

UNSDRI
UNITED NATIONS
SOCIAL DEFENCE
RESEARCH INSTITUTE
VIA GIULIA 52, 00186 ROME

RESEARCH AND DRUG POLICY

61101c1

PUBLICATION No. 19
ROME, MARCH 1979

NCJRS

SEP 18 1979

ACQUISITIONS

UNSDRI

✓ **UNITED NATIONS
SOCIAL DEFENCE
RESEARCH INSTITUTE**

VIA GIULIA 52, 00186 ROME

✓ **RESEARCH AND DRUG POLICY**

A DESCRIPTION AND ANALYSIS OF THE USE OF
LARGE-SCALE INVESTIGATIVE TECHNIQUES TO
ASSIST IN THE FORMULATION OF CONTROL POLICIES
IN THE NON-MEDICAL USE OF PSYCHOACTIVE DRUGS



TABLE OF CONTENTS

	Page
Preface	ii
Part One: Investigating an Elusive Phenomenon: General Considerations by James J. Moore	1
Part Two: A National Response to Drug Abuse: The American Commission on Drug Abuse (Appendix I, Appendix II, Appendix III) by Louis P. Bozzetti	7
Part Three: Canada: The Commission of Inquiry into the Non-Medical Use of Drugs (Appendix I, Appendix II) by James J. Moore	48
Part Four: Drug Use Investigation in Japan by James J. Moore (on the basis of documents received from the Japanese authorities)	88

PREFACE

The rôle of research in the development of drug control policies has assumed growing significance in recent years. For that reason the United Nations Social Defence Research Institute, whose legislative mandate in the field of adult criminality and juvenile delinquency, their prevention and control, encompasses all the aspects of phenomena which can originate directly or indirectly either criminal behaviour or, more generally, social deviance, and whose primary function remains to provide a link between research and action, initiated, in 1972, a programme to encourage the development of programmes of investigation in a number of countries throughout the world. This programme of country studies focussed, in the main, on three aspects of the phenomenon, public and private attitudes towards it and an assessment of the instruments of social response applied or available in individual countries.

The present volume, devoted to some substantial and significant large-scale investigative techniques implemented in order to assist in the formulation of control policies in the non-medical use of psychoactive drugs, is a corollary to the country studies programme and a companion piece to "Investigating Drug Abuse" published by UNSDRI in 1976.

We are grateful to the United Nations Fund for Drug Abuse Control which provided some financial support and to Louis Bozzetti and James Moore for their contributions to this volume. It is hoped that these efforts will enhance understanding of non-medical drug use, thereby resulting in the evolution of more rational and effective policies to reduce the dimension of the problems arising from it.

Ugo Leone
Officer-in-Charge

Rome, March 1979

PART ONE

INVESTIGATING AN ELUSIVE PHENOMENON:
GENERAL CONSIDERATIONS

by

James J. Moore^{*/}

^{*/} At time of the preparation of this publication, Research Expert
at UNSDRI.

The programmes of research elaborated in this volume reflect, to varying degrees, the puzzling nature of non-medical drug use in a number of developed countries in this decade. The very dimensions of this search to comprehend and respond to the phenomenon clearly indicates its dynamic but subtle nature and its effect on societies. The investigations documented here constitute an effort to achieve two goals: the first is to lay out, in exemplary fashion, the array of investigative techniques that can be employed in probing various facets of the phenomenon; the second is to demonstrate the variegated and often elusive nature of this form of behaviour. Both these objectives require elaboration.

First, the need for a comprehensive approach - as exemplified in the American and Canadian commission research programmes - arose, in part, because what had passed for "fact" in this field for a number of years, on examination proved to be quite challengeable. By the late sixties there was a growing awareness that a number of the assumptions underlying official and legal approaches to drug use could not always be justified; in addition, it was obvious that the phenomenon was not homogeneous in nature and, in fact, changed rapidly in character, continuously modifying its impact on society and frequently involving a variety of social groups at various points in time. Against this background a broad investigative philosophy evolved (particularly in North America), which resulted in the design and implementation of a number of individual research projects in both the United States and Canada.

The second goal of these programmes - an attempt to elaborate the complex and dynamic nature of non-medical drug use - arose from a growing recognition that drug use, like other forms of behaviour, should not be viewed in a single point-in-time focus, isolated from the psychological and social environment in which it occurs. A recent Unesco publication touched on the researcher's problem in this regard:

"There is an urgent need for social scientists to develop their own models for the study of social reality. The two traditionally separate questions 'why' and 'how' should be merged, so that behaviour at one particular point-in-time can be seen as both resulting from prior action and at the same time facilitating future action. Thus

behaviour is more realistically viewed as part of an ever-changing dynamic system. For example, the epidemiological model cannot be mechanically applied in the field of the behavioural and social science studies of psychoactive substance use where the agent (the psychoactive substance), the individual (as subject and/or object of transmission), and the milieu (society, community, etc.) find no direct counterparts in classical epidemiology of communicable diseases." ^{1/}

There is no suggestion that all national drug use research programmes need be as comprehensive as these described here. For many countries the cost would be prohibitive; also, some of the issues investigated by the two commissions are now better understood. It was felt, however, that the variety of techniques and designs developed in these programmes could provide a useful catalogue of approaches cutting across disciplines and theories.

In order to comprehend the utility of national programmes of research one first has to ask why we conduct research at all. The answer, quite simply, is that we investigate something in order to know and understand it better. In policy-related research we wish to know more about a phenomenon in order to determine, first, whether anything should be done about it and, if so, just what.

In case of countries in which non-medical drug use appears to be emerging in problematic dimensions, investigation is warranted. Initially it will concentrate on determining whether, in fact, a problem exists or is developing and in this connection a number of indicators may be identified: the kinds of drugs in use; the size of the various populations involved; the age groups engaging in drug use. These are just a few of the basic determinants that should be examined, although they do not need investigation on a national scale; they can even be carried out - and often are - at community or regional levels. A large-scale programme, frequently on a national scale, may however be called for when it is felt that policies of intervention are needed in order to avert problems arising from non-medical drug use. It is quite obvious,

^{1/} Fazey, C., The Aetiology of Psychoactive Substance Use, Unesco, Paris, 1977.

for example, that the control of illicit distribution of drugs is not a matter that can be left solely to individual communities or regions of a country. Likewise, the operation of control and treatment programmes is frequently beyond the resources of the community and more senior forms of government must assume responsibility. In these cases, data and information are needed if effective programmes are to be designed and operated in a rational and efficient manner.

Another important reason for national programmes of research may be constitutional in those states where the responsibility of drug control in whole, or in part, is in the hands of the authorities. For purposes of assessment, therefore, information must be gathered on a national scale.

A further quite compelling reason for nationally-based research arises from the cultural specificity of non-medical drug use. It cannot be assumed that the pattern of illicit drug use in one country will be identical in another. Various kinds of drug use are frequently involved, different populations engaged and a quite diverse set of problems prevailing. Likewise, forms of intervention which have been successful in one culture may very well fail, or cannot be applied, in other cultures. The Japanese data collection system exemplifies this to some extent, in as much as some cases of illicit drug use by young people are reported to the authorities by members of the user's family. In other cultures such an expectation would be precluded.

The notion of national programmes of drug abuse research should not frighten authorities if it is recognized that the collection of some of the relevant data would not require the design and development of entirely new models. The use of existing data sources can go far towards meeting a large part of the information needs in many countries, where at least some of the basic information elements for data collection already exist. This has resulted in part from the provisions of the two international treaties, the Single Convention on Narcotic Drugs and the Convention on Psychotropic Substances, under the provisions of which signatory states are required: 1) to establish regulatory systems to control and monitor the cultivation, manufacture and distribution of those substances which are listed in the schedules of the conventions; 2) to report annually to the United Nations Commission

on Narcotic Drugs and the International Narcotics Control Board on a number of specific matters which are spelled out in the conventions. In order to administer these commitments, signatory states must establish mechanisms for the collection of the necessary information in their own jurisdictions. These information components cover a broad range, including data on illicit cultivation, manufacturing, trafficking and, to a lesser extent, the illicit use of scheduled drugs. The value of the information thus systematically collected should not be underestimated since in some respects it is available only through these mechanisms.

In the administration of drug-related programmes at the various governmental levels, data are generated which, if analysed systematically, can yield a considerable volume of quite useful information. This presupposes, however, that in the initial designing of such programmes, care is taken to ensure that the reporting and recording of these data is both workable and reliable. In this connection, the United Nations Division of Narcotic Drugs has prepared and is testing a manual on drug abuse assessment for the guidance of governments. Part One of the manual focusses exclusively on the development and use of existing information for purposes of assessment, while Part Two deals with techniques for conducting population surveys.

Although both sources and methods of data collection can vary from country to country, it is useful to review their general framework. The sources listed in the United Nations manual referred to above include:

- health services for drug users in the general population, including in-patient, out-patient and day-patient facilities;
- welfare services, including financial assistance, assistance for training and rehabilitation, social assistance in providing residential accommodation;
- law enforcement records, including data from police, courts and correctional services;
- counselling and other services provided by schools and universities; services for drug abusers in the armed forces, and in commercial, industrial or other enterprises;
- case registers maintained by police, psychiatrists or other centralized forms of registers;

- prescription control records;
- emergency services;
- institutions which keep records of drug-related deaths, as well as those maintaining records on hepatitis.

This list is quite broad and in individual jurisdictions would be broken down in considerable detail.

In the chapters which ensue, it will be observed that even in sophisticated research programmes there was frequent reliance on data sources such as these. While in the past the rather vague or general nature of relevant records made their utility quite limited, the rising cost of health and social services in most developed countries in recent years has accented the need for more precise information in order to assist in the assessment of drug-related problems and in the evaluation of programmes designed to alleviate them. It is hoped that the exemplary descriptions which follow may provide a guide to more sound policy formulation based on researchable hypotheses and reliable data.

PART TWO

A NATIONAL RESPONSE TO DRUG ABUSE:
THE AMERICAN COMMISSION ON DRUG ABUSE

by

Louis P. Bozzetti, M.D.
Associate Professor of Psychiatry */
University of California, San Diego-

*/ Formerly Deputy Director, National Commission on Marijuana and Drug Abuse.

Background Setting

In attempting to understand the social setting for the National Commission on Marijuana and Drug Abuse, it is important to review some of the processes operating within the country during that period. The observer of contemporary American history realizes that the decades of the sixties and seventies were indeed tumultuous in the history of the United States. The country seemed to be involved in several activities which were testing the essential fabric of the nation's identity. The Viet Nam war, of course, was the highlight event for that period. However, on a less dramatic level, other events were occurring with perhaps equally far-reaching social and cultural effects. Included among these issues were social permissiveness, urban decay, use of leisure activity, racial tension, underground newspapers, and drug abuse. Before considering the issue of drug abuse in its historical perspective, it is important to mentally note that each of the just mentioned social issues conveniently served as a symbolic substitution for any one of the others. For example, one might argue with great emotion about the destructive nature of narcotic drugs, while, in reality, being very much upset with the issue of social permissiveness in the area of sexual behaviour.

