249 cases were alcohol-related and 17 were associated with other drugs. Drug-related psychosis accounted for 11% of all cases with a discharge diagnosis of psychosis. Of patients discharged with the diagnosis of neurotic personality disorder, 29% of cases were related to abuse of psychoactive substances, and 27% to alcohol dependence syndrome.

Data collected by the National Commission Against Drug Trafficking and Drug Abuse indicate that in 1987 the National Center for Social Rehabilitation admitted 603 cases (476 males and 127 females). In the same year the Toxicological Care Fund attended 525 outpatient cases (420 males and 105 females).

A research project was carried out in 1988 on the nature and magnitude of psychoactive substance abuse cases seen by hospital emergency services.[2] Approximately 5% of the emergencies seen in a one-week period were related to drugs, and of those, 64% were due to abusive consumption of alcohol, 20% to the ingestion of psychoactive medications, and 16% to mixed consumption.

There are no beds in general hospitals assigned specifically for alcoholic and drug-addicted patients, who are admitted to different services depending on the particular clinical consequences of their drug abuse. Very few cases are attended by the psychiatric services.

Special mention should be made of a study of blood alcohol levels in drivers carried out in the Federal Capital in 1978 by the Institute of Biology and Experimental Medicine. Blood alcohol levels between 0.03% and 0.07% represented 14.2% of the sample tested, and levels higher than 0.07% corresponded to 9.1% of the sample.

Studies carried out in a hospital in Buenos Aires in 1985 indicate that the most frequent discharge diagnosis of patients admitted for alcoholism was abstinence syndrome (48.8%), followed by a diagnosis of gastrointestinal hemorrhage (20%).[3] Mortality among patients hospitalized for diseases associated with excessive ingestion of alcohol was 15.4%. In

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[2]Hugo A. Míguez and Ricardo W. Grimson, "Consultas de urgencia por abuso de sustancias psicoactivas en hospitales de Buenos Aires," *Bol Of Sanit Panam* 107(4):296-306, 1989.

[3]H. Rambla and C. Tarasiuk, Diagnósticos al egreso de 84 pacientes alcohólicos internados en el hospital de San Isidro" (Buenos Aires, Mimeographed document), 1985.

the same period, overall mortality at the hospital was 11.5%. It was estimated that there is extensive underregistration of alcohol problems as a cause of disease and death. Twenty-five percent of the cases studied had no mention of alcoholism in the discharge diagnosis.

Of the AIDS cases known in 1988, 11 (6.7%) were intravenous drug addicts, six (3.7%) were bisexual intravenous drug addicts, and one (0.6%) was a homosexual intravenous drug addict.

According to the 1986 report of the National Center for Social Rehabilitation,[4] the use of inhalants appears to be increasing among youth between the ages of 12 and 19; another study[5] indicated that inhalant use began at about age eight.

## Sociocultural Framework

Numerous studies have been carried out on rates of nondrinking and different patterns of alcohol consumption. There is presently a need for more up-to-date and in-depth studies on attitudes toward drugs in Argentina.

Information from centralized statistics from various government security offices indicates that in 1987 a total of 3,839 persons were arrested for drug-related reasons, of whom 3,389 were males and 450 females. Of the total, 10.4% were minors.

## Responses to the Improper Use of Drugs

Argentina has some private foundations that alone or with partial support from the Government or international agencies are trying to develop actions in the area of prevention and treatment. There are also organizations of parents and family members that support and actively participate in treatment communities for young addicts.

Argentina is a signatory of the Single Convention on Narcotic Drugs of 1961 and the Convention on Psychotropic Substances of 1971. Pursuant to these Conventions, the Ministry of Health and Social Action sets standards for the production and marketing of pharmaceutical products. The National Commission Against Drug Trafficking and Drug Abuse coordinates all efforts in the campaign against drugs.

No specific places are designated for the sale of alcoholic beverages or tobacco, which are sold without restrictions, nor do any provisions control the number of retail outlets where they may be sold. The legal drinking age is 18. There are no regulations governing the advertisement of alcoholic beverages.

## Treatment, Rehabilitation, and Social Reintegration

The Ministry of Health and Social Action is the institution responsible for organizing the treatment of patients with drug abuse problems.

Treatment is financed by the State and carried out in public institutions. A portion of the revenues produced from gambling is used to finance prevention and treatment programs.

Many patients with substance abuse problems receive treatment from nonprofessional organizations of a religious nature, especially the Andrés and the Viaje de Vuelta ("Return Trip") Programs, both patterned on the treatment community models of the UOMO programs in Italy and the DAYTOP programs in the United States.

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[4] V. Otero, et al., "Caracterización del perfil de la demanda y tendencias del uso indebido de drogas en los pacientes del CENARESO" (Ministry of Public Health, Buenos Aires, Mimeographed document), 1986.

[5] C. Arias, "Observaciones sobre la inhalación de disolventes en menores" (Municipality of San Isidro, Centro de Vicente López, Mimeographed document), 1986.

Although outpatient treatment is available, some approaches used in the private medical sector involve compulsory hospitalization. To date, no research has been carried out to determine the relative effectiveness of the two different treatment modes.

Courses designed to combat the smoking habit have been developed and have produced promising results.

### Prevention

The primary prevention models that have predominated to date are those classified by Nowlis as the ethical-legal and medical-health models.[6]

A National Preventive Education Plan is in place for the period 1987–1989. Prevention publicity campaigns have also been designed for television and radio.

### Research

Research is basically financed by the State, but financial contributions have also been made by private organizations. Since late 1985, an agreement between three institutions, called the Tripartite Framework Convention, has made it possible to coordinate research efforts in the area of drug abuse. Current research topics include drug use among adolescents, detection of families at risk, drug abuse and the work environment, evaluation of treatment methods, and situations posing relapse risk, among others.

### Education and Training

Based on a study of how the topic of drug abuse is currently taught in the health, social, and legal science curricula in the universities, the suggestion was made to strengthen this field of instruction at the undergraduate level and to set up a graduate program. The latter initiative was begun in late 1986, when an interdisciplinary specialization program was organized.

An agreement was recently signed with the United Nations to train personnel in the treatment of drug-dependent patients.

[6]H. Nowlis, *La verdad sobre la droga: la droga y la educación* (Paris, UNESCO), 1975.

## BOLIVIA

### Production and Marketing of Psychoactive Substances

The legal psychoactive substances produced in Bolivia are spirits, wines and fermented beverages, malt beverages, potable ethyl alcohol, and tobacco. This production has been increasing considerably each year and is directed almost exclusively toward domestic consumption, since exports are not significant. In 1987, production amounted to 14,905,952 liters of spirits, 106,002,321 liters of malt beverages, 2,007,715 liters of fermented beverages, and 4,498,600 packs of cigarettes.

The psychoactive drugs diazepam, chlordiazepoxide, and phenytoin are produced domestically.

In addition, there is illegal production of both alcoholic beverages and drugs (marijuana, cocaine hydrochloride, and cocaine sulfate). It is estimated that the cultivation and production of coca approximately tripled between 1980 and 1986.

Bolivia produces an estimated 765 tons of coca paste per year, of which only 400 to 500 tons are exported. One-third is

transformed into cocaine hydrochloride, consumed in the country as *pitillos*.

The structure of the psychoactive substance industry is regulated through licensing by the Ministry of Industry and Trade and the Ministry of Social Welfare and Public Health. Quality and toxicity control are governed by international standards. Production is regulated by the free market.

The preparation, importation, distribution, and marketing of products that contain narcotic drugs or psychotropic substances require medical prescription and the use of special control forms. To date no forgeries have been detected.

The Bolivian pharmaceutical industry does not manufacture narcotic drugs but imports under regulations set by the Government.

Illegal trade in amphetamine drugs from Brazil has been reported. Also of concern is the discovery of illegal trade in pethidine (Demerol), fentanyl, haloperidol, and other medications.

## Consumption

According to data from the Ministry of Industry and Trade, 4,498,600 packs of cigarettes were produced in 1987. Domestic consumption was 3,903,225 packs, which means that 87% of the cigarette production was consumed in the country. However, it is suspected that if contraband were considered, the figures for domestic consumption would rise.

According to estimates made for 1987 by the Ministry of Social Welfare and Public Health, consumption of absolute alcohol was approximately 4.3 liters per capita. This figure did not take into account home production of *chicha* (a fermented maize drink), legal importation (which is limited), and contraband (which is significant).

Several studies have been carried out to estimate the prevalence of the improper use of psychoactive substances. A youth survey carried out in 1978 by the National Bureau for the Control of Dangerous Substances indicated that 11.2% of the respondents had tried drugs at one time or another, and 1.0% admitted to being habitual users. A study carried out by ABC Communications in 1986 on a sample of 1,219 people between 8 and 25 years of age and one conducted in the same year by the Bolivian Red Cross on 1,536 individuals aged 10 to 25 yielded similar results. The ABC Communications study revealed that the most commonly used substances were marijuana (38.7%) and basic cocaine paste (38.6%), followed by psychoactive drugs (8.8%), inhalants (7.5%), and cocaine hydrochloride (6.4%). The Red Cross study found the following percentages of use: marijuana, 36.3%; cocaine, 8.8%; inhalants, 6.3%; and gasoline, 6.3%.

With respect to the age groups at greatest risk of using psychoactive substances, research carried out in the Psychiatric Clinic of the City of La Paz between 1981 and 1984 showed that 83.7% of the alcoholics hospitalized were between 30 and 59 years of age. On the other hand, the study conducted by ABC Communications showed that the greatest prevalence of psychoactive substance use was in the group aged 20 to 25. Studies done by the National Institute for Research on Drug Abuse (INIF) showed that 65% to 70% of the addicts hospitalized in that institution were between the ages of 15 and 30. Research carried out in Cochabamba between 1979 and 1980 revealed that 30% of the respondents over 15 years of age drank alcohol. The above-mentioned Red Cross study detected the greatest incidence of psychoactive substance use among the 16-to-25 age group. This same research revealed no differences associated with social stratum.

Large quantities of psychotropic medications are smuggled into the country

from Brazil (amphetamines), Peru (propoxyphene), and Chile (pethidine and fentanyl). Consequently, it is not possible to accurately estimate their consumption.

## Health Indicators

A study done in 1985 by the Psychiatric Clinic of the National Health Fund in La Paz revealed that 251 (26%) of 953 hospitalizations were for alcohol problems. Of the 251 cases, 223 were males (88.8%) and 28 were females (11.2%). In this same study 4,541 records of outpatient consultations were examined. Of these, 341 were for alcohol-related problems (7.5%) and 21 for the use of other drugs (0.5%). These findings seem to indicate that patients with drug dependency problems make more use of hospitalization than of outpatient consultation.

Data are also available from the INIF, which in its 12 years of activity has increased its outpatient coverage and progressively reduced hospitalization. Most voluntarily hospitalized patients are males, and the unemployed predominate. According to this same source, a change has been observed in the proportions of patients treated for addiction to various substances. In the first five years (1976–1980), alcoholism represented 38.8% of the demand; multiple drug abuse, 25%; and cocaine, 10%. In the following five years (1981–1985), multiple drug abuse accounted for 40%; alcoholism, 27%; and cocaine dependence, 20% (an increase of 100%). The 1986 and 1987 data continue to reveal a rise in the demand for treatment by cocaine users (33%), whereas alcoholism treatment has been relegated to third place.

Little information is available on the relationship between traffic accidents and the use of alcohol and other drugs. According to statistics collected by the La Paz Traffic Department, in 1980 intoxication was the second most common cause of traffic accidents, being involved in 12.7%. The figure increased to 18.6% in 1986.

The effects of drug abuse on the labor sector are difficult to gauge. A follow-up study carried out by the Department of Hygiene and Industrial Safety in three factories in La Paz found that 7.3% of the absenteeism in the first two days of the work week and 1.2% of the work-related accidents were directly related to the consumption of alcohol.

## Sociocultural Framework

A growing acceptance of alcohol consumption has been observed, although consumption patterns vary in different social groups. In the Andean rural area, women's participation in drinking alcohol during civic and religious activities is accepted. Among the marginal urban groups, persons who drink to excess are rejected. Men drink heavily, particularly with friends on weekends, and becoming intoxicated is accepted. Other, more recent consumption patterns include the use of alcohol in combination with cocaine and other drugs in the 15-to-30 age group.

The relationship between the abuse of psychoactive substances and delinquency appears to be quite significant; however, no systematized information is available in this respect. The same is true for drug abuse among the prison population.