Cultural Perspective

The United States in the early 1970's was experiencing a great deal of confusion about drug abuse. On the one hand, the population was being told that a runaway epidemic of heroin addiction was occurring, while others spoke convincingly of the need to allow free access to all psychoactive substances in the United States. In the midst of this, the drug marijuana became the "symbol of misunderstanding". To mention the term marijuana surely would create, at that time, a very spirited debate between otherwise friends. The term drug abuse, itself, took on a symbolic meaning. Drug abuse had become an emotional term that connotated societal disapproval and elicited a sense of uneasiness and disquiet. It was in this historical context that the Comprehensive Substance Control Act of 1970 became law. A section of that legislation contained provisions for the creation of a National Commission to investigate the use, misuse, and abuse of psychoactive substances. Subsequently, in March 1971, the National Commission on Marijuana and Drug Abuse became a functioning entity fulfilling the mandate of that law.

Congressional Mandate

The Commission's charge from Congress was broad. In essence, Congress directed that this group conduct a comprehensive inquiry into the causes of drug abuse. Drug abuse was not limited to marijuana use. Additionally, the Commission was mandated to explore the relative significance of these factors. Further, this legislation specifically required that the Commission devote a major portion of its energy to an investigation into certain aspects of the drug cannabis (marijuana). In this regard, the congressional mandate was more specific. The legislation read, "The Commission shall conduct a study of marijuana including but not limited to the following areas: a) the extent of use of marijuana in the United States to include its various sources, the number of users, the number of arrests, number of convictions, amount of marijuana seized, type of user, nature of use; b) an evaluation of the efficacy of existing marijuana laws; c) a study of the pharmacology of marijuana and its immediate and long-term effects, both psychological and physiological; d) relationship of marijuana use to aggressive behaviour and crime; e) the relationship between marijuana and the use of other drugs; and f) the international control of marijuana "1/.

In addition, Congress specified the nature of the composition of the Commission itself. Specifically, it required that two members from the Senate and two from the House be appointed to this task force; one from each of the political parties; and that nine members be appointed by the President of the United States from the civilian population. These members were duly chosen by their respective bodies and non-governmental members were selected by the domestic advisers to the President. A list of the Commissioners and staff is found in Appendix I of this report.

The last legislative mandate to the Commission was with regard to the preparation of reports to the Congress and the President. This directive is summarized in the following quotation. "Within one year

1/ Public Law 91-513, 91st Congress, HR18583, 27 October 1970.

after the date on which funds first become available to carry out this section, the Commission shall submit to the President and the Congress a comprehensive report on its study and investigation under this subsection which shall include its recommendations and such proposals for legislation and administrative action as may be necessary to carry out its recommendations." Throughout its lifetime, the Commission explicitly followed these mandates.

From its inception, the Commission was never given legislative power, rather its function was to study the complex issues involved in drug use and related social responses. By law, the Commission was required to first examine and report on the marijuana issue. Some have argued that this placed the cart before the horse, and that we should have focussed first on the wider social issue of drug abuse, and then marijuana's impact on society within that context.

In retrospect, it seems that by separating the marijuana controversy from the other drug-related issues, the Commission was better able to analyse the unique position marijuana occupied in American society at that time. Given this broad dichotomy of activity, marijuana the first year and drug abuse the second year, the Commission set about to establish priorities for its prescribed two-year existence.

Early Commission Activities

The formal activities of the group began on 22 March 1971 when a \$250,000.00 appropriation was made available. With this, the legislated time clock began which required that a report on marijuana, with legislative recommendations, be submitted to the President and the Congress within one year of that date. This was compounded by budgetary distress. The Commission's total appropriation bill was incorporated in the Health, Education and Welfare Bill which did not clear Congress and the Office of Management and Budget until August 1971. These early fiscal restraints effectively 1) delayed early and adequate staff recruitment; 2) precluded the funding of a spectrum of new research projects, particularly in the medical area; and 3) severely limited the time-frame to four months for letting contracts, collecting data, and reporting on all research projects. The above necessitated an operational strategy which heavily relied upon ongoing research

activities and data from co-operating Government and private agencies. Additionally, staff research projects, contracted studies and papers by established experts in the field were compiled.

First Year - Marijuana Studies

The range of studies reviewed included complex endeavours such as, "The Study of Ganja Use in Jamaica" by the Research Institute for the Study of Man, and review monographs by accepted authorities. The majority of data in the biomedical areas was supplied by the National Institute of Mental Health and the Food and Drug Administration sponsored investigators. In reality, the focus of Commission sponsored projects was in the socio-legal areas.

In order to evaluate the efficacy of existing law, a series of projects was designed to ascertain opinion and behaviour within the criminal justice system and non-legal institutions, e.g., medical, clerical, business, and public opinion. Included were analyses of marijuana arrests (federal and local), opinion surveys of prosecuting attorneys, judges, probation officers, and court clinicians.

During the first year of the Commission's activity, two other research endeavours were undertaken. The first was a national survey of opinions, attitudes and beliefs of the people of the United States with regard to marijuana, and the second was a clinical investigation which allowed free access to marijuana in a controlled setting by selected male subjects. Both of these will be reported on in more detail later.

Public and closed hearings were another essential activity. Through formal and informal hearings the Commission sought to hear and interact with persons from all walks of life. Literally thousands of pages of transcript were collected from these activities which occurred in all geographic regions of the country.

Second Year - Drug Abuse Studies

Many of the above activities were repeated during the Commission's second year when the focus was on drug abuse in general. Specifically, a second opinion survey was conducted, a full range of formal and informal hearings were conducted, and scores of research projects were

commissioned. Tangible products of these experiences were the first and second Commission reports entitled: "Marijuana, A Signal of Misunderstanding" and "Drug Use in America: Problem in Perspective". Supporting these Commission reports were two volumes of technical papers for the first and five volumes of technical papers for the second report.

At the commencement of the Commission activities, it became clear that the marijuana issue was indeed a "signal of misunderstanding". Two disparate statements typify this controversy. Former President Nixon in a news conference at San Clemente, California, in May 1971 stated that he would never legalize marijuana despite the recommendations of the Commission which was at that time just beginning. On the other hand, Norman Zinberg, a research psychiatrist at Harvard, stated at a final Commission hearing that the members were biased and had made up their minds from the outset as to what their attitudes would be with regard to social control of marijuana. The above cited positions were exemplar of the public debate regarding marijuana in 1971. In order to clarify this polarized and political phenomenon, a national survey of beliefs, attitudes and experiences with marijuana was undertaken.

Public Opinion Research

The survey studied a stratified random sample of U.S. households in which personal interviews with an adult and youth were conducted. Of all adults, 15 per cent reported that they had ever used marijuana, while 5 per cent stated that they were currently using the drug. Among the youth (12-17 years old), 14 per cent had ever used while 6 per cent reported current use. Interestingly, proportions of users increased during the late adolescent years to 27 per cent (16-17 years old), and peaked during the young adult years to 39 per cent (18-25 years old). There was a steady decline in the number of users with advancing age (19 per cent, 26-35 years; 9 per cent, 36-49 years; 6 per cent, over 50 years). It is noteworthy that both ends in the spectrum age-wise report the same percentage of use: that is, 6 per cent.

Although trends were noted from the other factors studied (sex, marital status, race, income, etc.), the most striking variation in proportion to marijuana users depended upon age. At the time of the

interview, slightly less than half of those who ever used marijuana reported no longer using the substance. They reportedly had found it a meaningless experience. The proportions of current adult users followed the same age distribution as those who ever used cannabis.

Typology of Marijuana Users

From the survey data, it became apparent that all marijuana users were not the same, i.e., there were several distinct patterns of use delineated. Among youths and adults, one half or more of those who had ever used marijuana had discontinued it or were currently using it episodically at a rate of once a month or less. These were designated experimental users. About 40 per cent of the youths and adults were intermittent users, i.e., they did not use the drug more than once per week. The remaining 10 per cent consisted of moderate and heavy users, i.e., moderate users several times per week to once a day (6 per cent youths, 5 per cent adults); heavy users, those using the drug more than once daily (4 per cent youths, 2 per cent adults).

The American Marijuana User

The survey demonstrated that contemporary marijuana use was pervasive, involving all segments of the United States population. It was extrapolated that 24 million Americans over age eleven had used marijuana at least once in 1971. Additionally, marijuana use did not appear to vary significantly by race. With respect to religious affiliation, Jews and Catholics appeared to be slightly over-represented as compared to Protestants. Although males predominated among adult users (2 to 1), the sex differential appeared to be diminishing among youthful users. It was also found that users tend to be represented more frequently among clerical and professional workers in the higher socio-economic categories. Use of marijuana tended to increase with the level of formal education attained. At the same time, adult use of the drug was not confined to students. Interestingly, 75 per cent of the 18-25 year-old users were not students. Non-student users were found to span social class income level and occupational classifications. This survey data was confirmed by testimony from individuals during hearings before the Commission. During these sessions, surgeons, construction workers, air traffic controllers, and bus drivers spoke of their experience with cannabis.

As the above description suggests, marijuana use and the marijuana users do not fall into a simple and distinct typology. Although it is possible to sketch profiles of various marijuana-using populations according to frequency, intensity and duration of use, no valid stereotype of the "marijuana user" can be drawn.

By far the largest group of marijuana users were the experimenters. Experimentation with marijuana was motivated primarily by curiosity and a desire to share a social experience. Usage here was extremely infrequent and non-persistent. This group had a rather conventional life style.

The intermittent users generally continued to use marijuana because of its socializing and recreational properties. They are more inclined to seek and emphasize the social rather than the psychopharmacological effects of the drug.

New Clinical Marijuana Study

In contrast, although the moderate users tend to share many characteristics with intermittent users, they appeared to place more emphasis on the psychopharmacological effects of the drug. The heavy users seem to need the drug experience more often. Their initial and continued use is motivated not only by curiosity and socialization, but also a desire for "kicks", expansion of awareness, understanding, and relief of anxiety or boredom. Generally, these persons use cannabis more than once daily, and exhibit unconventional life styles, values and attitudes. Hitherto, American research had largely focussed on the large majority of individuals categorized as experimental and intermittent users. In order to gain unavailable information about moderate and heavy users, the Commission sponsored the Boston Free Access Study. This study permitted observation of a group of moderate and heavy cannabis smokers while they used the drug during a 21-day period of free access. They were superior intellectually; had an average age of 23; completed on the average two and one-half years of college; had erratic job histories; represented all socio-economic levels; frequently had family histories of broken homes, alcoholism and drug abuse; and had widespread use of hallucinogens and amphetamines. In contrast to other groups, heavy users almost uniformly reported that marijuana smoking produced relaxation, alteration of perceptions, increased

sense of well-being, and decreased hostility. The heavy users appeared to demonstrate a moderate psychological dependence on the cannabis experience, i.e., it is a pivotal social activity around which conversation, other personal interactions and much of the users' lives revolve. Smoking was the focal activity around which activity groups formed. Yet, these persons were more inclined to seek the psychopharmacologic effects rather than the socializing effects, which was in direct contrast to those using less frequently. Heavy users tended to be more withdrawn and interacted less with each other regardless of the state of intoxication. They also tended to accommodate themselves better to the effects of intoxication on social interaction which may represent tolerance. During the period of the study, the subjects maintained a high level of interest in participation in a variety of personal, athletic, and aesthetic endeavours. Under the study's confined conditions, participants tended to smoke more than they did on the outside. The intermittent users who averaged three cigarettes per day (range 1/2 - 6 per day); the moderate and heavy users averaged six and one-half cigarettes per day (range 3 1/2 - 8 per day). The marijuana used contained about 20 mg of Δ^9 THC per cigarette by laboratory assay.

Significantly, several of the heavy users consumed without any significant effects (physiological, psychological or behavioural) a maximum daily dose of cannabis approximately ten to twenty times that obtained by the average American marijuana user.

The apparent rapid build-up of tolerance to the hallucinogenic effects of the drug permitted this combination of atypical heavy use pattern and unusually large doses of marijuana. It should be noted that in the non-tolerant individual, i.e., the typical American cannabis user, this pattern of consumption would likely result in psychosis or hallucinations. The results of this study also demonstrated tolerance to the cardiovascular effect (pulse rate) and behavioural effects (time estimation, recent memory, psychomotor co-ordination). Also noteworthy is the tendency to increase daily intake by shortening the interval between marijuana cigarettes rather than increasing the number of cigarettes smoked each session. This suggests tolerance to the desired psychopharmacological effect of the drug. Aside from the

important clinical data learned from this study, it also represented an important conceptual breakthrough in the type of applied human marijuana research permitted in the United States.

One of the critical tasks facing the Commission concerned the effects of cannabis on public health and welfare. In order to address itself to the perceived public fears about the effects of cannabis, several items on public beliefs about the drug were included in the first national survey of public opinion. Marijuana, it was found, was perceived by the United States population as a harmful substance to persons using it, even in small amounts. Heroin and LSD were clearly regarded as the most harmful of all the psychoactive substances. Marijuana was listed third with cocaine, morphine, and amphetamines following closely. Barbiturates, tobacco and alcohol in that order followed in perceived harmfulness.

From this same survey, 65 per cent of adults and 48 per cent of youths believed that marijuana was addictive. Interestingly, marijuana was rated as less addictive than alcohol and tobacco by both youths and adults.

The most widely held belief about marijuana by American adults and youths was that it "makes people want to try stronger things like heroin". Seventy per cent of the adults and 56 per cent of the youths surveyed held that view. Other widely held beliefs were that marijuana was morally offensive, that it makes people lose their desire to work, and that many crimes were committed by persons under its influence. Others believed that some people died from having used it, and that it was often promoted by persons who were enemies of the United States. The survey further revealed that more than 50 per cent of all adults held these negative perceptions. In contrast, the positive beliefs, for example, increased enjoyment of art, sex, tension relief, and enhanced sociability, were not widely held by either youths or adults.

Examination of other survey data suggested that these expressions are reflections of a generalized attitude toward marijuana and the user among most adults and to a lesser extent, youths. An example of this was the finding that only one fourth of the youths and adults

surveyed believed that marijuana users lead a normal life. The majority of adults have a mental picture of the marijuana user as someone bored with life, not caring about the world around him, not showing good judgement in selecting friends, doing poorly in school, and being emotionally unstable and lazy. On the other hand, adults who themselves use marijuana have a much more positive belief system about the user.

Marijuana and Public Health

From what is now known about the effects of marijuana, its use at the present level does not constitute a major threat to public health. The highest-risk group, the small per cent classified as heavy users do, however, present findings of impaired psychological function and behavioural change that cannot be ignored. They also are a source of social contagion since they usually urge their friends and associates to use the drug.

No single human fatality in the United States is known to have resulted solely from ingestion of marijuana. No evidence of chromosome damage or teratogenic or mutagenic effects was found, but the use of marijuana (like that of many other drugs) is not advisable during pregnancy. The immediate effects of marijuana intoxication on the individual's organs or bodily functions are of little significance from a public health point of view, and no objective evidence of specific brain tissue pathology has been documented, contrasting sharply with the well-established brain damage of chronic alcoholism.

We have some evidence to suggest that long-term heavy use of cannabis may be associated with "amotivational syndrome". Although the United States does not have a large number of persons who exhibit this behavioural syndrome, the potential is there. Chronic heavy use of marijuana may jeopardize the social and economic adjustment of the adolescent.

Although heavy long-term use of marijuana may result in psychological dependence, marijuana does not have an addiction potential. In other words, cannabis does not lead to physical dependence as do narcotics such as heroin.

No evidence exists that marijuana causes or leads to the use of other drugs. There is, however, a correlation between use of marijuana and use of other drugs; persons who use marijuana are more likely to be influenced by their peer group and social environment to use (usually to experiment with) other drugs. Marijuana itself does not dictate whether other drugs will be used or the rate of progression or type of drug, if such escalation does occur.

Considering the current patterns of marijuana use in the United States, the vast majority of persons who use the drug either experimentally or intermittently do not require treatment and/or rehabilitation. Rather, they need realistic drug education regarding the potential consequences of use. Educational courses in this area must be made more effective, and emphasis should be placed on prevention.

Social Responses to Marijuana Use

A review of drug legislation in the United States, at both the federal and state levels, reveals that early legislation dealing with the social control of marijuana was strongly influenced by previously adopted policy toward the narcotic drugs. This was forcibly implemented during the past two decades when both narcotic and marijuana arrests were treated as felonies and punished by long terms of imprisonment. Nevertheless, there was little public reaction to this reality until the mid-1960's when state arrests for possession of marijuana rose 1,000 per cent. Among those arrested were the children of prominent public officials and many members of the dominant social class. This, of course, was due to the sudden increase in popularity of cannabis as a "recreational" psychoactive drug.

The general enforcement pattern involved in a marijuana arrest is a spontaneous one. Most arrests occur outdoors, in cars, and in the course of other police activity. This leads to the heavy concentration of arrests among white young males without prior records, who possessed only small amounts of marijuana for indiscreet use in public. A high percentage of cases (94 per cent) after arrest were disposed of by dismissal or informal diversion. This attests to the widespread ambivalence among law enforcement personnel about the appropriateness and efficacy of existing law. Other social institutions recognize

that the control of marijuana is only partially a law enforcement problem. The majority of American legal and non-legal opinion-makers were uniformly against incarceration of adults or youths for possession, however, they felt that the drug should not be made available at least for the time being.

A substantial amount of confusion underlies public opinion regarding the control of marijuana in the United States. There is an awareness of the legal consequences of use. Overshadowing this is a confusion and ambivalence about an appropriate system of control. The public is unenthusiastic about labelling the marijuana user a criminal, but reluctant to relinquish all formal legal controls.

Formulating a National Marijuana Policy

The Commission's real agony began as it attempted to formulate a proposed national policy regarding marijuana use and control. In part, this dealt with the tension existing in American society between individual liberties and the need for reasonable societal restraints. Underlying the Commission's social policy recommendations was the belief that the state is obliged to justify restraints on individual behaviour.

The Commission identified four alternative socio-legal policies: approval, elimination, discouragement and neutrality towards use. From the outset, the Commissioners believed that American society should not approve or encourage the use of any psychoactive drug. They concluded that the elimination policy was unachievable and unwarranted. This dissonance between the options of neutrality and discouragement involved the judgement whether society should dissuade persons from using marijuana or benignly defer to individual judgement. The factors which led the Commissioners to opt for the discouragement policy involved beliefs about the dynamics of social change, and the limitation of our current knowledge.

Throughout the Commission's deliberations, there was a recurring awareness of the possibility that marijuana use may be a fad which, if not institutionalized, would recede substantially in time. The Commissioners were concerned about the effects of cannabis on the heavy and very heavy users. Although these categories of users are presumably

small, the group felt that institutionalization of the drug would greatly increase these numbers. Additionally, it was believed that the general value system of contemporary American society was also in a state of flux. In a sense, the use of marijuana was seen as a rejection of some American values. Further, a substantial majority of the American public (64 per cent) opposed the use of marijuana by themselves or their fellow citizens. For these reasons, the Commission recommended to the public and its policy-makers a social control policy which sought to discourage marijuana use. In addition to the discouragement of use recommendation, the group also strongly recommended that every effort be made to prevent heavy and very heavy use of the drug.

From this, the partial prohibition approach was recommended which symbolized societal discouragement, while de-emphasizing marijuana as an emotional issue. This approach concentrated on reducing irresponsible use and its consequences. This would also remove the criminal stigma and threat from a widespread behaviour (possession for personal use), and would allow the law enforcement community to focus on drug trafficking and other relevant issues. Further, this policy would maximize the flexibility of future public response as new knowledge became available. The hallmark of this policy was the recommendation for decriminalization of possession of small quantities of marijuana for private personal use. Professor Farnsworth, Vice-Chairman of the Commission, stated that these recommendations fulfill the ultimate objectives of the Commission to de-mythologize, de-symbolize, and de-emphasize marijuana as a critical problem in contemporary America. A summary of the recommendations made by the Commission with regard to the use and control of marijuana is included in Appendix II at the end of this report.

National Response to the Marijuana Recommendations

As might be anticipated, the reaction to the proposed marijuana policy was immediate and varied. It is instructive to note that many spoke to their personal and symbolic biases rather than to substantive issues contained in the recommendations. On the one hand, critics argued that this would be the first step toward legalization of the drug in the United States, while on the other hand, others equally protested

the retention of criminal sanctions for possession of more than one ounce of marijuana, for planting, and cultivating the drug as being infringements of civil rights. Another point of criticism was that the Commission had euphemistically presented the drug marijuana as a "mild intoxicant, and that its usage cause little risk to the individual"^{2/}.

Suffice it to say, the Commission report clearly states several concerns with regard to the use of marijuana. Among them is the effect of the drug on individuals who are very sensitive to its psychoactive effects. More than three years ago this author wrote in the First Commission Report, "Any psychoactive drug is potentially harmful to the individual, depending on the intensity, frequency and duration of use. Marijuana is no exception "^{3/}.

It is with some satisfaction that former colleagues on the Commission look back and observe how the recommendations of the Commission have been implemented by various state legislatures. Several of the states have enacted laws which embody the basic concepts of decriminalization of possession of small amounts of marijuana for private use. In mid-1975, California became the most recent state to enact this type of legislation.

The Second Year - Drug Abuse

As already mentioned, the second year's activities were not as focussed by mandate as were those of the first year. A strategy decision made at the very beginning of the Commission's activities substantively affected the group's work during its second and final year. This refers to the decision to include alcohol as one of the drugs of abuse into which the Commission would make systematic inquiry. On the surface, this might seem like a straightforward decision given the realities of 1975. In the spring of 1971, however, there was strong feeling about not including alcohol among the "drug abuse substances". It was argued that alcohol should not be included among the psychoactive

^{2/} Nahas, G. and Greenwood, A., "A Critique of the First Report of the National Commission on Marijuana and Drug Abuse", Psychiatric Annals, April 1973, Volume 3, No. 4, p. 106.

^{3/} Marijuana: A Signal of Misunderstanding. Government Printing Office, Washington, D.C., March 1972, p. 65.

drugs abused in the United States as it was a "beverage" - much to the amazement of several members of the group. Given that essential decision, much of the activities of the second year indeed did focus on the issue of alcohol abuse in the United States. It is now a historical fact that the Commission in its final report to the Congress and the President unequivocally stated that alcohol was the number one drug abuse problem in the United States at that time.