## Responses to the Improper Use of Drugs

The community makes use of public and private institutions that provide prevention, treatment, and rehabilitation services. Currently there are approximately 20 institutions that treat drug addicts, concentrated mostly in La Paz,

Santa Cruz, Cochabamba, and Tarija. Emphasis is placed on rehabilitation.

In a survey carried out among health professionals, 60% of the respondents believed that alcohol and drug abuse was a disease and that drug addiction was more difficult to treat and had worse consequences than alcoholism. Of the remainder, 25% considered drug abuse to be both a disease and a social problem, and 15% considered it to be a vice that warranted punishment.

The Government of Bolivia has undertaken a campaign against drug trafficking as a major national priority, working through the National Council for the Prevention of Drug Addiction (CONAPRE), formed by four ministries, and the National Council Against the Improper Use and Illegal Traffic of Drugs. The latter agency defines overall policies; however, the country does not have sufficient resources to carry them out.

Bilateral agreements have been drawn up with the United States that have strengthened actions against drug trafficking.

### Prevention

The prevention strategies adopted by Bolivia are coordinated by the Ministry of Social Welfare and Public Health and the Ministry of Education. The programs are aimed at the entire population, with special emphasis on the groups at greatest risk. Preventive education is provided in the schools. Campaigns are carried out by State and private institutions. To date no evaluations have been made to determine the impact of these plans.

### Research

Financing for research comes almost entirely from international agencies. There is no national institution responsible for guiding and supervising the research, but the recently established CONAPRE could assume that role.

### Education and Training

The principal health education institution is the National Medical Residency System in the Graduate School of the Universidad Boliviana, which has been training psychiatrists since 1985. All the health science departments include drug abuse education in their undergraduate programs, but they fail to give it sufficient emphasis.

## BRAZIL

### Production and Marketing of Psychoactive Substances

The alcohol and tobacco products consumed in Brazil are produced entirely in the country. Most psychoactive medications are made with imported raw materials.

In 1984 the legal production of alcoholic beverages was 1,000 million liters of *cachaca*, 2,000 million liters of beer, and 400 million bottles of other beverages (wine, whiskey, cognac, vodka, etc.). In 1980 the absolute alcohol content of distilled beverages was 450 million liters.

The alcoholic beverage industry was the fifth fastest growing industry in the country in 1985 (among 25 manufacturing companies), and the drug industry was the sixth.

The production of psychoactive drugs is regulated by the free market and there

is no State monopoly. Their manufacture, marketing, and distribution are subject to control by the National Health Surveillance Unit, Drug Division, in the Ministry of Health. No information is available concerning the diversion of medications into illicit channels.

The Drug Division in the Ministry of Health reported that 228 products containing benzodiazepine were marketed in the country in 1983.

The dispensing of psychoactive drugs is governed by the provisions of the Single Convention on Narcotic Drugs of 1961 and the Convention on Psychotropic Substances of 1971. Consequently, some drugs require a regular doctor's prescription and others require special prescription forms. Forgery of prescriptions and prescription forms has been detected.

Despite legal regulations governing the sale of psychoactive medications, these substances are frequently sold without medical prescription. It is common for pharmacy salespeople to be consulted by customers and to prescribe these drugs for them.

## Consumption

Information from 1981 published by the press revealed that the consumption of all alcoholic beverages amounted to 9.1 liters of absolute alcohol per capita per year. The consumption of cigarettes in the second half of 1986 was estimated at 63 packs per year for each individual over 15 years of age. In regard to psychotropic drugs, data published in 1980 (*Pharmaceutical Market of Brazil*) estimated that 17% of Brazilian medical prescriptions were for psychotropic substances. No data are available on consumption.

Patterns of alcohol consumption in Brazilian society vary widely and cannot easily be generalized.

A study carried out in 1987 in São Paulo, Salvador, and Pôrto Alegre on a sample of 120 young people who lived on the street confirmed that drug use among that population had reached alarming proportions. Significant percentages of these youngsters, between 7 and 17 years of age, said they had used the following substances in the past month: tobacco, 86%; alcohol, 51%; marijuana, 44%; cocaine, 11%; and inhalants, 56%. In addition, 17% admitted to having used Artane (trihexyphenidyl), an anticholinergic, and 8%, diazepam.

It is interesting to compare the above figures with those of another study carried out in the same year. In a sample of 20,000 primary and secondary school students from 10 to 17 years of age in eight cities, the study found that 76% had used alcohol on some occasion or another; 58% had used it in the past year (62% of males and 55% of females), and 31% in the last month. Tobacco was used in the last year by 16%, marijuana by 1.6%, inhalants by 9.5%, cocaine by 0.4%, anxyolitics by 3.5%, hypnotics by 2%, and barbiturates by 1.7%. Another alarming piece of information obtained from this study was that 5% of the students said they had consumed alcohol on 20 or more days during the last month.

## Health Indicators

Two studies carried out in low-socioeconomic-class neighborhoods, the first in 1965 and the second in 1974, found that 6% of the persons in the sample were "pathological drinkers." In additional research in a marginal area of the city of Salvador, an alcoholism rate of 22.6% was discovered. Regarding the use of other psychoactive substances, a 1987 study done in psychiatric hospitals throughout the country indicated that 30% of the hospitalizations for drug dependence were for the use of *Cannabis*, 24% for unspecified drugs, 16% for

cocaine, and 12% for drug-related disorders.

Examination of the relationship between alcohol consumption and traffic accidents over a 10-year period (1966–1975) has revealed that 25% of the drivers involved in accidents had some degree of alcoholemia, and in 18% of the accidents studied that level reached more than 80 mg/dl.

Data from the Ministry of Health indicate that of the total number of AIDS cases reported up to March 1988 (2,956), 16.7% (495) had acquired the disease through blood, and of these, 39.4% (195) were intravenous drug users.

## Responses to the Improper Use of Drugs

Brazil does not have a tradition of organized social movements in the area of drug addiction. Local initiatives, in the form of information campaigns, are just beginning to take shape in the schools in the large cities.

Health professionals, at least formally, consider that drug abuse is a disease. Some professional organizations, such as the Brazilian Association for Studies on Alcohol and Alcoholism and the Brazilian Society of Psychobiology, promote research in this field. At the present time there is no formal communication between these organizations and the Government.

National legislation has been enacted to regulate the production, trafficking, and use of drugs; sentences of up to 15 years in prison are imposed for trafficking. There are also a number of Ministry of Health regulations that control the sale of drugs containing psychoactive substances. National directives in the area of drug abuse are established by the Federal Narcotics Council, which is under the authority of the Ministry of Justice.

Legislation exists to prohibit the sale of alcohol to persons under 18 years of age. The consumption of alcohol during working hours is also penalized. There is no public-health–based legislation governing the production, importation, and export of alcohol, nor are there any regulations governing the availability of alcohol or its advertising.

No regulations exist with regard to the sale of tobacco. There is a law that prohibits smoking in some public places, but compliance with its provisions is minimal. Legislation to regulate the advertising of tobacco is pending.

Brazil is a signatory of the international conventions of 1961 and 1971, and consequently legal provisions are in force that cover the dispensing of psychoactive medications.

## Treatment, Rehabilitation, and Social Reintegration

In Brazil no national governmental institution is responsible for addressing the problem of drug abuse. People in the high-income groups go to private clinics, and those in low-income brackets seek care from the public psychiatric services. At the present time, the centers providing these services are not systematically coordinated.

A national alcoholism program has been set up to establish a country-wide policy on the treatment and rehabilitation of alcoholics. For the most part, the health professionals responsible for these patients are psychiatrists. General clinicians, psychologists, and social workers also help provide treatment for drug addicts. No particular treatment approach predominates.

## Prevention

No national primary prevention program exists in the country. A national prevention campaign is currently being

conducted in the schools with United Nations funds, but its effects have not yet been evaluated.

### Research

State or federal agencies provide the basic mechanism for the financing of research. Important prior research has focused on the psychopharmacology of *Cannabis sativa* and basic and clinical information on alcoholism.

New trends in the epidemiologic study of drug consumption in young people have recently begun to emerge. A variety of approaches have been used for this purpose, ranging from research on animals to validation of international clinical-investigative instruments. There is some collaboration with international centers, but no single institution regulates or supervises the research.

### Education and Training

No educational institutions offer special training for professionals in the area of drug abuse. Physicians, who are the principal health professionals involved in treating this problem, do not have access to specific courses at the undergraduate or graduate level. However, such courses are offered by several professional associations, which also organize congresses.

## CHILE

### Production and Marketing of Psychoactive Substances

The only psychoactive substances produced in Chile are alcoholic beverages and tobacco. The raw materials for all psychoactive medications used in the country must be imported.

Vineyards account for 1.2% (100,000 ha) of the total cultivated area. Eighty-five percent of vineyard production goes toward the manufacture of alcohol—mainly wine—and the remainder for table grapes for domestic consumption and export. In 1980 annual production was 500–600 million liters of wine and *chicha*, 200–250 million liters of beer, and 15–20 million liters of distilled beverages. In addition, one million liters of wine and *chicha*, 280,000 liters of beer, and seven million liters of distilled beverages were imported. Wine exports for this same year reached 18 million liters.

The marketing of alcohol is unrestricted. Expenditures on advertising vary. In 1982, approximately US$14 million was spent for this purpose, with 70% of that amount directed toward television advertising.

Tobacco plantations cover a surface area of 2,500 ha. Most of the production is consumed domestically, and 15% is exported to the United States.

The Government controls tobacco production. Eight billion cigarettes are produced a year, accounting for 2% of the gross national product. The expenditure on advertising of tobacco products between June 1984 and July 1985 was US$1.5 million, most of which was used for television commercials.

The Institute of Public Health regulates the importation of psychoactive substances. Sale of these products to the public requires "prescription checks" or "medical prescriptions on file," which are registered in accordance with the Single Convention on Narcotic Drugs of 1961. So far, benzodiazepines are not included on any of the lists of specially

controlled drugs, and as a result they are dispensed with routine medical prescriptions.

Psychotropic medications, particularly amphetamines, anorexigenics, and benzodiazepines, are sometimes diverted to illegal use through the forgery of prescription forms and, on some occasions, by improper issue of prescriptions by physicians.

## Consumption

Seventy percent of the population of the country drinks alcohol. Per capita annual consumption is estimated at approximately 40 to 50 liters of wine, 15 liters of beer, and one liter of spirits, which amounts to six or eight liters of absolute alcohol. These figures increase by 50% if the population under 15 years of age and abstainers are excluded, and by another 20% if clandestine production is taken into account.

The rate of alcoholism ranges between 15% and 35% for males and between 0% and 4% for females.

It is estimated that almost 50% of the adult population (over 15 years of age) smokes cigarettes. Men smoke more than women, and there is a direct association between the smoking habit and education level. Annual gross consumption per capita ranges between 600 and 900 cigarettes. If this figure is corrected to include only the adult population and only the half that smokes, the resulting figures show that smokers consume six to nine cigarettes a day.

According to various studies carried out in recent years, the psychotropic drugs abused in Chile—mainly by adolescents—are marijuana, volatile solvents, cocaine, and certain psychoactive medications (stimulants, amphetamines, anorexigenics, and some of the benzodiazepines).

Marijuana (*Cannabis*) is easy to obtain because hemp is an industrial fiber and is grown extensively in the country. Although its cultivation is controlled, thefts and clandestine production occur. It is estimated that between 40% and 50% of adolescents have smoked marijuana at one time or another, and it is probably used regularly (more than once a week) by 5% of young people between 12 and 19 years of age, regardless of socioeconomic level.

Inhalable solvents are also easy to obtain, especially domestic products such as glue. An estimated 3% to 5% of children between 8 and 15 years of age at the lower, marginalized socioeconomic levels inhale these substances.

Three years ago cocaine was eliminated from the national drug register, so it is now used only illegally. In the northern part of the country, cocaine free base (sulfate) is used. It is estimated that 30% of the adults have tried this substance at one time or another. Regular users constitute 3% of the urban population in these areas; they are usually young and middle-aged adults from the middle and upper socioeconomic levels.

Amphetamines and anorexigenics are often obtained illegally. It is probable that between 3% and 5% of the population 12 to 19 years of age from all socioeconomic levels makes some use of these drugs without proper medical prescription. This use is much more prevalent in the northern area of the country because of the ease with which drugs can be obtained from Peru.

Insufficient control and low cost facilitate the abuse of these drugs. In most cases they are probably used to calm anxiety. The abuse of such substances, especially diazepam and flunitrazepam, is known to occur among adolescents, and it is estimated that 1% to 2% of the population between 12 and 19 years of age uses them for nonmedical purposes. They are frequently used in combination

with other drugs, particularly alcohol and tobacco.