In addition to conducting another national survey of public opinion, beliefs, attitudes and practices, the Commission also sponsored sources of technical papers covering many areas. Additionally, the Commission members also had opportunity to travel to thirty-six countries on six continents to gain an international perspective on drug abuse problems. Almost invariably, all the countries visited have a drug abuse problem of one form or another. World-wide, most concern was expressed for the developing problems with alcohol misuse.

Defining the Issues

One of the most important tasks facing the Commission during its final year of activity was that of separating and clarifying important policy issues regarding drug misuse. First of all, the terms employed in this field have been used to confuse, to argue symbolically, and to promote one's biased theoretical point of view. The term drug abuse, for example, was found to communicate nothing specifically and everything symbolically.

Although American drug policy had heretofore been based on the fundamental notion of eliminating non-medical drug use, the Commission could find little, if anything, to pragmatically achieve that goal. Rather, this society, by and large, has deferred the risks inherent in drug using behaviour to individual judgement.

The Drug Abuse Industrial Complex

Over the years, as the number of "drug abusers" increased, many Americans opted to control this apparent epidemic of higher risk behaviour by increasing numbers of stringent law enforcement procedures. Underlying this policy option was the premise that if information about risks and moral persuasion were not successful in preventing

increased drug misuse, then certainly the threat of criminal sanction would do so. Unfortunately, real experience did not support this hypothesis. Since drug use is a behaviour which usually occurs in private, criminal sanction usually had little impact upon it. These so-called victimless crimes (possession offences) were no longer uniformly dealt with through the criminal justice system. More and more diversion programmes are being utilized to "treat" persons making initial contact with the criminal justice system (first arrest for possession). This activity implies that there is an effective treatment for these individuals. From what is currently known, there appears to be no effective, curative programmes for the drug-dependent person. This does not depreciate the fact that many of these individuals are helped significantly by a variety of counselling and other therapeutic procedures. It is imperative that these real limitations be clearly understood by planners who, many times, are desperately looking for quick answers to difficult public issues.

The Commission found that although the United States had developed a truly formidable empire of drug abuse-related activities at both the criminal justice and health care delivery levels, very little planning had gone into the formulation and implementation of these myriad programmes. In terms of dollars, it was found that there was an astronomic increase in federal drug programme obligations from 1969 to 1973. Specifically, in 1969 a total of 66.4 million dollars had been allocated, whereas in 1973, 791.3 million dollars had been allocated for various federal drug programmes. The Commission in no way believed that this policy should be rejected out of hand, but that it should be made more coherent and flexible. The reader is directed to the policy recommendations which were made in the final report with regard to specifics as to how these modifications might be made (Appendix III).

It is instructive to note that since these recommendations were made, the federal government has indeed taken action to make its drug programmes more coherent by establishing National Institutes for drug abuse and alcohol problems, together with a centralized federal agency dealing with drug enforcement issues. At the state level, there has also been an attempt to co-ordinate state drug programme activities centrally and to provide uniform guidance and consultation to individual communities.

Epidemiological Issues

From all the surveys reviewed and conducted by the Commission, it was found that alcohol was the most extensively used drug by both adults and youths. It was found that about 99 million Americans currently use alcohol. Nine million persons are believed to be dependent on that drug. Also, there was minimal increase in the percentage of individuals currently using, or having ever used, marijuana when compared with the results of the first national survey. These data apply to both adults and youths.

The following table is a summary of reported experience by both youths and adults with a variety of psychoactive drugs in the final national survey done in 1972. It must be emphasized that this represents non-medical use of these substances.

Reported Experience with Drug Use by American Youth and Adults^{4/}
(In percentages)*

	Youth (N=880)	Adults (N=2411)
Alcoholic beverages**	24	53
Tobacco, cigarettes**	17	38
Proprietary sedatives, tranquilizers, stimulants***	6	7
Ethical sedatives***	3	4
Ethical tranquilizers***	3	6
Ethical stimulants***	4	5
Marijuana	14	16
LSD, other hallucinogens	4.3	4.6
Glue, other inhalants	6.4	2.1
Cocaine	1.5	3.2
Heroin	.6	1.3

* Figures are not additive, thus they do not total to 100 per cent.

** Within past 7 days.

*** Non-medical use only.

^{4/} Drug Use in America: Problem in Perspective. Government Printing Office, Washington, D.C., March 1973, p. 63.

A review of over two hundred surveys done at junior high schools, high schools and colleges in the United States revealed one critical finding. From these data, one could say with statistical accuracy that the use of tobacco, cigarettes and/or alcohol appeared to set the stage for all other psychoactive drug use. In other words, if a youth did not have experience with either tobacco and/or alcohol, it would be rare indeed to find that person using other psychoactive drugs, whether it be marijuana, amphetamines, barbiturates or the opiates. Policy planners might well consider this finding as preventive programmes are conceptualized and implemented.

Summary

An attempt has been made to highlight in this document some of the Commission's activities during a productive two-year period of time. Throughout its existence, the Commission attempted to present objectively all of the pertinent, current information about psychoactive drug use in the United States. Additionally, every attempt was made to present all of the social policy options which might be considered in formulating a societal response to these complex issues. Repeatedly, the Commission recommended that American society, through its appointed policy-makers, should not rely totally upon public institutions, e.g., the health care delivery system or the criminal justice system, to resolve the thorny issues inherent in this area. Specifically, the Commission recommended that new and meaningful emphasis be placed upon the importance of and activities within those institutions which can potentially, positively affect these problems; namely, the family, the church, and the school. Full mobilization of these vital forces in American society was seen as essential in making significant impact and progress.

In closing its formal activity, the Commission suggested that a similar group be formed within five years to take an objective, systematic look at what had happened and what was happening in these defined areas. In looking toward the future, the Commission expressed hope that a major goal for the United States would be to de-emphasize the drug problem as such and to reintegrate it into the larger framework of human resources policy planning. As precisely mandated by the law which created the Commission, it ceased to exist in May 1973. This carefully limited life-span might serve well as a model for other governmental activities.

APPENDIX I

National Commission on Marijuana and Drug AbuseCommission MembersChairman

Raymond P. Shafer
Former Governor of Pennsylvania

The Honourable
Jacob K. Javits
U.S. Senate

Vice-Chairman

Dana Lyda Farnsworth, M.D.
Professor Emeritus
Harvard School of Medicine

The Honourable
Harold E. Hughes
U.S. Senate

Henry Brill, M.D.
Director
Pilgrim State Hospital

The Honourable
Tim Lee Carter
House of Representatives

John A. Howard, Ph.D.
President
Rockford College

The Honourable
Paul G. Rogers
House of Representatives

Charles O. Galvin
Dean
Southern Methodist University

Maurice H. Seevers, M.D.
Professor of the Department of
Pharmacology
University of Michigan

J. Thomas Ungerleider, M.D.
Associate Professor of Psychiatry
U.C.L.A. Neuropsychiatric Institute

Mrs. Joan Ganz Cooney
President
Children's Television Workshop

Mr. Mitchell Ware
Deputy Superintendent of Police
Chicago Police Department

Commission StaffExecutive Director

Michael R. Sonnereich

Deputy Director

Louis P. Bozzetti, M.D.

General Counsel

Anthony J. Roccograndi

Associate DirectorsRalph M. Susman
SociologyMichel D. Silva
Public AffairsAssistant DirectorsRichard J. Bonnie
LegalEmergy F. Bacon
EducationLeonore R. Kupperstein
CriminologyJack D. Blaine, M.D.
MedicalDelores F. Mack, Ph.D.
PsychologyProgramme ManagersMaryann L. Urban
Government RegulationsSol J. Silverman
Social SciencesAndrea Maharam Corcoran
Law EnforcementResearch AssistantsSuzanne Baumgartner
Glenn Gilman
John Helm
Paulette Hodges
Roberta Hollander
Peter J. Jessen
Evelyn Miller
Cynthia Rose
Carol SimonsAdministrative Officer

Sally M. Boyd

Executive Secretary

Mary K. Ryan

Executive Assistant

Etnel McIntosh

Special Assistant

Basil M. Johnson

Support Staff

Cynthia Freeman
Judith Herbert
Christine Jones
Maryann M. Kowalczyk
Theresa Lewis
Sharon Payne
Mary Povich
Cornelia Reister
Carlton Thompson
Deloris West

Youth Consultants

Kathryn E. Aasen
John D. Arterberry
Bren L. Buckley
Robert Donfeld
Ann Frame
Eric A. Goldstein
Terry J. Houle
Milton J. Nichols
Michael S. Pauley
Andrew D. Pike
Ellen B. Rouse
Terri J. Siegel
Richard L. Taylor
Sarah C. Tefft
Patricia A. Wallace
Dianne L. Williams

Student Researchers

Samuel H. Bayless
Theodore M. Becker
Karen Bonnie
Richard D'Amico
Linda Dubuclet
John T. Golden
James Kimble
William King
Daniel Lipman
Gerald F. Murray
Joel S. Ostrow
Stephen H. Pugh
Michael W. Russell
William Sharek
Kenneth S. Starkey
Michael Stein
Michael J. Valentine

APPENDIX II

Recommendations - First Report

The Commission recommends the following changes in federal law:

- Possession of marijuana for personal use would no longer be an offence, but marijuana possessed in public would remain contraband subject to summary seizure and forfeiture.
- Casual distribution of small amounts of marijuana for no remuneration, or insignificant remuneration not involving profit, would no longer be an offence.

Federal law should be supplemented to provide:

- A plea for marijuana intoxication shall not be a defence to any criminal act committed under its influence, nor shall proof of such intoxication constitute a negation of specific intent.

The Commission recommends the following uniform statutory scheme for marijuana at the state level:

- Cultivation, sale or distribution for profit and possession with intent to sell would remain felonies (although we do recommend uniform penalties).
- Possession in private of marijuana for personal use would no longer be an offence.
- Distribution in private of small amounts of marijuana for no remuneration, or insignificant remuneration not involving a profit, would no longer be an offence.
- Possession in public of one ounce or under of marijuana would not be an offence, but the marijuana would be contraband subject to summary seizure and forfeiture.
- Possession in public of more than one ounce of marijuana would be a criminal offence punishable by a fine of \$100.
- Distribution in public of small amounts of marijuana for no remuneration, or insignificant remuneration not involving a profit, would be a criminal offence punishable by a fine of \$100.

- Public use of marijuana would be a criminal offence punishable by a fine of \$100.
- Disorderly conduct associated with public use of or intoxication by marijuana would be a misdemeanour punishable by up to 60 days in jail, a fine or \$100, or both.
- Operating a dangerous vehicle or instrument while under the influence of marijuana would be a misdemeanour punishable by up to one year in jail, a fine of up to \$1,000, or both, and suspension of a permit to operate such a vehicle or instrument for up to 180 days.

APPENDIX III

Recommendations - Final Report

Part I: PUBLIC INSTITUTIONS

Government Organization

A. Federal

1. Congress should create a Single Federal Agency similar in its legal and political status to the Atomic Energy Commission. The agency, which might be called the Controlled Substance Administration, would establish, administer and co-ordinate all drug policy at the federal level and would be the principal, if not sole, point of contact with the state drug programmes. The Single Agency would remain separate from all other federal departments and agencies and would be responsible for its own organization and fiscal management.
2. The Single Agency should have the authority and capability to:
 - Distribute and monitor grants to states for drug dependence treatment, rehabilitation, prevention, education, and law enforcement programmes.
 - Co-ordinate all substance-related programmes which remain external to the agency itself, such as those of the Department of Defence and the Bureau of Prisons.
 - Maintain and monitor an ongoing collection of data necessary for present and prospective policy planning.
 - Develop and implement a general research plan, including evaluation of federally funded drug programmes.
3. In taking on these tasks, the Single Agency would absorb the functions concerning drug programmes now performed by all the various federal agencies.
4. To avoid institutionalizing the drug "problem", the concept and accomplishments of the Single Agency should be re-examined four years after its creation; and the agency itself, by law,

should disband within five years, its surviving components being reassigned to the agencies or departments from which they came (or into other more appropriate), and integrated into the larger social concerns of those organizations.

B. State

Each state should establish a unified drug agency on the same model as that proposed for the Federal Government. The Single State Agency should be equipped to provide information about programmes and drug use patterns, to assume joint responsibility for evaluating federally funded programmes, and to evaluate and direct the state's own funded programmes.

C. Community

Each community with a significant drug use problem should create a co-ordinating council to ensure communication and concert of action between the various drug-related functions in the community.

Legal Controls

A. International

A series of technical recommendations includes provisions for effective extradition procedures, exchanges of information between countries, changes in the Single Convention and the Psychotropic Convention, and recognition of the special needs and rights of individual nations.

B. Federal

1. The status of cocaine should be discussed at all national levels, with the American Medical Association conducting a survey to determine if the use of cocaine is essential in medical practice.
2. At present none of the barbiturates should be placed in Schedule II of the Federal Controlled Substance Act, but instead the AMA should design and furnish to physicians guidelines on the prescribing of barbiturates and actively encourage state medical societies and individual practitioners to respect these guidelines.
3. Methaqualone should be placed in Schedule II along with the amphetamines.

4. The National Institute of Alcohol Abuse and Alcoholism should devote substantial effort to the development of better non-prohibitory means of controlling the availability of alcohol. In particular, society should work through availability controls to structure alcohol use, so that social costs of its use may be minimized rather than maximized.

C. Federal and State

1. The unauthorized possession of any controlled substance except marijuana for personal use should remain a prohibited act. As a matter of statute of enforcement policy, assertion of control over the consumer should not be tied to concepts of criminal accountability but rather to concepts of assistance appropriate in the individual case. The primary purpose of enforcement of the possession laws should be detection and selection of those persons who would benefit by treatment or prevention services.
2. For those drug-dependent persons who are apprehended for consumption-related offences, including possession, one of the following dispositions should be mandatory:
 - a) diversion to a treatment programme in lieu of prosecution;
 - b) diversion to a treatment programme after conviction but before entry of judgement by the court.

Failure by an individual to comply with the conditions of treatment would result in his return to the court for prosecution or sentencing. In that event, he should be subject to punishment by up to one year imprisonment, a fine of up to \$500, or both.

For those non drug-dependent persons who are apprehended for consumption-related offences, including possession, one of the following dispositions should be mandatory:

- a) diversion to a prevention services programme in lieu of prosecution;
- b) diversion to a prevention services programme after conviction but before entry of judgement by the court;

- c) a fine up to \$500; or
- d) probation with appropriate conditions.

Failure by the individual to comply with the conditions of prevention services under alternatives a) or b) would result in his return to the court for prosecution or sentencing. In that event, he should be subject to punishment by up to one year's imprisonment, a fine of up to \$500, or both.

D. State

1. All states should attempt to rationalize the operation of the criminal justice system as a process for identifying drug-dependent persons and for securing their entry into a treatment system. The states should establish, as part of the comprehensive prevention and treatment programme, a separate treatment process which runs parallel to the criminal process and which may be formally or informally substituted for the criminal process.
2. Each state should review its penalty structure for trafficking offences and determine whether the penalties are commensurate with the relative severity of the offences. The Commission endorses the criminal provisions in the 1970 Federal Controlled Substances Act and recommends that the states use them as a model for their own trafficking penalties.

Law Enforcement

A. Federal

1. Federal criminal investigation agencies should concentrate primarily on the top of the illegal drug distribution network: importation, exportation, and large volume foreign and domestic trafficking.
2. The federal regulatory effort should concentrate on preventing diversion of drugs at the manufacturing and wholesale levels, leaving to the states primary responsibility for supervising retail pharmacies and physicians.

3. To deal more effectively with the higher levels of the illegal distribution systems, federal law enforcement agencies must develop long-range strategies. The degree to which an investigation can penetrate the illegal market depends directly on how long it remains under cover before surfacing to make arrests and obtain convictions.
4. Criminal investigation activities at the federal level should not have regional offices, as BNDD and Customs do, but instead deploy strike forces, not tied to any one region, which are able to follow the distribution networks wherever they lead.
5. Federal agencies should give recruitment of qualified drug investigative agents high priority. Screening of recruits should include testing to ensure suitability for this type of enforcement.
6. Federal drug law enforcement personnel should receive more intensive training. Career agents should periodically take refresher courses to keep them abreast of current trends.
7. Federal agencies should encourage skilled criminal investigators to remain in the field, giving them equal promotional opportunities within the investigation area.
8. To minimize corruption and the appearance of corruption, a separate unit should be established to maintain internal security among federal drug law enforcement agencies. This unit should be distinct from all other drug law enforcement activities and report directly to the Attorney General of the United States.
9. All federal law enforcement agencies, especially the Bureau of Narcotics and Dangerous Drugs and the Bureau of Customs, should use uniform reporting forms to the maximum extent possible so that the information can be combined, studied, and shared.
10. The Federal Government should provide state and local agencies with the technical and funding assistance necessary for the development of a national uniform reporting system on drug

arrests and case dispositions which can provide reliable, valid and comparable data.

B. State

1. In order to complement the federal effort, state enforcement should concentrate on the lower levels of both licit and illicit distribution networks. State criminal investigative agencies should focus on middle-level illicit trafficking within the states. State regulatory agencies, to ensure compliance with laws and regulations, should concentrate on inspecting pharmacies, physicians and researchers. Both regulatory and investigatory state agencies should work on the problem of pharmacy drug thefts, developing standards to minimize this serious problem.
2. Every state should systematically review and evaluate the operations of its boards of pharmacy and medicine, to ensure that they are adequately enforcing the provisions of state and federal laws. Professionals who knowingly or repeatedly violate state drug regulations and laws should lose their licences to practice, in addition to being prosecuted under criminal statutes. Each state should also establish an advisory medical body to act as liaison between the state medical society and law enforcement officials, giving advice and assistance on matters within the area of medical expertise.
3. State and local enforcement agencies should actively recruit younger men and women into their drug investigation units, in order to broaden and update the agencies' perspective. Recruits should be carefully screened and receive extensive training. Federal agencies should continue to provide technical assistance.
4. Each state with a substantial trafficking problem should have a separate unit, responsible to the state attorney general, charged with the responsibility of investigating any evidence of corruption in drug law enforcement agencies.

C. Community

1. Local police departments should participate with other community institutions in the development of a preventive services programme. As part of this programme, the departments should formulate precise guidelines for non-arrest dispositions of persons to appropriate prevention or treatment services. Each police department should consider using citations or other formal means of directing persons into the appropriate programmes. Those states which have not already done so, should authorize law enforcement officials or public health officers to make non-criminal referrals of persons under the influence of controlled substances or possessing controlled substances for personal use.
2. Local police should receive appropriate training in dealing with the medical needs of drug-dependent persons, including alcoholics. In particular, guidelines should be developed for diverting such persons to treatment facilities for emergency care and, if necessary, for formal treatment.
3. Local police should act as an early warning system on emerging patterns of drug use in the community, including changes in at-risk populations and non-drug developments which may be relevant to drug-using trends. For example, a constant analysis of drugs on the street can be extremely useful in preparing other community agencies to launch specifically targeted preventive efforts.

Treatment and Rehabilitation

A. Federal Funding, Services, Evaluation and Regulation

1. Through block and formula grants to the states, the Federal Government should have major responsibility for funding treatment and rehabilitation services administered by the states.
2. Except for offenders within federally-operated correctional institutions, the Federal Government should not have direct operating responsibility for providing treatment and rehabilitation services. Services provided to persons entering treatment on a voluntary basis or through involuntary civil commitment proceedings should be provided only at the state level.

3. The Federal Government should sponsor a programme to evaluate existing drug treatment and rehabilitation programmes to see whether they are cost-effective and are designed to deal effectively with their client populations, and establish suitable criteria and objectives. After such an evaluation the Federal Government should establish performance criteria for state drug treatment and rehabilitation programmes.
4. Opiate antagonists, or similar chemical agents, should not be administered involuntarily under any circumstances, either as a method of treatment or as a method of prevention.
5. The Government should continue to prohibit heroin maintenance as a treatment modality.

B. State Treatment Programmes

1. Each state should establish a comprehensive state-wide drug dependence treatment and rehabilitation programme including integrated health, education, information, welfare and treatment services, which should be administered as part of the state's broader health care delivery and human resources development systems. The programme should:
 - a) Provide a full range of treatment and rehabilitation services throughout the state, including emergency, residential, intermediate and out-patient services for drug-dependent persons, persons incapacitated by controlled substances or persons under the influence of controlled substances.
 - b) Include medical, psychological and social service care; vocational and rehabilitation services; job training and career counselling; corrective and preventive guidance; and any other rehabilitative services, including maintenance, designed to aid the person to gain control over or eliminate his dependence on controlled substances and to make him less susceptible to dependence on controlled substances or alcohol in the future.
 - c) Emphasize the development of community-based emergency, intermediate, out-patient and follow-up support services.

- d) Utilize and co-ordinate all appropriate public and private resources, wherever possible utilizing the facilities of and co-ordinating services with community mental health services and general hospitals.
 - e) Allocate services within the state according to an overall plan based on the estimated size and location of the current and potential populations of drug-dependent persons in various communities.
2. The state administrator of such a comprehensive drug dependence treatment programme should have statutory responsibility to:
- a) Establish standards and guidelines for effective drug dependence treatment services provided by public or private agencies participating in the programme.
 - b) Evaluate, on a continuing basis, all public and private treatment services included in the programme, in order to ensure that such services are adequate and effective according to defined objectives and standards.
 - c) Prepare, publish and distribute annually a list of all public facilities and those private facilities to which public agencies are authorized to refer individuals for treatment services.
 - d) Ensure that the courts of each jurisdiction within the state are periodically notified of facilities through which services are available within the jurisdiction and of the types of treatment offered at each facility, thereby ensuring that formal control is not asserted over a person for purposes of treatment when appropriate facilities are not available.
 - e) Ensure that the services offered within each community include drug-free programmes as well as maintenance programmes, thereby ensuring that persons seeking or referred for treatment have the option of participating in a drug-free programme.