## Health Indicators

The various state psychiatric care services are requested by the courts to determine whether the young people whose cases are referred to these services are addicted to drugs. This work accounted for approximately 3% of psychiatric consultations in 1987.

Although no data from a national prevalence study are available, consumption levels of the principal illegal substances are believed to be relatively low, except possibly in the northern area of the country, where there is known use of cocaine. For example, between January and August 1988, 2.5% of the discharge diagnoses in the psychiatric department of the local hospital in the city of Iquique were related to the abuse of cocaine free base.

Data are available from the emergency services on withdrawal symptoms, severe intoxication, and blood alcohol levels in drivers involved in traffic accidents. The number of drivers arrested for drunk driving declined from 5,400 in 1983 to an average of 2,900 in 1986 and 1987, a drop of 46%.

Of 100 cases of AIDS reported, two were associated with intravenous drug use, with infection having occurred abroad.

Alcoholism accounts for 4.5% of the hospital discharges in the country. If multiple associated diseases were included, this figure would rise to 38% of all hospitalizations. Likewise, alcoholism is responsible for only 7% of all deaths if it is considered as the principal diagnosis, but for 53% of deaths if all the associated pathologies are taken into account.

The association between violent deaths and alcohol use is significant. Of all homicides recorded between 1981 and 1983, the proportion of persons with alcohol in their blood was 48.6% (365 out of 751). Of the 862 suicides recorded during this period, 38.6% were alcohol-related.

## Sociocultural Framework

In general, the population has a permissive attitude toward drinking, especially by men. In the low socioeconomic strata drunkenness is tolerated and drinking begins at an early age. The situation is similar with regard to smoking, which begins during adolescence and increases with age, especially among women.

With regard to psychoactive drugs, there is a certain indifference toward marijuana use, but inhalation of volatile solvents and stimulant use cause great concern.

## Responses to the Improper Use of Drugs

Community response is highly varied but is generally directed toward protecting the community from the violence associated with drug abuse. Religious organizations, with some professional assistance, have set up centers for the treatment and guidance of drug addicts.

All university programs in the health sciences include courses on alcoholism in their undergraduate curricula; however, they are insufficient on that subject and, moreover, do not include instruction about other psychoactive substances.

The Center for Alcoholism Studies (CEA) and the Ibero-American Association for the Study of Alcohol Problems (AIEPA) have developed plans for both treatment and academic programs.

Chile is a signatory of all the United Nations conventions on the trafficking and improper use of drugs. Regulations limit the places and hours of sale of alcohol and set the minimum drinking age at 21 years. Tobacco is sold practically with-

out restriction, but advertising is currently regulated. The sale of glue containing organic solvents to persons under 15 years of age is prohibited.

### Treatment, Rehabilitation, and Social Reintegration

Both governmental and nongovernmental institutions are involved in these activities. Interesting initiatives have been undertaken in various regions of the country; however, the problem has not been clearly confronted by means of prevention efforts.

### Research

Epidemiologic research on the use of alcohol, tobacco, and other substances has been very extensive in the last 10 years, thanks to the impetus of certain national and foreign university institutions. The greatest problem with these studies has been the differences in the parameters employed, which make comparison difficult. Clinical research has been focused mainly on the application of self-administered scales (CAGE, MAST, etc.).

### Education and Training

In view of the existing educational initiatives, such as the training for general practitioners offered by the Ministry of Health and some of the graduate-level programs available in universities, the principal problem is lack of coordination between these institutions.

## COLOMBIA

### Production and Marketing of Psychoactive Substances

In 1987, 120 million bottles of aguardiente, 30 million bottles of other liquors, and 1.6 billion bottles of beer were produced in Colombia. No clandestine production of alcoholic beverages has been reported.

The production, distribution, and consumption of psychoactive medications is strictly monitored by the Drug Review Commission. The list of controlled substances includes narcotic drugs, special analgesics, barbiturates, amphetamines, anorexigenics and similar drugs, tranquilizers, and nonbarbituric hypnotics.

By law, only the Ministry of Health's Revolving Narcotic Drug Fund is empowered to carry out or authorize the importation of drugs and remedies. This legislation also extends to wholesale distributors and retailers. Likewise, sale of these kinds of products to the public is regulated.

According to information from the Mental Health Section of the Antioquia Department of Health, illicit dispensing of psychoactive medications occurs only through contraband from other countries.

### Consumption

Tranquilizers, alcohol, and tobacco are the three substances whose consumption is socially accepted. In a study carried out in 1987 (Torres de Galvis and Murrelle—see pp. 12–21), the following prevalences of consumption per 1,000 population were found for these three substances: alcohol, 560; tobacco, 297; and tranquilizers, 60. Marijuana continues to rank first among illegal substances, with consumption rates of 19 per 1,000 among men and 3 per 1,000 among women. Cocaine has

been displaced by basuca (cocaine paste), which is used by 3.3 times as many men as women.

It is estimated that in urban areas 81,000 persons consume basuca, of whom 19,000 are women, most of them of reproductive age. Marijuana is used by about 137,000 people in urban areas, and another 31,000 use cocaine. Alcoholic beverages are consumed by over 1,400,000 women and by a total of more than 7,000,000 individuals. Alcoholism is believed to affect about 104 per 1,000 men and 8 per 1,000 women.

In terms of high-risk groups, males are more likely than females to use psychoactive substances, with the exception of tranquilizers. In men, the age group at greatest risk consists of those between 20 and 24 years of age, and for women those between 16 and 19. The highest prevalences of cocaine and marijuana use are found among men in the upper socioeconomic classes. The greatest consumption of basuca is found among the lower classes.

## Health Indicators

Of all psychiatric consultations, 0.43% are related to alcohol and drug use.

No precise information is available regarding the percentage of the 5,605 psychiatric beds in the country that are set aside for the treatment of drug addicts.

A noteworthy phenomenon is the strong association between the use of psychoactive substances and attempted suicide, especially among women. The strongest correlation is between basuca use and suicide.

## Sociocultural Framework

Legal drugs are accepted by the community from the standpoint of both marketing and consumption. There is social rejection of drinking to excess but not of "social drinking." The use of tranquilizers is also socially accepted. People who smoke in closed spaces are beginning to face censure.

Most of the population opposes the unrestricted sale of dependency-producing substances. Only 4% of Colombians are in favor of the legal sale of marijuana, and 2.5%, of basuca and cocaine.

## Responses to the Improper Use of Drugs

Steps have been taken recently to establish foundations and corporations, such as the Colombian Corporation Against Alcoholism and Drug Abuse (SURGIR). That organization began in Medellín and has now expanded to other cities.

In Bogotá there are four Alcoholics Anonymous centers that provide advisory services and work in prevention, intervention, and treatment of alcoholism through self-help groups.

In a survey conducted among physicians in some of the cities in the country, 57% responded that drug abuse was a vice, 20% said that it was a disease, and the remainder responded equivocally. Alcoholism was considered to be a vice "of social origin" by 38% of the physicians surveyed, and 51% described it as a disease.

There does not appear to be any professional association concerned with drug abuse. Various professional groups have focused attention on the problem, and in some cases they are able to influence political decisions.

A law passed in 1986 (Law 30) established a National Plan for the Prevention and Treatment of Drug Abuse and the Rehabilitation of Drug Abusers. Control measures related to alcoholic beverages and cigarettes are provided in several laws.

Colombia is a signatory of the 1961 Sin-

gle Convention on Narcotic Drugs, the 1971 Convention on Psychotropic Substances, and the South American Agreement on Narcotic Drugs and Psychotropic Substances. It has also established bilateral agreements with neighboring countries.

### Treatment, Rehabilitation, and Social Reintegration

The Ministry of Health is responsible for carrying out the National Plan through 14 State drug abuse and alcoholism services, which operate in hospitals.

There are eight associated private institutions and many other independent ones that provide prevention, treatment, and rehabilitation services. The social security system also provides treatment services for alcoholism and drug abuse.

### Prevention

The Family Welfare Institute provides prevention training for educators. The Ministry of Education offers seminars to professors on primary prevention of alcoholism and drug abuse. Efforts are also being made to educate parents and community leaders so that they will be able to collaborate in prevention activities. In addition, a directory exists of organizations involved in prevention efforts and treatment and rehabilitation of alcoholics and drug abusers.

### Research

The University of Antioquia, through the National School of Public Health, has been the principal institution conducting research on the epidemiology of alcoholism and drug abuse. The School of Medicine of that university is conducting important clinical research on the effects of basuca use.

Del Valle University, the Mental Hospital of Antioquia, the Ministry of Health, the Departments of Health of Antioquia and Caldas, and the Ministry of Education have carried out research in the field of drug addiction.

### Education and Training

The Ministry of Public Health provides seminars and courses on various drug-related topics for groups of health professionals. The Mental Hospital of Antioquia gives courses in which multidisciplinary teams are trained to provide treatment. It has also held national workshops on the use of clinical instruments applied to the study of alcoholism and drug abuse. The National School of Public Health in Medellín offers a course on epidemiologic study of drug abuse, which is designed to train investigators in this area. However, most of the health sciences schools do not adequately train professionals to deal with this serious problem.

## Costa Rica

### Production and Marketing of Psychoactive Substances

Both distilled and fermented alcoholic beverages are produced in Costa Rica. The former include aguardiente (called *guaro*), standard liquors (rum, vodka, gin), and "fine" liquors (whiskey and cordials). The fermented beverages include beer and wine.

The production of standard liquors began to increase in 1971, and that of fine liquors in 1986. The largest production of distilled beverages—11,551,390 liters—

occurred in 1984, and the largest production of beer was in 1987, with a total of 211,301,700 bottles.

Up to 1986 between three and five million liters of distilled liquors were imported annually. That figure has since declined to an average of one million liters. With regard to clandestine liquor production (*chirrite* or *guaro*), a total of 1,992 stills were discovered between 1973 and 1977, and 1,175,225 liters of these liquors were confiscated.

Several laws levy taxes on alcoholic beverages, but their purpose is to increase revenue rather than to help prevent alcoholism.

In the period 1984–1985, 2.3 million kg of cigarette tobacco were produced, which represented an increase of 24% with respect to the previous biennium. In 1983, 181,845 kg were imported, 98% in the form of raw tobacco.

Hypnotic, barbiturate, and anxiolytic drugs are produced in Costa Rica, and their production and importation are regulated by the Government. No data are available on the illegal or clandestine production or importation of psychoactive drugs. Dispensing requirements include the presentation of a medical prescription; the registration of physicians, dentists, and veterinarians authorized to prescribe such drugs; and the use of official prescription stub books. Extensive legislation is in force regulating the places where psychoactive drugs may be sold. Some cases of counterfeit or altered prescriptions have been detected.

## Consumption

Information on the per capita consumption of absolute alcohol, by type of beverage, indicated that in 1987 beer was the product most commonly consumed (1.7 liters), followed by aguardiente and standard liquors (1.2 liters).

Since 1980, per capita consumption of absolute alcohol in the population over 15 years of age has been stable, despite an increase of 57.5% in the consumption of beer for the period 1980–1987. No information is available with respect to tobacco use. Warehouse dispatching records from the Costa Rican Social Security Fund (CCSS) and information regarding the importation of diazepam clearly point toward the increased use of psychotropic drugs in the past year.

In 1987 the Institute on Alcoholism and Drug Dependence (IAFA) carried out a drug use prevalence study based on a sample of 2,083 subjects. Of the population studied, 3.5% had used illegal drugs at least once in their lives; 37.6% of those who had used drugs used them regularly, and 20% almost daily. The substance most frequently consumed was marijuana (by 91.4% of the drug users), followed by solvents, tranquilizers, and hallucinogens (8.5% each), and cocaine (5.7%).

Seventy-three percent of the population that used illegal drugs also used tobacco, and 81% used alcohol. Of the nonconsumers of illegal substances, 19.9% used tobacco and 34.2% alcohol. Fifty-eight percent of the users were between the ages of 20 and 29, making this the age group at greatest risk. Another IAFA study found that 12% of children and young people 7 to 18 years of age in a marginal population inhaled industrial glue fumes. They began this practice at about 10 years of age and often went on to use marijuana.

## Health Indicators

The IAFA maintains records of the number of persons who request treatment for alcoholism and drug abuse, particularly in the Alcoholic Rehabilitation Center and outpatient service. The CCSS, the institution responsible for hospital and outpatient clinical services

throughout the country, does not maintain a specific register of these cases.