3. Each state should review its current statutory mechanism regarding the process by which drug-dependent persons are permitted or compelled to enter treatment. Those states which have not already done so should modify existing legislation to encourage drug-dependent persons to seek treatment voluntarily. In order to maximize the attractiveness of voluntary programmes, formal legal processes should be avoided entirely and absolute confidentiality of the treatment records should be ensured.
4. Whenever a state chooses to exert formal control over a drug-dependent person for purposes of treatment, either through criminal process or an involuntary civil process, treatment services should be administered in accordance with the following standards:
 - a) Each person has a right to receive such individual treatment as will give him a realistic opportunity to overcome his dependence on controlled substances.
 - b) An individual treatment plan, guided by sound medical and clinical judgement and maximizing freedom of choice of the patient, shall be prepared and maintained on a current basis for each person.
 - c) No person should be required to receive chemical treatment or maintenance services without his consent, and in the case of persons under 18 years of age, without the additional consent of his parents or legal guardian.
 - d) Each individualized treatment plan should employ methods which restrict the drug-dependent person's liberty only when less restrictive alternatives would be inconsistent with necessary and effective treatment.
 - e) No person should be required to be a subject for experimental research without his expressed and informed consent.
 - f) All persons should be required, as a condition of participation in a treatment programme, to comply with reasonable conditions, including surveillance techniques such as urinalysis.

5. The state, through legislation or administrative action, should ensure that private and public hospitals do not discriminate in either admission or treatment policy against any person on the grounds of use of or dependence on controlled substances.
6. Every state should have confidentiality-of-treatment laws, modelled after the provision in the draft Uniform Drug Treatment and Rehabilitation Act, currently before the Conference of Commissioners on Uniform State Laws.
7. In connection with these above recommendations, the Commission supports the adoption of the Uniform Drug Dependence Treatment and Rehabilitation Act presently being considered by the National Conference on Uniform State Laws.

Prevention

A. General

1. Drug use prevention strategy, rather than concentrating resources and efforts in persuading or "educating" people not to use drugs, should emphasize other means of obtaining what users seek from drugs: means that are better for the user and for society. The aim of prevention policy should be to foster the conditions of fulfillment and instill the necessary skills for coping with the problems of living, particularly the life concerns of adolescents. Information about drugs and the disadvantages of their use should be incorporated into more general programmes stressing benefits with which drug consumption is largely inconsistent.
2. Drug dependence prevention services should include educational and informational guidance for all segments of the population; job training and career counselling; medical, psychiatric, psychological and social services; family counselling and recreational services.
3. Government should not interfere with private efforts to analyse the quality and quantity of drugs anonymously submitted by street users and to publicize the results through appropriate media, like rock stations and the underground press.

4. The Government should not support, sponsor or operate programmes which compel persons, directly or indirectly, to undergo chemical surveillance such as urinalysis, unless the person is participating in treatment services, is a prospective or actual public employee, is charged with a crime or is a member of the military.

B. Federal

1. The Federal Government should fund prevention services through block and formula grants to the states, and sponsor basic research in the prevention area. The Federal Government should also retain discretionary funds for direct assistance to innovative and experimental programmes, as well as to programmes in communities receiving insufficient aid from the state.
2. Federal agencies should immediately review the situation of manpower resources in the area of drug treatment and prevention, to determine exactly the size and shape of the country's capacity to respond. The review should cover training resources, as well as number and kinds of skilled personnel already available.

C. State

1. The primary responsibility for designing a prevention strategy and operating appropriate programmes should reside at the state and local levels. Each state should establish a comprehensive state-wide drug dependence prevention programme, including a full range of prevention services attuned to the needs of local communities and designed to reduce the likelihood that an individual or class of individuals will become drug dependent.

Part II: PRIVATE INSTITUTIONS

Health Professions

1. Schools of medicine, nursing and public health should include in their curricula a block of instruction dealing with the social and medical aspects of drug use. This instruction should be so designed that health professionals are adequately informed of the problems and possibilities of treating drug use and dependence and understand as well the wider social implications of both licit and illicit drug use.
2. The medical profession should prepare criteria for use of all psychoactive drugs in medical practice. These guidelines should stress restraint in use of such drugs, emphasizing that they are not a treatment of first resort and that when prescribed, they should be given in the smallest dosage units and doses possible. Medical societies should see that the guidelines are widely distributed among health professionals and, in simplified form, made available to patients themselves. Professional organizations should also conduct continuing education courses in the uses and dangers of psychoactive substances.
3. Both doctors and pharmacists should expressly warn patients of the risks of dependence, overdose, and use in conjunction with similar drugs such as alcohol.

Pharmaceutical Industry

A. Manufacturers

1. Manufacturers of psychoactive substances should undertake a major campaign to educate both health professionals and the public about the appropriate rôle of these drugs in treatment of conditions of anxiety, tension and depression. Information and advertising aimed at physicians should emphasize the need for restraint in use of these drugs, particularly the more powerful ones; point out alternative therapies; and plainly disclose harmful side effects, risks in prolonged use, and dangers in combining use with that of other drugs,

including alcohol. In non-technical language, a series of public service advertisements should carry the same message to the lay public.

2. Drug companies should end the practice of sending doctors unsolicited samples of psychoactive drugs.
3. Manufacturers should contribute a significant part of their considerable research capacity to exploring the technical side of the drug use problem: the nature of drug dependence, the development of less harmful substitutes for those substances most often associated with disruptive use patterns, and the search for "anti-drugs"-chemical correctives to dependent and chronic use of psychoactive substances. In particular, the industry should continue to pool its knowledge and resources in the search for effective narcotic antagonists.
4. Advertising of proprietary mood-altering drugs should omit suggestions that the substance can result in pleasurable mood alteration or deal with malaise caused by stress or anxiety. Proprietary drug producers should develop clearly defined standards which reflect correct use of home-medications and establish a procedure for ensuring industry-wide compliance with these standards. At a minimum, the procedure should contain the following elements:
 - 1) An independent mechanism to review any advertisement for compliance with the advertising standards,
 - 2) Opportunity for any member of the public to submit an advertisement for review, and
 - 3) Specific sanctions to be imposed on advertisers who do not abide by decisions of the review board.

B. Retail Pharmacies

1. At the retail level, all pharmacists must verify the identity of persons seeking prescription psychoactive drugs. They must also vigorously enforce the regulations which apply to over-the-counter cough preparations containing codeine.

2. Steps should be taken to reinvolve the community pharmacists in the consumption decision, particularly with respect to psychoactive substances.

Alcohol Industry

1. The alcohol beverage industry should take the lead in funding research into the nature of disruptive alcohol-using behaviour and the relation between alcohol use and traffic accidents, violent crimes and domestic difficulties.
2. Manufacturers and distributors of alcoholic beverages should educate the public to the fact that irresponsible use of alcohol is the most widespread and destructive drug-use pattern in this nation. Advertising should emphasize moderate, responsible use and point out the dangers of excessive consumption.
3. The industry should reorient its advertising to avoid making alcohol use attractive to populations especially susceptible to irresponsible use, particularly young people.

Legal Profession

1. Bar associations should conduct seminars and courses on handling criminal drug cases. Law schools should develop courses dealing with drug use and behaviour as part of the wider socio-legal problems confronting the legal profession.
2. Lawyers, operating both individually and through bar associations, must point out to the public the need for alternatives to the legal response and the urgency of involving other social institutions in the effort to control drug-using behaviour. By the same token, the bar has an equally important obligation to discourage any violations of the law.

Industry

1. Management and unions, supported by the Department of Labor and Commerce, should co-operatively undertake a comprehensive study of employee drug use and related behaviour.

2. The business community should not reject an applicant solely on the basis of prior drug use or dependence, unless the nature of the business compels doing so. When pre-employment screening is necessary, companies should establish appropriate screening procedures, including physical examination, for job applicants and keep the results confidential.
3. Industry should consider alternatives to termination of employment for employees involved with drugs. Where the nature of the business allows, employees should be referred to company-run or other public and private rehabilitation or counselling programmes.
4. The business community should consider adopting employee programmes patterned after the "troubled employee" or "employee assistance" concept. This programme consists of a management control system based on impaired job performance, determined by minimum company standards. It seeks to determine and treat the underlying causes of poor performance - whatever they may be - rather than limit itself to the standard responses.
5. The fact of treatment and rehabilitation should be confidential to encourage employees to accept counselling and other assistance. No record of the employee's drug problem should be carried in any file which is open to routine inspection. If treatment requires a temporary absence, the company should attempt to keep the employee's job open for him.
6. Insurance benefits for employees should include drug care insurance, similar to that included in most major medical plans for treatment of mental illness.
7. Insurance companies offering health, liability and life insurance must confront the issue of underwriting drug users and drug dependent persons. Companies should not refuse insurance policies solely on the basis of prior or present drug use or enrollment in a drug rehabilitation programme; instead, standards should take into account the type of drug and frequency use.

Colleges and Universities

1. Colleges and universities should make their policies and practices regarding drug use, including alcohol, explicit, unambiguous and readily available to all students.
2. Even those colleges and universities which strongly disapprove of student drug-use behaviour should expand their counselling services, rather than rely upon disciplinary measures alone.
3. Counselling, treatment and rehabilitation programmes on camps should ensure confidentiality to their student clients. Specific rules should be set up indicating to whom confidentiality will be extended and under what circumstances.

Mass Media

1. Since governmental intervention is inappropriate here, the media, on their own initiative, must re-examine the impact of informational messages on youthful interest in psychoactive drugs. They should look not only at advertising but also at anti-drug public service announcements, at programme content, and at news coverage of "drug stories".
2. In conjunction with their self-appraisal, the media should sponsor and support long-term, longitudinal research into effects of various communications on behaviour.

PART THREE

CANADA:

THE COMMISSION OF INQUIRY INTO THE NON-MEDICAL USE OF DRUGS

by

James J. Moore^{*/}

^{*/} Formerly Executive Secretary, Canadian Commission of Inquiry into the Non-Medical Use of Drugs.

At time of the preparation of this publication, Research Expert at UNSDRI.

On 29 May 1969, the Government of Canada established the Commission of Inquiry into the Non-Medical Use of Drugs and on 14 December 1973, the Commission presented its fourth and final report to the Minister of National Health and Welfare. The work programme of the Commission during that period is summarily described in this brief paper, which will particularly focus on the investigative techniques employed and relate the findings of this research to the various conclusions and recommendations.

The Commission was established against a background of mounting concern - general in North America at that time - about the rising incidence of the use of mood-modifying substances. This concern was reflected in the terminology of the order-in-council authorizing the establishment of the Commission noting, in particular:

"... there is growing concern in Canada about the non-medical use of certain drugs and substances, particularly those having sedative, stimulant, tranquillizing or hallucinogenic properties and the effect of such use on the individual and the social implications thereof.

"... within recent years, there has developed also the practice of inhaling of the fumes of certain solvents having an hallucinogenic effect, and resulting in serious physical damage and a number of deaths, such solvents being found in certain household substances."

And elsewhere, the order-in-council noted:

"... notwithstanding these (legislative) measures and the component enforcement thereof by the R.C.M. Police and other enforcement bodies, the incidence of possession and use of these substances for non-medical purposes, has increased and the need for an investigation as to the cause of such increasing use has become imperative."

Five commissioners were appointed and given special powers under Canada's Public Inquiries Act. The names of the commissioners and senior staff personnel appear in Appendix II to this paper.

The Commission's Terms of Reference and their Interpretation

As embodied in its terms of reference, the Commission was given a five-part mandate:

- "1. To marshal from available sources, both in Canada and abroad, data and information comprising the present fund

of knowledge concerning the non-medical use of the drugs and substances referred to above;

- "2. To report on the current state of medical knowledge respecting the effect of the drugs and substances referred to above;
- "3. To inquire into and report on the motivation underlying non-medical drug use;
- "4. To inquire into and report on the social, economic, educational and philosophical factors relating to the use for non-medical purposes of the substances referred to above and in particular on the extent of the phenomenon, the social factors that have led to it, the age groups involved and the problems of communication;
- "5. To inquire into and recommend with respect to the ways or means by which the federal government can act, alone or in its relations with government at other levels in the reduction of the dimensions of the problems involved in such use."

Although these terms of reference were somewhat specific in outlining the task of the Commission, they nevertheless left the determination of the scope of their work to the commissioners themselves. For example, the Commission itself decided that the term "non-medical drug use" should encompass any use of psychotropic substance which was not indicated on generally accepted medical grounds. This, of course, would include such drugs as alcohol and tobacco, although in the context of the late sixties and early seventies these were not accorded primary consideration, except as factors in a climate of widespread drug-taking.

At the same time, the Commission did not feel that its work would be complete unless the medical use of drugs was taken into account, at least to the extent that prescribing practices could have an impact on non-medical use.

Solicitation of Views and Public Hearings

In the early stages of its work, the Commission wrote to more than 750 individuals and organizations in all parts of the country inviting them to submit briefs. Particular attention was paid to federal and provincial government agencies and to welfare and treatment organizations, whose rôles had in the past brought them into contact with one or another aspect of the drug phenomenon.

Another important phase of the Commission's information-gathering programme was that of public hearings, which were held in 27 Canadian cities. The purposes of these hearings was to encourage and enable the widest possible discussion of the issues as perceived by the Commission and, more particularly, by the public itself. A total of 46 days were devoted to these hearings, which included special sessions in 23 Canadian universities and in coffee houses in Montreal, Toronto and Vancouver. Many private hearings were also held, by which process the anonymity of witnesses could be guaranteed if desired. In all, the commissioners travelled some 50,000 miles during the hearings and received more than 600 submissions from organizations and individuals.

In evaluating the utility of these public hearings, the Commission commented in its Interim Report:

"... the Commission has been intensely aware of the fact that it was listening to an unusual social commentary. Opinions and feelings have poured forth in the hearings with great spontaneity, particularly in the more informal settings. The Commission has been deeply impressed, and on several occasions, moved by the testimony which it has heard. It has been struck by the depth of feeling which this phenomenon and the social response to it have aroused. As a result of the initial phase of its inquiry, the Commission is more than ever convinced that the proper response to the non-medical use of psychotropic drugs is a question which must be worked out by the people of Canada, examining it and talking it over together. It goes to the roots of our society and touches the values underlying our whole approach to life. It is not a matter which can be confined to the discreet consultation of experts, although experts obviously have their rôle and a very important rôle."

The Commission's Research Programme

The necessity for a research programme evolved both from the specific requirements of the terms of reference (e.g., to inquire into the extent of the phenomenon, the age-groups involved, the social factors leading to it, etc.), as well as the obvious need to learn more about the most significant aspects of the effects, pharmacological and behavioural, of the various drugs. A number of research projects were conducted by the staff of the Commission; other projects were contracted to institutions and individual experts, whose research programmes had already involved them in related projects of investigation.

Although a list of the 118 individual projects of the Commission appears as Appendix I, some special attention should be directed to particular aspects of the research programme.

Surveys of extent of drug use: In order to meet the requirement for an estimate of the extent of the phenomenon, early in 1970 the group commissioned a national survey of drug use in Canada. This was not intended to be the definitive master survey of drug use in Canada, but since it would be the first national survey of the phenomenon it was considered that it could be related to other existing and on-going regional surveys.

Three populations were sampled in the survey conducted on behalf of the Commission by the Survey Research Centre of York University (Toronto) and the Centre de Sondage de l'Université de Montréal.

These were:

1. High-school students aged 12 to 19 years, enrolled in Grades 7 to 13. More than 1,200 students were interviewed in this survey in homes selected for the National Household Survey described in 3 below.
2. A total of 1,213 students attending colleges and universities in Canada at either the undergraduate or graduate level. The students selected were from 8 large and 12 smaller institutions representing all regions of the country and they were provided with an explanatory letter, a copy of the questionnaire and material for return mailing.
3. Some 2,800 households, in each of which a member was interviewed under a method of selection that ensured an equal opportunity for each individual 12 years of age or older not attending a primary or secondary school.

The information yielded by this survey was not used only to estimate the incidence or prevalence of drug use in Canada, but was also applied to each substance in combination with other surveys conducted in various regions of Canada, providing a practical range of probable use, indicating the relative degree of seriousness in terms of extent.

As one example of the use to which the data yielded by the national surveys was put, the following is the Commission's comment on the likely extent of the use of cannabis in Canada up to 1970:

"Our data indicate that there has been a rapid and very sharp increase in the use of cannabis in Canada within the past five years. According to our surveys, an estimated 79,000 persons had begun using cannabis in 1966 or earlier. By 1970, an estimated 850,000 persons had used it at least once. Projecting to mid-1971 an estimate of between 1,300,000 and 1,500,000 persons who have used cannabis is not unreasonable. Obviously, these estimates do not take into account the number of individuals who have terminated their use of the drug. This will require further analysis. To understand the social significance of these findings, however, we must not overlook the frequency with which the drug has been used by individuals. Our surveys indicate that a significantly large proportion of those who have used cannabis appear to have used it in an experimental fashion - not more than two or three times. Our continuing analysis of the survey research data will assist in estimating the proportion of Canadians whose use of cannabis has gone beyond the experimental stage and might be considered occasional or frequent use."

In the Final Report of the Commission, the national survey data were arrayed alongside other forms of evidence to indicate a likely range of the extent of use of individual substances, although the Commission admitted freely that this form of research is unlikely to yield useful or significant information about the extent or nature of a substance like heroin.

Critical review of the effects of the drugs: While science could not solve many of the problems that surrounded this phenomenon, it was nevertheless recognized that it did have a rôle to play in helping to bring some precision to our understanding of the effects of the drugs. Certainly, in the late sixties and early seventies such an approach seemed essential if only to quell some of the disagreement in the public forum regarding the behavioural effects of the various drugs and also the danger to individual and public health. Consequently, the Commission staff systematically accumulated as much of the scientific literature as seemed relevant to permit a critical review of the effects of the substances. By the time the Final Report had been completed, almost 15,000 articles, books, briefs and other documentary forms had been entered into the Commission's information system, much of it

relating to the behavioural, pharmacological, botanical and chemical action of the substances under investigation. In the preparation of the report on cannabis alone, some 2,600 articles were reviewed by the scientific staff.

The product of this effort appeared initially in the Interim Report, in which a chapter on the drugs and their effects covered all the main substances of abuse. In subsequent reports, in particular the report on cannabis and the Final Report, similar treatment was given to this scientific review process. It has generally been conceded that this was the most thorough modern-day review of the relevant scientific literature on the subject.

Experimental research: In an attempt to fill a gap in the information regarding some current, socially-relevant aspects of cannabis use, the Commission undertook four experimental projects, from which it was hoped information would be obtained on the likelihood of harm resulting from cannabis use in somewhat common social situations.

1. A comparison of Delta-9 THC tetrahydrocannabinol and marijuana effects in humans. The purpose of the project was to throw light on the possibility that Delta-9 THC was, indeed, the principal active constituent in marijuana and hashish. This could in part be determined by testing both marijuana and THC (sprayed on alfalfa) in controlled doses on subjects experienced in the use of marijuana, after which they were submitted to a number of tests to determine the relative effects of the various doses and substances on performance.
2. Effects of marijuana and alcohol on some automobile driving tasks. While the rôle of cannabis in traffic accidents had not been determined in any statistical manner in North America, it was thought useful to conduct some controlled experiments on the effects of marijuana on driving performance at varying dose levels and - as not infrequently occurs in real social situations - in combination with alcohol or compared to alcohol.

3. Effects of marijuana and alcohol on psychomotor tracking performance. Some human and animal data had indicated that cannabis and alcohol, used in combination, might have addictive effects on certain functions, including psychomotor performance. This study, therefore, attempted to obtain some basic information about the effects of cannabis and alcohol, alone or in combination, on tracking performance - i.e., on a psychomotor task involving intermittent or continuous manipulation of an instrument or machine in an effort to follow a stimulus or maintain a given level of output. The effects of cannabis and alcohol on visual perception and several other physiological and psychological variables were also investigated in this study.
4. Effects of marijuana on visual signal detection and glare recovery. The purpose of this experiment was to determine the extent to which a change in directed attention is a consequence of acute marijuana use. This, of course, has particular relevance in the operation of a vehicle and certain other tasks involving the operation of machinery. A second goal of the experiment was to explore the effects of cannabis on the recovery of dim-light visual acuity after bright glare - a phenomenon related to driving a vehicle at night.

In general, all four experimental projects indicated a reduction in performance after the administration of the drug. In the first experiment, no consistent differences in effect could be determined between Delta-9 THC and marijuana; the experiments where alcohol was administered instead of marijuana indicated that performance decrements were higher in the low dosage range than in the same range of marijuana, although these differences seemed to decline as the dosage of marijuana was elevated. Where the two drugs were used in combination, there was a consistent decrease in psychomotor performance, exceeding performance decrements when either of the drugs was administered separately, thus suggesting that their effects can combine.

Other investigations of possible effects of drug use: A number of other issues related to the effects of drugs required investigation outside the conventional pharmacological literature. Some of these included:

- An investigation of the occurrence and characteristics of cannabis-induced psychosis, conducted through a literature survey, a sample survey of physicians treating young persons and site visits to reported cases;
- An analysis of official statistics, including coroners reports, to ascertain the prevalence and nature of drug-induced poisoning and deaths in Canada;
- A survey of Canadian researchers who had administered LSD to subjects, in order to learn approximately how many persons had been involved in the programmes, the doses used and effects, the occurrence of adverse reactions and any follow-up studies that may have resulted;
- A survey of existing literature as well as submissions made by various parties to the Commission, to determine a possible relationship between non-medical drug use and the commission of crime (other than illicit drug use);
- A telephone survey of all psychiatric hospitals in the country to determine the degree to which drug abuse had been a factor in the development of the condition of admitted individuals.

The chemical and botanical aspects of the drugs: Beyond the critical literature review on the effects of the various drugs referred to above, the Commission was interested in learning something of the nature of the substances that were actually in circulation "on the street". A number of projects were designed and implemented to provide this information. Chemical analyses were conducted on seized drugs as well as on samples submitted anonymously by users. Two other more scientifically precise projects investigated the effects of combustion on cannabis and the botanical and agricultural aspects of cannabis.