The Alcoholic Rehabilitation Center reported a total of 1,737 discharges during 1987; the average number of days of hospitalization was 12.8. Of these patients, 34.1% were between 35 and 44 years of age and 62.5% were between 35 and 54. In 1986, a total of 2,166 discharges following a diagnosis of alcoholism were recorded by the CCSS, representing 0.7% of all discharges. Of these patients, 1,250 had a diagnosis of alcohol-dependence syndrome, 302 suffered from alcoholic psychosis, and 247 had alcoholic cirrhosis of the liver.

CCSS data for the same year indicate 130 discharges following a diagnosis of drug addiction, of which 50 had presented psychosis, 45 abuse without dependence, and 35 physical dependence on drugs.

Of a total of 927,644 emergency consultations in 1987, 120,594 (13.0%) were related to problems secondary to the consumption of alcoholic beverages. In the period 1981–1987, 119,435 traffic accidents were recorded, of which 6,003 (5%) were associated with drunken driving. It is estimated that 30% of absenteeism and workplace accidents are caused by alcoholism.

The death rate from alcoholism in 1986 was 4.7 per 1,000 population, the highest in the decade. Deaths from homicide and suicide have increased during the 1980s, but not enough information is available to establish a correlation with the use of drugs and alcohol.

## Sociocultural Framework

The attitude of the Costa Rican people toward the marketing of legal drugs is, in general, one of acceptance. The sale of illegal drugs is unconditionally condemned.

The following three observations can be made with regard to attitudes toward alcohol use: (1) there is no specific way to categorize the excessive drinker, since the term "alcoholic" is reserved for individuals who suffer from the ultimate consequences of the disease; (2) a certain degree of social permissiveness exists with regard to intoxication; and (3) recognition of alcoholism as a disease has been slow to happen because the concept of vice (abuse) is tied to the disease (dependency) in Costa Rican thought.

Most habitual drug users come from broken or dysfunctional families and live in marginal socioeconomic conditions that often lead them to abandon their homes. However, inveterate users, who may also be drug dealers, may find support in their families and even receive help in preparing marijuana cigarettes from family members who do not use the drug themselves. It appears that the Costa Rican family does not significantly influence its members not to use drugs.

The media have undertaken information campaigns on drug trafficking, a problem that has affected the country in recent years. The public openly condemns the illegal traffic, marketing, and distribution of drugs.

## Responses to the Improper Use of Drugs

As part of its prevention program, the IAFA maintains an activity called "Community Organization and Promotion," aimed at organizing youth and adult groups. Under the direction of a primary health worker, these groups prepare and develop prevention activities and projects designed to channel detected drug users toward the community health infrastructure or the IAFA itself.

Health professionals view the drug problem with great concern, but they require more training in this area. While alcoholism and drug abuse are intellectu-

ally regarded as diseases, the attitude manifested toward patients is one of rejection. Various organizations and institutions carry out scientific forums, seminars, round tables, and conferences on the topic. The IAFA offers training courses for medical and paramedical professionals, and a division has been established with this objective in mind.

A great deal of anti-drug abuse legislative action has been achieved. Coordinating entities have been established at the highest level, and the IAFA has been granted the power and responsibility of standardizing, regulating, and coordinating activities related to the country's alcohol and drug problems. The treatment of patients is carried out mainly by the IAFA, working jointly with the CCSS.

Extensive regulation governs the sale of alcoholic beverages, and in recent years some measures have been introduced to control cigarette sales and smoking in public places.

A National Commission on Drug Trafficking was recently established to carry out research on all matters related to this problem.

Finally, the National Drug Council (CONADRO) is made up of the Ministries of Health, Education, Labor, Government, Justice, and Security, together with the IAFA. Its objective is to provide the nation with a common, systematic, and coherent approach to prevention, education, research, control, treatment, and rehabilitation. The IAFA has presented CONADRO with a National Integration Plan on Drug Abuse as a response to the problem.

## Treatment, Rehabilitation, and Social Reintegration

The CCSS and the IAFA have clinics and hospitals for the treatment of alcoholics and drug addicts. The IAFA is funded directly by the Government to develop programs for treatment, rehabilitation, and social reintegration. In addition, many communities have organized care systems, some supervised and subsidized by the IAFA and others receiving only advisory services and authorization. The Salvation Army, a private transnational organization, has treatment centers in various localities in the country. Alcoholics Anonymous groups also exist in almost all the cities and play an important role in the recovery process.

In addition to the infrastructure described above, some drug addicts receive treatment through Hogares CREA, a network specifically concerned with the rehabilitation of male addicts, and the Refugio de la Esperanza. The latter, which is run by the Salvation Army, was initially created for the treatment of alcoholics but is now devoted to the treatment of drug addicts.

## Research

Research on drug abuse in Costa Rica is relatively recent and has been geared to the needs of the agencies conducting it. In recent years, the IAFA has participated in some international research efforts sponsored by WHO, such as early identification and treatment of alcoholics, the communications media and health promotion, and adaptation of clinical instruments (ASI, MAST, CAGE) to the Costa Rican setting. No governmental institution finances research. The IAFA is by law the agency responsible for guiding and supervising studies in the area of alcoholism and drug abuse.

## Education and Training

The formal training offered by the universities to future health professionals is inadequate on the topic of drug addiction. Since 1984 the IAFA has been giving intensive courses in the Schools of Medi-

cine, Psychology, Social Work, Nursing, and Education on alcohol and alcoholism, and more recently, on drug abuse. In addition, it offers seminars, conferences, and short courses to staff in the National Health System and to the ministries and private institutions upon request. In coordination with the Ministry of Education, trained staff of the IAFA act as advisors and consultants for Costa Rican educators in this area.

In Costa Rica, physicians are not the principal health professionals that see persons with drug problems. Efforts have been made to ensure that all the professionals in the social service area receive basic training and to provide a balanced response to needs. The IAFA health promoters provide community education and organize groups that carry out primary prevention projects and activities.

# ECUADOR

## Production and Marketing of Psychoactive Substances

Alcohol and tobacco are produced in Ecuador, but there is no production of psychoactive medications. However, the preparation of cocaine free base and cocaine hydrochloride has recently gained importance.

In 1982, 1,880 million cigarettes were produced, the equivalent of 94 million packs. Alcohol production in 1987 was 70 million liters, of which a portion was exported to the Andean region. It is estimated that the clandestine production of alcohol, which is destined almost exclusively for domestic consumption, is three times the volume of controlled production.

Practically all psychoactive medications are imported, either as raw materials for subsequent manufacture and packaging (in laboratories regulated by the Institute of Hygiene) or as final products, in accordance with international agreements. The only product whose clandestine manufacture has been reported is methadone.

Between 1985 and 1988 the production of cocaine hydrochloride ranged from 300 to 1,000 kg.

Special prescription forms are required for the dispensing of narcotics, but not for other psychotropic drugs.

## Consumption

In 1985 a national survey on the prevalence of alcoholism revealed that the per capita consumption of absolute alcohol among the general population of Ecuador was approximately 3.2 liters per year. This figure rose to 13.9 liters for alcoholics. The study also showed that "pathological drinking" was associated with the wine-producing areas (15 liters per capita and 10% alcoholism in the mountainous regions, as compared with seven liters and 1%, respectively, in the eastern portion of the country). The highest rate of alcoholism was found among persons 35 to 45 years of age. The male to female ratio for this pathology was 9 to 1. The proportion of nondrinkers in the country was 23.6%, and they were predominantly women.

According to a 1984 survey of schoolchildren undertaken by the Office of the Attorney General, 50% of the students used alcohol or tobacco. Most began between the ages of 13 and 16, but 20% of the sample had started before the age of 12.

A series of investigations carried out by the Mental Health Division between 1979 and 1984 revealed shifts in the rate of consumption of illegal substances among students in Quito. In 1979, 13.1% of the respondents admitted having used drugs; in 1982 this figure rose to 16.1%, but in 1984 the overall prevalence of consumption declined to 11%.

## Health Indicators

In 1987, in all the centers where treatment is provided for addicts, 1,259 patients were treated for drug abuse, of whom 34.8% used *Cannabis*, 40.8% cocaine and its derivatives, 1.7% psychotropic medications, and 1.5% inhalants. The substance of abuse was not known for 21.1%. There are no statistics on treatment given to drug addicts in emergency services. The psychiatric hospitals assign between 5% and 10% of their beds to drug abuse cases.

Up to 30% of all traffic accidents are alcohol- or drug-related. In the first three months of 1981 there were 158 accidents caused by persons driving under the influence of alcohol or drugs in the province of Pichincha; deaths occurred in 58% of these accidents.

An increase has been observed in the prevalences of diseases associated with the use of tobacco.

The relationship between AIDS and drug use has not been studied. However, intravenous drug use is very infrequent in Ecuador.

## Sociocultural Framework

According to surveys of the population, the use of illegal drugs is widely disapproved.

Legal drugs, such as alcohol, are extensively marketed and consumed, and there are no age restrictions applied to their sale. The same is true of cigarettes, although some control mechanisms have recently been initiated. There is a distressing failure to enforce the use of medical prescriptions for psychotropic drugs.

## Responses to the Improper Use of Drugs

Numerous types of support groups exist within the community. Some have a religious affiliation and others are simply community groups or part of an international network, such as Alcoholics Anonymous.

The concept of alcoholism as a disease has gained ground among health professionals, and this topic is included in their university studies. There are some scientific organizations concerned about the problem, but they have no real involvement in the formulation of health policies.

Legislation has been enacted to regulate traffic in narcotic drugs and to control the consumption of some products. Furthermore, the Government has largely taken charge of the treatment and social rehabilitation of addicts, and it coordinates prevention plans and formulates policies in this regard. A National Plan for the Control of Illegal Trafficking and the Prevention of Drug Abuse is currently being developed. Ecuador is a signatory of the international conventions of 1961 and 1971 and of the South American Agreement on Narcotic Drugs and Psychotropic Substances.

## Treatment, Rehabilitation, and Social Reintegration

The Ministry of Health is the principal entity responsible for the health care of drug addicts. Some international funding is received, but the principal costs are borne by the Government.

Treatment is provided both in psychiatric hospitals and in outpatient clinics.

### Prevention

A number of governmental institutions have prevention programs. These programs include an education component that involves the participation of teachers and guidance counselors and also the training of social educators.

### Research

Research is financed mainly by international institutions. The instruments used in the epidemiologic study of drug abuse are selected from among those recommended by the United Nations.

### Education and Training

Courses coordinated by the schools of medicine and the Ministry of Health provide training for physicians, nurses, psychologists, social workers, and other professionals. There are no graduate courses in the universities, but the topic of drug addiction is included in the undergraduate curriculum of the health sciences programs.

## EL SALVADOR

### Production and Marketing of Psychoactive Substances

Production and marketing of psychoactive substances in El Salvador are controlled by the Government through the Superior Public Health Council, but this agency lacks the resources and personnel to ensure even minimal control. The Ministry of Finance, through the Office of Income Administration, regulates the production and marketing of alcohol and tobacco, but again, it does not have the resources necessary to monitor retail sales.

In 1985, 6,188,000 liters of alcohol were produced. This was about the same level that had been maintained since 1982.

The preparation of psychoactive drugs is entrusted to private enterprise, with partial governmental inspection. Psychoactive substances are also produced and imported clandestinely.

There is a special prescription form for narcotic drugs that is made available to physicians upon request in compliance with the stringent measures set forth in the Drug Regulations of 1962. However, contraband is known to exist and drugs of all kinds can be dispensed to anyone.

### Consumption

There are no reliable data on the consumption of alcohol, tobacco, or psychotropic drugs in the last year, but economic indicators for the years from 1978 to 1985 showed an increase in consumption.

### Health Indicators

No statistics are available on the number of persons who request or receive treatment for the improper use of drugs, nor is there information on prevalence of the use of illegal drugs among psychiatric patients. There is no percentage assignment of beds for drug abuse in the psychiatric hospitals.

A study of the prison population showed that 52.5% of the female and 42.1% of the male inmates had used illegal drugs. Alcohol problems were also observed in 30% of the women and 20.3% of the men. Neither the specific substances nor the criteria used for the diagnosis of alcoholism were indicated in the study.

Traffic accidents are among the 10 leading causes of death in the country, but their relationship to alcohol or other psy-

choactive substances has not been studied specifically.

Thirty-two cases of AIDS have been detected, of which only two were associated with intravenous drug use.

### Responses to the Improper Use of Drugs

There are no community organizations that deal with this problem in particular. People seeking help tend to consult a physician or a pharmacist, depending on their social stratum.

Physicians and other health professionals in El Salvador view drug use as a health problem on the increase. Drug abuse and alcoholism are regarded as diseases. The professionals do not share the community's attitudes and traditions. There is no "drug culture" in the country.

Specific laws and articles concerning drug abuse exist under the Health Code of March 1988 and the Civil Code. The Mental Health Department in the Ministry of Public Health is responsible for dealing with the drug problem. At the present time there are no national plans designed to coordinate the various governmental or nongovernmental institutions.

No provisions exist for controlling the number of establishments authorized to sell tobacco or alcohol, but measures are in force to regulate the advertisement of these products.

El Salvador is a signatory of the international conventions of 1961 and 1971 on narcotic and psychotropic drugs.

### Treatment, Rehabilitation, and Social Reintegration

No specific funds are set aside for the treatment of drug-related problems, nor are there special facilities for this purpose other than the Psychiatric Hospital on the outskirts of the capital city. There are no programs in place for rehabilitation, primary prevention strategies, or any kind of evaluative research.

### Research

No financing mechanisms exist in the country for the development of research, nor has any research on the subject been documented.

### Education and Training

The educational institutions that train health professionals are not adequately coordinated and do not share common objectives. In most cases, instruction on drugs is restricted to a few hours.

The School of Medicine offers no courses to train future professionals to respond to drug-related problems or to treat addicted patients. There is no graduate-level training in the area of drug abuse.

Psychiatrists, trained abroad, are the only professionals equipped to deal with drug-dependency problems.

## GUATEMALA

### Production and Marketing of Psychoactive Substances

Beer and wine are produced in the country. The trend has been toward a moderate increase in production. In 1987, 16,095,563 liters of absolute alcohol were produced, up from 14,386,587 liters in 1986, for an increase of 11% in one year's time.

The volume of beer production (97,454,216 liters) is significant. On the other hand, the amount of alcohol imported and exported is relatively insignificant. Only 247,342 liters of whiskey and 307,942 liters of other distilled beverages were imported in 1985.

The production and sale of tobacco products in 1987 came to 10,001,204 packs of 20 cigarettes each. In 1987, 2.8 million kg of leaf tobacco and 1.2 million kg of shredded tobacco were exported.

Guatemala imports raw materials for the manufacture of psychotropic and narcotic drugs (meprobamate, phenobarbital, pethidine, morphine, and codeine). The psychoactive substance industry, as well as the alcohol and tobacco industries, are private activities that operate according to the free market. Imports are regulated. Clandestine production of psychoactive substances is not known and is not believed to occur.

Drugs that contain narcotics and some psychotropic medications, such as flunitrazepam, methylphenidate, secobarbital, and pentobarbital, are controlled substances. Their prescription is registered in the General Directorate of Health Services. Prescription forgery and contraband drugs have been detected. Confiscations are frequent, and the following amounts were seized during 1987: 2.52 kg of cocaine, 7.25 kg of *Cannabis*, 108 *Cannabis* resin plants, and 84 "units" of stimulants. The cultivation of poppies and *Cannabis* was recently discovered.

Only registered and authorized establishments are permitted to manufacture or distribute psychoactive drugs.

## Consumption

The consumption of legal psychoactive substances has not been of great importance, apparently due to the effectiveness of controls imposed on these substances. However, an increase has been observed in the consumption of diazepam and triazolam, both of which are sold without medical prescription, making it difficult to estimate their consumption.

The use of inhalants is very widespread among youngsters nine years of age and over, especially in peripheral urban neighborhoods. It is not possible to control the use of marijuana and cocaine.

A 1982 study by the General Directorate of Health Services on a sample of 2,403 individuals showed higher rates of tobacco use among males. The highest smoking rates were found among men 30 to 34 years of age (62.9%) and among women 25 to 29 years of age (44.8%).

## Health Indicators

There are no reliable statistics on patients who request or receive treatment or who seek emergency services for drug-related problems.

The Psychiatric Hospital provides specific treatment for cases of drug abuse, but very few patients are attended. The prevalence of drug use in the population of psychiatric patients is not known, but it is not considered to be very high.

The use of alcohol was involved in approximately 50% of the 430 traffic accidents in 1986. Their association with the use of other drugs is unknown.

Alcoholism is not generally regarded as a disease, and consequently the prevalence figures are substantially underrecorded.

Thirty-two cases of AIDS have been detected. Two were related to intravenous drug use, which is uncommon in Guatemala.

## Sociocultural Framework

The general attitude of the population is one of disapproval of illegal drugs, with the exception of marijuana, which is accepted among some groups of young

students. Regional variation exists in this respect. For example, use of marijuana, cocaine, and inhalants is an urban problem. Alcohol and tobacco use is accepted by the population.

## Responses to the Improper Use of Drugs

In Guatemala there are almost 750 Alcoholics Anonymous groups, 450 of which are located in the capital city. Al-Anon groups are beginning to be formed, in addition to an organization similar to Narcotics Anonymous. In the rural areas, traditional healers are consulted.

As a rule, medical professionals are not interested in alcoholism or drug abuse and, consequently, these conditions are underdiagnosed. With regard to drug addicts, only limited information is available, and an attitude of rejection exists.

In 1985 the multidisciplinary and multisectoral National Commission for the Prevention of Drug and Alcohol Abuse was founded. Although it does not yet exercise a significant influence, in the future it could become an entity capable of mobilizing resources and promoting effective actions.

Government response consists basically of enacting legislation on the production and sale of psychoactive substances. However, lack of resources has hampered effectiveness. For example, most medications are sold without a doctor's prescription, except for narcotics and some psychotropic drugs subject to strict control.

The Law on Alcohol regulates the production, marketing, importation, and export of alcoholic beverages, but in practice it is not enforced. There are no limitations on the advertisement of alcoholic beverages and tobacco.

Guatemala is a signatory of the Single Convention on Narcotic Drugs of 1961 and the Convention on Psychotropic Substances of 1971.

## Treatment, Rehabilitation, and Social Reintegration

These aspects of the problem have not received adequate attention in the country, and no government institutions have been assigned to deal with them. Some private organizations have made individual efforts. No primary prevention strategy has been formulated.

## Research

Only a few surveys have been carried out. No organization has been put in charge of carrying out research, nor is financing available; thus, research is virtually nonexistent.

## Education and Training

The principal institutions involved are connected with the university. Nevertheless, mental health topics are barely dealt with in the School of Medicine's curriculum, and no graduate-level courses are offered.

Two years ago, a program was initiated on alcoholism and drug addiction to train multidisciplinary personnel at the primary health care level in diagnosis and treatment. Emphasis has been placed on working jointly with Alcoholics Anonymous.

# HONDURAS

## Production and Marketing of Psychoactive Substances

The alcoholic beverages produced in Honduras are beer, rum, and aguardiente. The tobacco products manufactured are cigars and cigarettes. Production for 1987 was as follows: cigarettes, 104,566,000 packs of 20 each; beer, 153,352,000 12-ounce bottles; aguardiente, 1,683,000 liters; and rum, 4,220,000 liters.

No alcoholic beverages were exported in 1986; the most important imports were whiskey, beer, and wine. The most important tobacco exports were leaf tobacco and cigars.

The clandestine production of alcoholic beverages is well documented. In 1985 a study was carried out on the consumption of *pachanga* (methyl alcohol mixed with water).

No psychoactive medications are produced in Honduras. Pharmaceutical houses and hospitals import them with the authorization of the Drug Control Board of the Ministry of Public Health, in accordance with the regulations of the International Drug Control Board.

A signed and stamped medical prescription issued by the attending physician is required in order for preparations containing narcotic or psychotropic drugs to be dispensed to individuals. Strictly controlled drugs require special prescription forms that may be obtained from the Drug Control Board and are issued only to persons who present certified accreditation as physicians.

Approximately 500 counterfeit prescriptions have been discovered since 1986, almost all for flunitrazepam. In addition, some psychoactive drugs, including diazepam, phenobarbital, meprobamate, lorazepam, and clobazam, enter the country through illegal channels.

## Consumption

A study carried out in 1979 on the problems of alcohol use and alcoholism in Honduras found that most male drinkers started their habit before the age of 15, while women started after the age of 17.

In rural areas aguardiente and rum are the drinks of preference, whereas in urban areas beer is favored. Many cultural traditions and myths about its properties encourage the consumption of alcohol.

A 1987 study conducted among young people in two rehabilitation centers showed that 51% of the interviewees had some history of drug use; the inhalation of glue was the most common practice.

## Health Indicators

There are two psychiatric hospitals in Honduras, with a total of 330 beds. The Santa Rosita Hospital contains a 60-bed unit for alcoholics.

In 1984 and 1985, alcohol-dependency syndrome ranked seventh and sixth, respectively, as a hospital discharge diagnosis. It ranked second as a discharge diagnosis from psychiatric hospitals in 1985, at 18.8%; drug-related problems ranked ninth, at 1.8%. In 1986 alcohol-dependency syndrome ranked first among the discharge diagnoses at the Santa Rosita Hospital (60.4%) and alcoholic psychosis ranked third (4.7%).

In the Central District, which has a population of 700,000 inhabitants, there were 1,530 traffic accidents in 1987, of which 175 were alcohol-related. Sixty-four fatalities occurred in those accidents.

## Sociocultural Framework

Smoking is socially accepted, as is the consumption of alcoholic beverages, but

with some limitations in regard to the time and occasion of drinking, the amount consumed, etc.

The illegal sale of psychoactive medications is not condemned. In the rural and marginal urban areas there is less knowledge about and less control of psychoactive substances.

The use of other drugs, such as marijuana and cocaine, is strongly disapproved of. Inhalants constitute a special case, since their use frequently takes place in full view of members of the community, who appear not to understand the significance of the act and are not moved to stop it.

There is awareness of drug dependence, but its true importance and dimensions are not known.

## Responses to the Improper Use of Drugs

Drug users tend to seek help for drug addiction from their family or close friends. In very grave situations, other kinds of help are sought, but not necessarily professional. The reaction to other people's drug addiction problems is one of indifference.

Among the community support organizations are the Comité de la Defensa de la Salud del Pueblo (Committee for the Defense of the People's Health) and the Comité Sanpedrano Pro-Salud Mental (Sanpedrano Committee for Mental Health).

It would appear that professional help is more frequently sought by members of the upper social classes or those with higher levels of education. Traditional healers fulfill an important function for less educated people in the low-income classes and those living in rural areas.

Health professionals consider drug abuse to be an important problem, and the majority believe that alcoholism and drug abuse are diseases. Professional organizations do not sponsor meetings for persons who work on or have interest in the problems of drug abuse.

The governmental institution that deals with the drug problem is the Mental Health Division of the Ministry of Health, through the Honduran Institute for the Prevention and Treatment of Alcoholism, Drug Addiction, and Drug Abuse.

The private organizations working in this area are involved only in drug addiction rehabilitation and prevention and have no regulatory power. However, they will be able to influence drug-abuse policies through the National Mental Health Committee (CONASAM), which is still being organized. This Committee is directly associated with the Mental Health Division of the Ministry of Public Health.

Created in 1987, CONASAM is made up of representatives from various ministries and private institutions. Its objective is to design and execute national plans for the campaign against drugs.

Two laws pertaining to drugs are the Law Against Illegal Traffic in Narcotic, Psychotropic, and Other Dangerous Drugs and the Law of the Honduran Institute for the Prevention and Treatment of Alcoholism, Drug Addiction, and Drug Abuse.

No restrictions exist on the sale of tobacco. Aguardiente is the only alcoholic beverage that is subject to special sales regulations. There is no legal drinking age. Hours of sale of alcohol are regulated, but the limits are not always complied with. Advertising is not controlled.

Honduras is a signatory of the international conventions of 1961 and 1971 but not of the South American Agreement on Narcotic Drugs and Psychotropic Substances.

## Treatment, Rehabilitation, and Social Reintegration

Planning and organization of drug abuse treatment is based on morbidity data obtained from the various treatment centers in the country and on the health policies that respond to problems of this kind.

The Mental Health Division of the Ministry of Public Health carries out its activities at the different levels of care, and there are referral and interconsultation mechanisms that operate between them. In the Government institutions, treatment is provided by psychiatrists and general practitioners with psychiatric training, as well as psychologists. There are also private, nonprofit religious institutions.

No formal programs for social reintegration exist. Although no evaluative research has been carried out, the most noteworthy failings are thought to be the limited care coverage provided at the national level, the lack of adequate structure for rehabilitation, and the lack of centralized programs for social reintegration.

## Prevention

An important measure toward more effective primary prevention was establishment of the Honduran Institute for the Prevention and Treatment of Alcoholism, Drug Addiction, and Drug Abuse. Enactment of laws against the illegal traffic of drugs, community involvement, and the training of personnel are also steps that have been taken in this direction.

The principal method of prevention is education, which involves the printing and distribution of posters and pamphlets, together with the dissemination of radio programs and talks. Attention is focused particularly on secondary school students. To date, the responsibility for prevention has rested with the Mental Health Division of the Ministry of Health.

## Research

Health research in Honduras is essentially carried out through two institutions, the Ministry of Public Health and the National Autonomous University of Honduras. There is no specific budget for research in general or for research on drugs. The Science and Technology Unit of the Ministry of Public Health and the Office for Scientific Research of the National Autonomous University of Honduras are the organizations responsible for guiding and supervising research or research proposals.

Work has been done with young people with regard to their involvement with alcohol and drugs. Some research has been coordinated with other countries.

## Education and Training

The only institution that provides training in this area is the Ministry of Public Health's Mental Health Division, through an undergraduate program for medical students. There is also a training program for graduate physicians who work in mental health clinics.

It is not necessary to have completed graduate-level studies in order to treat addicts in Honduras, since general practitioners and psychologists, as well as psychiatrists, are trained to provide treatment for these patients.

# MEXICO

## Production and Marketing of Psychoactive Substances

The alcoholic beverage industry in Mexico has developed rapidly since 1960, in part because the principal firms control both the basic inputs and production itself. The Government is not economically involved, except in the pulque industry through the Maguey Board of Trustees; however, it controls the distribution of some of the raw materials required for production, such as sugar and absolute alcohol.

The brewing industry is one of the most important in the country and one of the largest in the world. It is estimated that between 1980 and 1984 the production of beverages with low alcoholic content (20° GL) increased by 2.9 million liters. Between 1970 and 1984 the production of beverages with higher alcoholic content increased by 10.5 million liters. Beer production increased by 37 million liters between 1973 and 1984.

Given the size of the country and predominance of rural areas, the illegal manufacture of alcoholic beverages and drug smuggling occur frequently and are difficult to control.

The acquisition, manufacture, preparation, packaging, storage, import, export, medical prescription, possession, transport, and consumption of narcotic or psychotropic substances (except inhalable solvents) can only be carried out for medical or research purposes and with the authorization of the Ministry of Health. However, considerable quantities of marijuana, heroin, and opium are produced illegally in Mexico.

Industrial solvents are widely available, although their sale to minors is prohibited and their labels must contain warnings of health risks that accompany their misuse.

In 1984 approximately 39,125 ha were planted in tobacco.

Special prescriptions are required for the dispensing of narcotics. For other psychotropic drugs, an ordinary nonrefillable doctor's prescription is required. Forgery of prescriptions has been detected, but the extent of such forgery is not known. Special prescription forms are delivered to individual physicians who are registered and authorized to prescribe. The prescription must include the patient's diagnosis and the signature of the attending physician. Medical samples containing narcotic or psychotropic drugs have been prohibited.

## Consumption

Based on domestic sales figures, in 1984 the per capita alcohol consumption by the population over 15 years of age was calculated at 72 liters of alcoholic beverages (5.4 liters of absolute alcohol). In 1974 that figure was 4.7 liters. It should be noted that these figures are underestimates, since the consumption of untaxed beverages is not known. Beer and hard liquor have displaced pulque as the drink of choice, especially in urban areas. Consumption of brandy, rum, and table wine has also increased considerably.

It has been found that absolute alcohol mixed with soft drinks is used as an intoxicating beverage. Household surveys indicate it is consumed by between 1% and 6% of the general population, possibly because of its low cost.

In 1986, a study was carried out on middle-school and high-school students for comparison with a 1976 survey in order to learn the trends in psychotropic

substance use in the last 10 years. Of the 9,967 students surveyed in 1986, 12% had used one or more drugs at least once in their lives, excluding tobacco and alcohol. Between 0.1% and 0.3% of the respondents used drugs daily. The most commonly used substance was inhalants (4.4% of the sample), followed by amphetamines (3.5%), marijuana (3.2%), tranquilizers (2.5%), cocaine (1.0%), sedatives (0.9%), hallucinogens (0.6%), and heroin (0.5%).

A comparison of these figures with data obtained in 1976 shows increases in the consumption of inhalants (up 3.55%), marijuana (1.6%), cocaine (0.5%), and heroin (0.22%). The consumption of tranquilizers and hallucinogens decreased by 0.1% and 0.3%, respectively. The greatest limitation in this study was thought to be that it excluded many drug users because they did not attend school. That assumption appears to be confirmed by a study of minors who worked in the streets, which indicated that 27% had used inhalants occasionally, and 22%, daily.

The National Health Survey carried out in 1987 showed that 17% of the population over 12 years of age smoked tobacco. Of that group, 16.6% smoked more than half a pack of cigarettes a day; 68.6% smoked between 1 and 10 cigarettes daily; and 14.8% did not know the number of cigarettes they smoked.

## Health Indicators

The rate of cirrhosis of the liver observed in Mexico is one of the highest in the Region. This disease is among the first 10 causes of mortality for the general population and is first among the male population 35 to 54 years of age. In 1983 the rate was 34.6 per 100,000 males and 9.9 per 100,000 females.

In the first half of 1987, 2,403 emergency cases related to drug abuse were treated, of which 62.2% were alcohol-related. Another study of emergencies found that 22% of the incoming patients had positive blood alcohol readings.

The proportion of traffic accidents in the Federal District that involved intoxication increased from 8.3% of all accidents in 1968 to 15.9% in 1983. The same trend has been observed in the relationship between violence and alcohol consumption. Of those incarcerated for homicide, 49% had imbibed alcohol before committing the crime. Of 80 suicides in 1980, 55% were alcohol-related.

The improper use of dependency-producing substances is said to affect 15% of the labor force and cause losses of approximately four million work hours per year.

Since approximately 1970, drug abuse, especially the use of inhalants, has been one of the most complex public health problems in Mexico. The abuse of inhalants increases daily and is now widespread among children and adolescents; in addition, it is very closely associated with the rise in juvenile delinquency, poor school performance, and cases of intoxication seen in emergency services.

Data from the Ministry of Health indicate that 10% of the hospital beds are occupied by alcoholics or addicts. In 1986, 16% of the beds in the Juan N. Navarro Child Psychiatric Hospital were occupied by addicts.

The magnitude of the problem of tobacco use is indicated by the mortality rates of diseases associated with this habit. Heart disease was responsible for 11.6% of all deaths in 1980, whereas in 1963 the figure had been 3.7%. This represents a proportional increase of 54%. Lung cancer was among the 20 leading causes of death in 1981, with a rate of 4.4 per 100,000 inhabitants in the general population and 71.2 per 100,000 persons over 65 years of age.

## Sociocultural Framework

A study carried out in 1984 in a low-socioeconomic-level community of 70,000 inhabitants to the south of Mexico City found that 90% of the people, regardless of sex or age, rejected the use of drugs. However, a permissive attitude was observed among groups of students and workers.

The use of illegal drugs and inhalable solvents occurs mainly among young people. Both in the general population and among students, males use more drugs than females, except in the case of amphetamines. Persons over 24 years of age make more use of prescription drugs such as tranquilizers and amphetamines than do youth.

The areas most affected by the consumption of drugs are those near the border with the United States and in the region of Jalisco. Thus far, heroin use has been limited to the northwestern part of the country; it is practically nonexistent in the southern part. Similarly, the use of cocaine, which is more common among the upper middle class, is more prevalent in the northwestern area. The use of inhalants is most common in areas on the outskirts of large cities.

The differences between the sexes in alcohol consumption are very marked. Men drink larger amounts than women, and this trend appears to be related to social pressures. Drinking is most prevalent among those between 30 and 50 years of age. During religious or civil festivities the consumption of alcoholic beverages increases, people drink over a period of several days, and intoxication is frequent.

Some studies suggest that among children and adolescents there are two main types of drug users: the multiply-addicted, with marijuana predominant, and inhalers of solvents.

It also has been observed that the attitude of teachers and parents toward the problem of drug abuse is one of denial, grounded in a lack of information and a feeling of inability to cope with the problem.

## Responses to the Improper Use of Drugs

There is a general tendency to think that the problems of drug dependency can be resolved by medical personnel. Currently, attempts are being made to involve the community in prevention work. In addition, there are self-help groups such as Alcoholics Anonymous and Narcotics Anonymous. The church also plays an important role in supporting those who decide to abandon their habit.

In recent years the concept of "dependency" as a disease has been gaining ground. Some organizations, such as the Mexican Psychiatric Association, sponsor meetings for those interested in the subject. Their work is primarily scientific and educational.

The General Health Law of 1984 provides the fundamental legal framework for programs against alcoholism and drug abuse, which include control of the production and sale of narcotics and the execution of plans to evaluate and combat the problem. Thus far, several institutions have been established to coordinate preventive actions.

The legal minimum drinking age is 18. Each state government licenses establishments to sell alcoholic beverages. Advertisements for tobacco and alcoholic beverages are not allowed to link their products to images of calm and joy, attribute nutritive or sedative properties to them, or depict their use by children or adolescents.

Mexico is a signatory of the international conventions of 1961 and 1971 and reports regularly to the International

Narcotics Control Board of the United Nations.

Each year large quantities of illegal substances are confiscated and crops are destroyed. For example, 394 kg of cocaine were seized in 1982, and 443 in 1984; 3,583 ha of poppies were destroyed in 1984, and 25,056 marijuana plants were destroyed in 1987.

## Treatment, Rehabilitation, and Social Reintegration

Treatment of drug addicts is carried out in primary care clinics or in general or specialized hospitals. Established procedures exist for patient referral between these institutions. There are also toxicology modules in the emergency services as well as Juvenile Rehabilitation Centers that offer outpatient treatment or hospitalization free of charge.

## Prevention

In regard to primary prevention, the Attorney General of the country has created the Drug Abuse Treatment Program, which attempts to deal with the problem comprehensively. Significant prevention activities are carried out in the Juvenile Rehabilitation Centers.

## Research

The research activities developed by agencies and institutions that make up the Committee on Legislation are grouped into three categories: Program for Social, Clinical, and Biomedical Research; Center for Integration and Documentation of Drug Abuse; and training of investigators. These activities include the integration and organization of registration systems for cases detected in various health agencies; studies to improve diagnosis, determine trends, and identify subgroups affected; studies to evaluate the action and effects of various substances; evaluation of methods of case identification and timely intervention, treatment, and rehabilitation; and studies to determine the effectiveness of prevention activities.

Financing and advisory services for these activities come mainly from international agencies such as PAHO/WHO, the National Drug Plan of Spain, and institutions in the United States of America. Also involved are national governmental agencies, such as the National Council on Science and Technology (CONACYT), and private organizations, such as the Social Studies Foundation.

## Education and Training

The Committee on Education is composed of several university and governmental institutions. The Autonomous University of Mexico includes comprehensive courses on alcoholism and drug abuse in its medical curriculum. In addition, the Mexican Psychiatric Institute has played a central role in the education of physicians and other professionals in this field.

# NETHERLANDS ANTILLES

## Production and Marketing of Psychoactive Substances

Tobacco is imported for the production of cigarettes. Beer is produced domestically, but alcohol is also imported for the preparation of other beverages. No clandestine production of alcoholic beverages has been detected. The importation, production, and sale of alcohol are based on the free market.

Psychoactive medications are imported and sold on the free market and are subject to some controls. For example, narcotics and psychotropic substances can be sold only by medical prescription, although no special prescription form is required. Pharmacists must file a report every four months on the sale of controlled substances.

## Consumption

With regard to alcohol consumption, information is available only for beer. In 1987–1988, a total of 10,423,000 liters were consumed, representing a marked increase over previous years. Excessive prescription of psychoactive substances has been documented. According to the Office of Pharmaceutical Affairs, 222.5 g of cocaine, 1,067 g of *Cannabis*, and 85.6 g of opium were imported in 1987.

## Health Indicators

The number of persons consulting the Mental Health Department for drug abuse problems was 110 in 1984, 104 in 1985, 106 in 1986, 91 in 1987, and 79 up to October 1988.

There are no statistics documenting the demand for medical emergency services owing to drug abuse. A surveillance system has been initiated through the emergency service of St. Elizabeth Hospital. No hospital beds have been assigned for the treatment of addicts.

Although the relationship between AIDS and drug abuse has not been studied in the Netherlands Antilles, it does not appear that such a connection exists there. No direct programs are in place for the prevention of intravenous drug use as a risk factor for that disease.

## Sociocultural Framework

No data are available that relate drug abuse to law-breaking in general or to juvenile delinquency specifically, nor do data exist on drug use in prisons. It has been observed that a drug abuse problem exists in the workplace and, accordingly, treatment strategies to combat it have been planned.

No studies have been done on the attitudes or perceptions of the population or its leaders regarding drug abuse and trafficking, but it would appear that not all the people condemn the use—and especially the trafficking—of drugs. It is suspected that many families of limited economic resources are involved in drug trafficking.

## Responses to the Improper Use of Drugs

The Office of Pharmaceutical Affairs, which is part of the Ministry of Health, is responsible for collecting information and reporting it to the International Narcotics Control Board. The Attorney General's Office works closely with the Board.

Advertisements for alcoholic beverages may not be aimed at minors and are permitted on television only between 10 p.m. and 1 a.m. There is no legal drink-

ing age, although the sale of liquor to minors under 16 years of age is not allowed unless they are accompanied by a parent or legal guardian. No restrictions apply to the sale and use of tobacco.

The Netherlands Antilles is not a member of the South American Agreement on Narcotic Drugs and Psychotropic Substances.

### Treatment, Rehabilitation, and Social Reintegration

Treatment is usually given on an outpatient basis and consists of individual and group therapy. Wives, husbands, and family members are also included in the treatment program. No specific policies have been formulated with regard to rehabilitation programs.

### Prevention

Little has been done in the area of prevention. In view of the notable increase in the problem, some communities have taken the initiative to organize and carry out prevention programs.

### Research

So far, very little research has been done. A public mental health case register has existed since October 1987. Data on patients with mental disorders are collected to provide a basis for distributing information for planning and management, to establish a solid foundation for epidemiologic research, and to serve as a point of departure for future research.

### Education and Training

There are no centers for the training of professionals in the area of drug abuse, with the exception of the School of Nursing. Most academic experience is acquired in the United States and in the Netherlands. During medical training little attention is given to the problem of addiction.

## PANAMA

### Production and Marketing of Psychoactive Substances

Alcohol, tobacco, and a small amount of phenobarbital and meprobamate are produced in Panama. Between 1980 and 1985 the production of alcoholic beverages generally tended to increase. The total 1986 production of alcohol was 100,546,480 liters, a 15% increase over the 1985 figure of 87,742,209 liters. Beer represented almost 95% of the production in 1986.

The manufacture of tobacco products has declined in recent years: in 1981 it reached 1,049,732 cigarettes, while in 1986 it was 872,755.

Psychoactive medications are imported by authorized pharmaceutical agencies.

In regard to the clandestine production of psychoactive substances, it is known only that certain alcoholic beverages are made in the rural areas. There are no official figures.

Medical prescriptions are required for the dispensing of psychoactive drugs. Special prescription forms are required for dispensing narcotics, and these substances must be handled by the chief pharmacist, who must be licensed annually. In the last five years there have been no official reports of forged prescriptions.

The manufacture, marketing, and distribution of psychoactive substances is

controlled by the Government. Up to now no diversion of production toward illegal channels has been detected.

## Consumption

In 1985, 77,845,223 liters of nationally produced beer were sold, but these gross figures may not be directly indicative of consumption. Regarding the use of psychotropic medications, the Ministry of Health's Department of Pharmacy and Drugs reported the following sales in 1987: 8,496 kg of clobazam (Urbadán), 18,191 kg of chlordiazepoxide (Librium), 26,117 kg of diazepam (Valium), 336,321 kg of phenobarbital, and 3,440 kg of meprobamate. No national studies have been done on the prevalence of psychoactive substance use.

## Health Indicators

Information is only available on the outpatient demand for government services to treat psychiatric problems related to alcohol and other drug abuse. Significant variations in the demand occurred between 1981 and 1985, but no clear trends emerged. The total number of cases treated in 1981 was 1,811, while in 1985 it was 2,707.

In 1982 and 1983 the numbers of consultations for all diagnoses were considerably higher for men than for women, with the exception of "drug psychoses," for which the number of females seeking treatment was slightly higher. The male-to-female ratio with respect to "alcohol dependency syndrome" was 5.5 to 1 (with males representing 84.7% of the cases attended). For the diagnosis "drug abuse without dependency" the ratio was 9.8 to 1 (males representing 90.7% of the cases treated).

The Social Security Fund's Psychiatric Ward showed a steady rise in the percentage of addicts among all cases treated: in 1983 the proportion was 3.3% (10 out of 330); in 1984, 5.9% (22 out of 376); and in 1985, 7.0% (26 out of 372).

From 5% to 10% of the beds in the psychiatric hospitals or psychiatric services in general hospitals are set aside for cases of drug abuse.

Regarding traffic accidents and alcohol consumption, in 8.7% of all accidents in both 1984 (1,776 out of 20,520) and 1985 (1,888 out of 21,751), alcoholemia was demonstrated.

Up to March 1988 only six cases of AIDS associated with the use of intravenous drugs had been recorded, out of a total of 47. No studies have analyzed the relationship between AIDS and administration of drugs by this method, which is rarely used in Panama.

Studies carried out at the end of the 1970s and the beginning of the 1980s found 5% of the study sample to be "alcoholics" and from 30% to 35% to be "excessive drinkers" (Deleuze).

There are no direct indicators of drug use and abuse. It is estimated that the groups at greatest risk are concentrated in the metropolitan area, due to the higher frequency there of health problems related to the consumption of psychoactive substances. The use of inhalants in the juvenile population has not been quantified, but is known to exist.

## Sociocultural Framework

The general attitude toward the marketing of illegal drugs is one of strong disapproval. Alcohol consumption is highly accepted, as is the use of tobacco. There is no research on this subject.

## Responses to the Improper Use of Drugs

Organizations exist in the community that are concerned with this problem, such as Alcoholics Anonymous and Narcotics Anonymous.

A significant proportion of the people

with dependency problems rely on traditional medicine (mainly healers). The upper and middle classes more frequently use the specialized services.

In general, knowledge of the problem on the part of nonpsychiatric physicians and other health professionals is limited. The approach to alcoholism and drug abuse is frequently moralistic and reproachful, and these conditions are not seen as diseases. Alcoholics are treated with disdain in emergency rooms.

There are not yet any organizations of health professionals interested in the subject, only civic or community organizations that do some preventive work. Coordination with the public sector is limited.

Legislation regarding alcoholic beverages exists to regulate production, alcohol content, quality control, wholesale distribution, and advertising. There are also standards that govern the location of sales establishments and set the minimum drinking age at 18. However, the beverages are sold in supermarkets and bars and are easily purchased by minors, either for adults or for their own consumption.

The legislation regulating tobacco is less strict and more limited. With regard to psychoactive drugs, the country is a signatory of the international conventions of 1961 and 1971.

Some regulations apply to the advertising of alcoholic beverages and tobacco, but they are very limited. For example, an ad cannot show individuals drinking liquor or smoking.

## Treatment, Rehabilitation, and Social Reintegration

The organization of these activities is the responsibility of the Government health systems. Almost all regions have specialized mental health teams that treat drug problems in the population. The greatest concentrations of cases and treatment facilities are found in Panama City; in the rest of the country, coverage is low. Programs exist to treat alcoholism and drug abuse. Efforts are currently being made to coordinate the initiatives of the various working groups.

The governmental institutions that are involved in responding to the country's drug problem are the Ministry of Health, the Social Security Fund, and the Institute of Forensic Medicine, which is responsible for coordinating the Government's activities related to psychoactive drugs. Treatment is financed by the national Government, since the work is done in the country's general and psychiatric hospitals, but there is no special budget for this purpose.

The National Psychiatric Hospital, which is under the Ministry of Health, has specific programs on alcohol and drugs. Of its 1,000 beds, 5% to 10% are used annually for the hospitalization of addicts.

In the private sector, there are also organizations that provide treatment specifically for young people. The mental health team bears the primary responsibility for carrying out treatment in Panama, and their approach is basically medical. In the community, a psychological treatment model is more prevalent. No evaluation of the results is available.

The Ministry of Health and the Social Security Fund are responsible for prevention programs, which are oriented mainly toward adolescents and young people. Seminars, workshops, and the communications media (press, radio, television) are used most often. There are no official university programs on prevention.

## Research

To date no country-wide research has been done on the use of psychoactive

substances. There have only been some studies on attitudes and forms of consumption, especially among youth. One of the major problems has been the limited availability of funding.

### Education and Training

The universities are the principal institutions that carry out education in this field. Health professionals receive this preparation at the undergraduate level, but it is insufficient. Most of the personnel working on drug abuse receive adequate training at the graduate level. There are no special internships. Psychiatrists have the primary responsibility for responding to the dependency problems in the country, and only within their specialty are courses on drugs included. Community education basically focuses on prevention and health promotion.

## PERU

### Production and Marketing of Psychoactive Substances

The country is not a producer of psychoactive medications; only preparation of pharmaceutical specialties takes place there. Responsibility for the importation of basic legal drugs lies outside the health sector.

A medical prescription is required for the purchase of narcotics. Also required are some type of personal identification, commercial or home address, name of person or firm buying the product, and place of delivery. These data are also entered in a special registry of sales, duly authenticated by a judge. Forgery of prescriptions for narcotics has been detected.

The Government controls the manufacture, sale, and internal distribution of narcotics, but not of other psychotropics. Small-scale diversion of chemical inputs —for example, sodium carbonate, ether, acetone, and sulfuric acid—for the illegal manufacture of drugs has been found to occur.

### Consumption

Without a doubt, alcoholism constitutes the principal drug dependency. In 1970 it was estimated that the rate of addiction to this drug was 8.8% in the marginal areas of Lima. In the last 40 years, the consumption of alcoholic beverages has increased enormously. Per capita consumption was 2.96 liters of absolute alcohol in 1940, 7.22 liters in 1970, and 7.65 liters in 1980. The type of alcohol consumed most (57%) is made from sugar cane, but consumption of beer has increased more than 100% in the last decade. Alcohol consumption is associated with the use of other drugs.

In 1985, one study estimated that 60,000 persons in the cities of Lima and Callao were "addicted" to psychotropics, or 4.4% of the population using these substances. It was calculated that 80% of these were addicted to cocaine free base.

With regard to the use of inhalants by minors, a 1981 study conducted on a sample of 400 children at the Civil Guard Juvenile Center No. 1 showed that 13% used several drugs, most of which were plastic glues. Of the users, 93% were male and the average age at which they began their habit was 9; 67% lived in marginal areas, while 33% had no fixed residence. It is important to emphasize that the principal reason for starting in this group was "curiosity."

A 1986 national household survey conducted on a sample of 7,425 inhabitants (4,146 in Lima and 3,279 in the provinces) revealed an overall prevalence of use (at least once in the respondent's lifetime) and prevalence of use in the last year for various psychoactive substances. The six highest overall prevalences corresponded to alcohol (87.2%), tobacco (67.4%), coca leaves (21.7%), sedatives (18.5%), analgesics (9.9%), and marijuana (8.3%). The prevalences of use in the last year for these same substances were as follows: alcohol, 34.8%; tobacco, 19.9%; sedatives, 9.8%; analgesics, 4.0%; coca leaves, 4.0%; and marijuana, 1.3%.

## Health Indicators

There are no statistics or data for the country as a whole on morbidity due to the abuse of psychoactive substances. The only information available is from the outpatient clinic of Hermilio Valdizán Hospital, which has a unit for treatment of alcoholism and drug abuse.

Of a total of 1,918 patients treated in this clinic in 1987, 234 (12.2%) were alcoholics and 487 (25.4%) were drug addicts. The vast majority (94.5%) of the drug abuse patients were males, and 64.1% were in the 20-to-29-year age group. Of the 380 beds in the hospital, 15 (4.0%) are set aside for addicts.

The death rate associated with drug abuse is not known. However, use of cocaine free base is believed to cause many deaths either directly or indirectly.

Thus far, 280 cases of AIDS have been reported. Its association with drug abuse has not been studied. Intravenous administration of drugs is infrequent in Peru.

## Sociocultural Framework

The population of Peru considers drugs to be the third most important problem in the country, after the economy and terrorism. In Lima, people are concerned about drug use, while outside the capital they are more concerned about drug trafficking. Lima's residents believe the drug consumed most is cocaine free base, while elsewhere it is thought to be alcohol. In general, the public disapproves of drug use.

The association between juvenile delinquency and drug use has not been studied, nor has the prevalence of the problem in the prison population. However, use of cocaine is believed to be a very serious epidemic because within a few months the drug causes profound personality changes characteristic of psychopathology or delinquency.

## Responses to the Improper Use of Drugs

In general, drug addicts first seek help from family members, then from the religious community, and third from professionals. Alcoholics Anonymous and Narcotics Anonymous are organizations they can turn to, and there are also other community organizations that refer patients to the health services.

Both health professionals and the general population consider drug abuse to be an important problem and perceive it as a disease. Some professional organizations presently work in this field, such as the Center for Information and Education for the Prevention of Drug Abuse (CEDRO) and the National Association for Prevention, Treatment, and Rehabilitation from Drug Dependency (COCADIL). However, these organizations do not influence drug abuse policy.

Broad legislation on the subject dates from as early as 1921. In summary, there are regulations regarding production of and trafficking in illegal drugs, especially coca. The country is a signatory of the 1961 and 1971 conventions.

An interministerial committee is charged with coordinating pertinent actions. A National Plan for Prevention and Control of Drugs (1986–1990) is being implemented under the provisions in the General Drug Law. Decisions are made at the level of the Sectoral Committee on Drug Control (COMUCOD), which is composed of several ministries.

The minimum legal drinking age is 18. In general, compliance with this provision is poor.

There are practically no regulations concerning tobacco, with the exception that its advertisement on television is prohibited before 9:00 p.m. This prohibition does not exist for alcohol.

## Treatment, Rehabilitation, and Social Reintegration

Treatment is planned and organized on the basis of the working group therapy course. Several approaches are used in combination, including behavior modification, treatment communities, and individual, group, and family therapy. These activities are coordinated by the National Institute of Mental Health. Care is provided by health services responsible for defined geographic areas.

Treatment is financed by the Government and by Social Security. In addition, international agencies offer assistance in the areas of equipment, training, technical advisory services, and research.

## Prevention

The only State rehabilitation center for addicts was inaugurated in Lima in 1978. It uses a cognitive/behavioral/institutional treatment model, with activities that foster social reintegration.

Primary prevention strategies include proposed changes in the law, antidrug campaigns, information dissemination, etc. Prevention activities are not organized; there is coordination only between some institutions. The efforts are directed toward children and youth, through the communications media. No government institutions are in charge of prevention nor are there university prevention programs.

## Research

Research is usually financed by the investigators themselves and by some private national and international organizations. Most of the studies are tangential to the drug problem. Some epidemiologic and clinical studies have been done, but in general they were limited to small samples. To date, cooperative studies with other countries have not been carried out.

The Ministry of Health, in coordination with the Ministry of Education, develops research programs that include epidemiologic, medical, and scientific studies, together with technical training for dealing with the problem of drug addiction.

## Education and Training

Educational initiatives come principally from the universities and the health sector, which have organized multidisciplinary courses or seminars. Very few professionals devote themselves specifically to the subject of drug abuse. At present, there is no specialization in drug abuse and little instruction at the undergraduate level. The physician is the principal health professional responding to this problem, with the support of a multidisciplinary team consisting of psychologists, nurses, social workers, physical and occupational therapists, and others.

# TRINIDAD AND TOBAGO

## Production and Marketing of Psychoactive Substances

Only alcohol and tobacco are produced in the country. There is no production of psychotropic medications nor evidence of their clandestine production. The free market governs distribution of imported materials.

In 1986, 20.2 million liters of beer, 3.4 million liters of stout (malt beer), and 10.3 million liters of rum were produced for local consumption. Between 1977 and 1986 the production of rum decreased, while the levels of beer and stout production were maintained, though with considerable variations from year to year.

The country is a signatory of the international conventions of 1961 and 1971. A medical prescription is required for the sale of psychoactive drugs, and the prescription is registered at the pharmacy. The authority to import drugs is also regulated. Vendors of psychotropic drugs have to obtain authorization annually from the Chemistry, Food, and Drug Division of the Ministry of Health. No diversion of these substances from legal channels has been detected.

## Health Indicators

Most patients seeking treatment for alcohol-related problems enter the psychiatric hospital. Between 1985 and 1987 there was an increase of 20% in the total number of cases treated, from 697 to 835. A specialized, 29-bed center exists for the treatment of alcoholic patients of both sexes. Also, some companies have programs to assist employees with alcohol-related problems.

According to data from the most important general hospital in the country, 55% of the drivers treated for accidents in 1979 presented blood alcohol levels of 0.08% or greater. In the same hospital, 47% of the males admitted had some medical problem related to alcohol.

In 1985 the principal health institutions of the country treated 785 patients with problems associated with the use of drugs, mainly marijuana and cocaine, while in 1987 the same institutions treated 1,055 such patients, for an increase of 34%. It is believed that cocaine abuse accounts for the sharp increase (580%) in cases of addiction treated between 1983 and 1987.

## Sociocultural Framework

Given the broad variety of cultural groups in the country, it is not easy to generalize about attitudes toward drugs. However, the use of tobacco and alcohol appears to be widely accepted. Marijuana also has the approval of some subgroups of the population who cultivate it. Attitudes vary regarding the illegal sale and use of other substances.

## Responses to the Improper Use of Drugs

There has been a broad response to the problem by the community. Several organizations concerned with primary prevention and rehabilitation, especially oriented toward youth and the family, have been formed (e.g., Alcoholics Anonymous, Narcotics Anonymous). Still, primary health care services are perhaps the most important sources of care.

The concept of addiction as a disease is accepted by most health professionals. Many of the professional organizations incorporate activities related to drug abuse in their regular programs.

The Government recently created a

Council on Alcohol and Drug Abuse, which coordinates and supervises programs for drug abuse control at all levels. The places where alcohol may be sold are regulated, and the legal minimum drinking age is 16. The restrictions on advertising are insufficient.

### Treatment, Rehabilitation, and Social Reintegration

The Ministry of Health is responsible for the treatment of drug addicts. Treatment programs are carried out mainly in the psychiatric services of the general hospitals and include both outpatient treatment and hospitalization. Most patients are referred by the primary health care centers.

Alcoholics Anonymous and Narcotics Anonymous have treatment and rehabilitation centers throughout the entire country. Several community organizations have developed programs that offer support for young people. In addition, there is a private rehabilitation center that provides hospitalization.

### Research

Up to the present, research in this field has not been coordinated or designed in a way that would permit comparison of findings.

No household surveys have been carried out because of their high cost. Studies are currently under way on the relationship between AIDS and drug addiction, as well as on alcohol consumption and traffic accidents. There are also some preliminary clinical studies that analyze admissions to drug abuse treatment centers.

### Education and Training

The major centers of higher education participate in training related to drug abuse. Medical students also receive training in this field within the area of psychiatry. In addition, the subject is included in the postgraduate psychiatry program. The Council on Alcohol and Drug Abuse is currently attempting to coordinate all these efforts.

## VENEZUELA

### Production and Marketing of Psychoactive Substances

In Venezuela, alcohol and tobacco are produced, but other psychoactive substances are not. The importation of narcotic and psychotropic medications has increased in recent years. According to unofficial information from the Drug and Cosmetics Division of the Ministry of Health and Social Welfare, prescriptions from dentists and veterinarians for narcotic and psychotropic drugs have begun to appear, an indication of bad professional practice.

Pharmaceutical products that contain psychotropic and narcotic substances are prepared in legally established pharmaceutical laboratories. Narcotic and psychotropic medications are dispensed through pharmacies by prescription only. The sale of psychotropic and narcotic substances to minors is prohibited.

Venezuela also has a licensing system for the internal distribution of narcotic and psychotropic substances. Requirements include registration and permission for importation, inspection of the imported substances for identification, permission for preparation, and permission for sales and purchases. In addition, the distribution of medical samples to

laboratories, drug stores, and pharmaceutical agents is prohibited.

Some substances, including tranquilizers and certain drugs such as propoxyphene and pethidine, are diverted from legal channels.

## Consumption

No data can be provided on the consumption of narcotic and psychotropic medications since the information submitted monthly by the distributors is not computerized.

## Health Indicators

The prevalence of alcoholic psychosis increased significantly between 1982 and 1984, especially in the urban areas, where liquor sales are greater. Alcohol dependency syndrome also increased, as did psychoses from drugs. Mortality due to these causes showed a slight increase.

The psychiatric hospitals set aside almost no beds for addicts, except for the Caracas Psychiatric Hospital, which has 24 beds for drug abuse and another 24 for alcoholism.

Intravenous administration of drugs is not a frequently used method in the country. However, in recent years an increase has been noted.

## Sociocultural Framework

Consumption of alcoholic beverages is an integral part of Venezuelan social and cultural life. Alcohol is increasingly relied on for gratification, since it is easily obtained, low in cost, and socially accepted. It is not generally considered to be a drug. Its consumption by women is increasing.

Venezuela once ranked among the 10 top countries in whiskey consumption and was a large consumer of champagne, but due to the current economic crisis the consumption of national liquors has increased and that of imported liquor has decreased.

Since 1984, with the passage of the Organic Law on Narcotic and Psychotropic Substances, a new conception of the drug problem has emerged in the country, and the search for solutions has been initiated. The drug user is regarded as a patient who needs treatment, rehabilitation, and reintegration into society.

In general, there is now greater awareness of the drug problem by the public, together with a feeling of powerlessness and fear. However, the idea persists that only young people and members of disadvantaged social groups are affected by drug addiction.

The proportion of crime associated with alcohol use has been estimated at almost 20% in recent years. Between 1978 and 1982 there was an increase in the number of arrests for drunkenness. In addition, a study carried out in 1981 found that 4% of a sample of addicts had a history of imprisonment, 26% had been tried in court, and 63% had a police record.

## Responses to the Improper Use of Drugs

The Organic Law on Narcotic and Psychotropic Substances of 1984 consists of 198 articles and six sections, as follows: general provisions, administrative order, crimes and consumption of regulated substances, prevention, procedures, and establishment of the National Commission Against the Illegal Use of Drugs. Article 28 of the Organic Law on the Sale of Liquor, on Retail Distributors of Alcohol and Alcoholic Products, establishes the hours during which alcoholic beverages can be sold in Venezuela. Article 9 provides the criteria for calculating the number of retail distributors permitted in the country. There are many places, how-

ever, that sell alcoholic beverages without a license.

Tobacco may be freely sold in all types of commercial establishments and it may be sold to children. Some laws have been passed prohibiting smoking in specific places, but they have received very little publicity. Consequently, they are unknown to most of the population and are frequently violated.

Since 1981, the advertising of alcohol and cigarettes on radio and television has been prohibited. Enforcement of this resolution has been quite satisfactory.

To date, the taxes on tobacco and alcohol and the increased retail prices per unit do not appear to have influenced the availability of these products in the community.

Venezuela is a signatory of the Single Convention on Narcotic Drugs of 1961, the Convention on Psychotropic Substances of 1971, and the South American Agreement on Narcotic Drugs and Psychotropic Substances.

## Treatment, Rehabilitation, and Social Reintegration

Up to now, no planned policy has determined actions in these fields. By law, the Ministries of Health and Social Welfare and of Justice are responsible for treating prisoners who have problems with alcoholism or drug addiction. However, they operate only one establishment for the treatment and rehabilitation of these patients, the Unit for the Treatment of Addicts (UDAF), which has a small budget and only modest installations.

The Ministry of Justice has set up some orientation centers for outpatient care, but staffing is limited.

The Ministry of the Family participates in treatment, rehabilitation, and social reintegration through the José Felix Ribas Foundation, which was created in 1985 and has six hospitalization centers that function as treatment communities and seven centers for outpatient care.

Up to the present, Social Security has not been interested in dealing with this problem. However, since 1984 independent associations giving assistance to addicts have proliferated, although they generally lack academically or professionally qualified staff.

Very few efforts are being made in the area of social reintegration. There is no research or experience in the country in this regard. In addition, preventive activities have been isolated and sporadic, limited in scope, and without clear objectives.

## Research

Research is being done by only a few university and clinical investigators who are interested in this field. Most of the studies are literature reviews rather than field research.

The National Council on Scientific and Technological Research (CONICIT) coordinates, supervises, and promotes research projects. There are no sources of financing.

## Education and Training

The institutions that train health professionals have generally provided only lectures on drug-related topics. Recently, there has been some interest in having students of psychology and social work do internships at a center that treats addicts, something that neither medical students nor postgraduate students of psychiatry had previously done.

Since 1987 the UDAF has offered a one-year theoretical-practical training course on drug abuse for psychiatrists and graduate-level clinical psychologists.