Sources and distribution of drugs: Since sources of information about the provenance and distribution routes of illicit drugs in Canada had not previously been developed, the Commission set out to systematically supplement its knowledge about this important "market" dynamic.

Through analysis of both scientific and popular literature as well as interviews in numerous parts of the country, an attempt was made to outline the general shape of the phenomenon. Projects included: an analysis of the involvement of organized crime in drug trafficking, both nationally and internationally; the importation, production and marketing of all (licit) psychotropic drugs in Canada; development of a history of the medical use and availability of cannabis in Canada.

Patterns of drug use: The relative novelty of the phenomenon in the early 1970s made it evident that, if its terms of reference were to be met, the Commission would have to systematically collect data and information that would provide insights into not only the numerical dimensions of the problem - as described earlier - but more particularly into the pattern of drug use, the dynamics by which the incidence of the phenomenon increased, the values and motivation of the various groups of users. Several methodological approaches were used in order to probe this important subject area, including the following:

- a major participant observation study of drug users "on the street" in the major cities of Canada;
- a critical review of the international literature on the extent and patterns of the use of amphetamines;
- drug use at rock music festivals;
- a series of interviews with adult cannabis users and a self-reported "log-book" study of drug use patterns by regular cannabis users.

Motivation and causal factors: The Commission's terms of reference specifically required it to explore the motivation underlying the non-medical use of drugs and, by inference, any other causal factors that might exist. Both sociological and psychological perspectives were applied to existing literature on this subject. A special two-day private symposium was sponsored by the Commission in order to solicit opinions regarding the sociological aspects of drug use from a number of internationally recognized sociologists who had already studied the question in some depth.

Law and law enforcement: An analysis of the existing system of legal control of drugs was of paramount importance to the Commission, since this was the system on which major reliance had been placed for nearly 50 years in Canada. Accordingly, 24 research projects were included in the programme for this particular aspect of the inquiry. Although the entire programme is itemized in Appendix I, a few projects are particularly worth noting. An analysis was made, for example, of sentencing attitudes and practices with respect to drug offenders in Canada by means of standard interviews with a sample of trial court judges. Another project examined, over a two-year period, the way in which drug offenders were handled at sequential stages in the criminal justice process from arrest to parole. A project of participant observation with police drug squads was carried out in three cities in order to understand the style of police operation, the problems of drug law enforcement as perceived and understood by the police officers themselves, as well as the interaction between individual police officers and drug users. These and a number of other research projects added materially to the Commission's perception of some of the practical aspects of law and law enforcement with a particular focus on illicit drugs. Finally, as with its investigation into motivational factors in drug use, the Commission sought expert opinion in a private two-day seminar, at which law enforcement officials and criminal law specialists with both national and international recognition participated.

Medical treatment and related services: Since in recent years there has been an obvious and growing shift from reliance on law enforcement for drug abuse to the provision of medical and other services for users, the Commission carried out an analysis on not only existing treatment facilities and capacities in Canada, but also what it termed "innovative services", i.e. services which had come into existence outside the conventional institutional structure for handling public health problems. The programme included a survey of innovative and community treatment services across the country and an analysis of treatment capacity in the various provinces. Again, a seminar was sponsored, with the participation of a number of outstanding specialists, in order to fill gaps in the Commission's knowledge.

Information and education: The rôles of information and education as possible preventive factors in the control of drug use were examined by the Commission research staff, with particular emphasis on the prevailing experience in Canada and abroad, in the field of drug education programmes in school systems.

Mass media: The contention was investigated that the media - including films, literature, broadcast media and popular music - were related in some way to the spread of non-medical drug use. A number of studies were commissioned to mass media specialists to probe the dynamics of communication of information and attitudes about drugs and drug use.

Miscellaneous research: A number of other projects were implemented, chiefly with a view to learning something of the nature of existing policies being pursued both in Canada and abroad. These included, for example, an analysis of policies with regard to research into non-medical drug use; a survey of professional, business, religious and military organizations to determine what policy approaches, if any, were taken towards drug use; co-ordination of information about the legal and scientific aspects of tobacco and alcohol in Canada. Finally, the Commission staff, in the preparation of its later reports, conducted a systematic analysis of the various critiques which had been directed towards the Interim Report. This provided a check not only on the various attitudes towards the report, but also on the methodology and conclusions in connection with the work of the Commission.

Publication of Commission Reports

In all, the Commission published four reports. The first, the Interim Report, was made public in the spring of 1970. This was followed in 1972 by two reports: "Treatment" and "Cannabis". The Final Report of the Commission was published in December 1973, completing some four and a half years of investigation and writing. The conclusions and recommendations contained in each of these reports are described in the sections which follow.

The Findings and Recommendations of the Commission

The development of policy recommendations continued throughout the life of the Commission; each of the reports contained a number of recommendations deriving from the conclusions in their particular area of interest. The single exception to this was the Interim Report, which the Commission was compelled to produce at the conclusion of the first six months of its work and which dealt, essentially, with those philosophical and conceptual aspects of the drug use phenomenon which the commissioners felt were most important for consideration by both the government and the public at an early stage in its work. The conclusions and recommendations of the Interim Report will, therefore, be considered first, since they logically bear directly on the succeeding work and attitudes of the Commission.

The Interim Report: This report, released in early 1970, was written after the first round of public hearings held by the Commission. It presented a set of impressions based on the experiences to that point in time, as well as a reasoned, philosophical basis for its first set of recommendations.

As a first step, the Commission questioned where emphasis should be placed on the utilization of a wide range of social responses which could have an impact on the phenomenon of non-medical drug use. "We believe", said the Interim Report, "that this emphasis must shift, as we develop and strengthen the non-coercive aspects of our social response, from a reliance on suppression to a reliance on the wise exercise of freedom of choice".

The Commission proceeded to point out that society does not, in fact, condemn all non-medical drug use (alcohol and tobacco use are legal and condoned), and then attempted to determine what criteria could be used in determining how non-medical drug use should be viewed. Their statement on the issue was as follows:

"Our own view is that while we cannot say that any and all non-medical use of psychotropic drugs is to be condemned in principle, the potential for harm of non-medical drug use is such that it must be regarded, on balance, as a phenomenon to be controlled. The extent to which any particular drug use is to be deemed undesirable will depend upon its relative potential for harm, both personal and social.

"By personal harm we mean the adverse physiological or psychological effect of the drug upon the user; by social harm we mean the general adverse effects of non-medical use upon society".

The commissioners further clarified this important conceptual approach in the following statement:

"In considering the relative potential for harm of any drug and the social response to its use which such harm would seem to justify, it is important to keep in mind the values which we seek to protect from harm. We must also remember that such values may be threatened by our social response to drug use, as well as by the use itself. We believe that most of these values can be related to two general conditions. They are vitality - that is, the condition of the person who is in command of his full capacity to act - and the opportunity for the full development of one's potential as a human being."

In its consideration of causes and related factors of non-medical drug use, the Interim Report quite explicitly rejected a notion that had been advanced a number of times in submissions to the Commission.

"There has been some tendency to think of the motives for drug use as pathological or as reflecting a pathological psychological condition. This is shown by the tendency to turn to the physician, and particularly to psychiatrists, for help in understanding the drug phenomenon. There is no doubt that some drug users are to some degree mentally ill. However, we are convinced that the vast majority fall within the normal range of psychological functioning."

While the Commission commented on related matters such as research, information, education and the need for national co-ordination of efforts in these fields, its most significant statements and conclusions were reserved for changes which, it was felt, should be made in legal approaches to the phenomenon. In reviewing existing policies in Canada, the commissioners expressed doubts about the labelling of possession of illegal drugs as an offence in order to control illicit trafficking - an argument that had been advanced on a number of occasions.

"... we do feel, however, that further study and consideration must be given to the contention of the law enforcement authorities on this point, and for this reason we are not prepared at this time to recommend the total elimination of the offence of simple possession in respect of non-medical drug use."

The Commission then went on to develop perhaps the most important of its recommendations in the Interim Report:

"Our basic reservation at this time concerning the prohibition against simple possession for use", said the commissioners, "is that its enforcement would appear to cost far too much in individual and social terms, for any utility which it may be shown to have. We feel that the probability of this is such that there is justification at this time to reduce the impact of the offence of simple possession as much as possible, pending further study and consideration as to whether it should be retained at all."

Further explaining its reservations about the need for an offence of possession in Canadian Criminal Law, the Commission considered that more time was necessary for a study of the effect of the existing law, but concluded:

"At the same time, the Commission is of the opinion that no-one should be liable to imprisonment for simple possession of a psychotropic drug for non-medical purposes... Accordingly, the Commission recommends as an interim measure, pending its Final Report, that the Narcotic Control Act and the Food and Drugs Act be amended to make the offence of simple possession under these acts punishable upon summary conviction by a fine not exceeding a reasonable amount. The Commission suggests a maximum fine of \$100."

In line with its general policy of reducing the impact of the criminal law on the use of drugs, the Commission advanced a number of allied recommendations including:

- the increased use of discretion by police, prosecutors and courts to minimize the impact of the law on persons found in possession of drugs for their own use;
- closer controls on the production, importation and prescription of legally distributed psychoactive drugs;
- the reclassification of cannabis from the Narcotic Control Act to the Food and Drugs Act;
- amendment of the legal definition of trafficking with respect to cannabis to exclude the giving, without exchange of value, of small quantities which could reasonably be consumed on a single occasion;
- the enactment of general legislation to provide for destruction, after a reasonable period of time, of all records of a criminal conviction.

Finally, the Commission suggested that: the medical profession, in consultation with the appropriate governments, initiate development of special facilities for the treatment of short-term toxic effects

of some forms of drug use; that governments provide more direct financial assistance to street clinics; and the implementation of an educational programme for practicing physicians.

The Treatment Report: The Treatment Report, which was released early in 1972, attempted to round out the Commission's perspective on the entire question of treatment for drug-related disorders in Canada. The issue of whether treatment was to be voluntary or compulsory was not dealt with in this report, but consciously left for consideration in the framework of the Commission's Final Report.

Although methadone maintenance programmes existed in Canada prior to the establishment of the Commission, their philosophy and operation was the subject of considerable scrutiny by it. In the Treatment Report, a number of recommendations were forthcoming about the form of management of opiate dependence.

- Methadone maintenance programmes should continue to operate and should be available in all areas.
- Scrupulous care should be taken in the screening of prospective candidates for such programmes, including a period of residence in a clinic or hospital.
- Methadone dispensing should be confined to specialized clinics, except in cases where physical remoteness prevented the patient from attending a clinic. In such cases local medical or para-medical personnel might be authorized to dispense it.
- All individuals involved in methadone programmes should be fully informed on the nature of the drug and of the treatment options available.
- All maintenance programmes should be intensively evaluated through constant monitoring of the caseload and operations.

Other recommendations with respect to treatment of opiate dependence included, notably, a proposal that for those who fail to respond to other forms of treatment, methadone or other opiate maintenance should be offered as a last resort.

The Commission's full set of recommendations also covered other forms of drug dependence. In particular, the use of residential therapeutic communities was recommended for chronic users of amphetamine

and methamphetamine. For alcoholics, the Commission recommended that the existing "drunk tank" should be abandoned in favour of medically-oriented detoxification centres, and that clearer enunciation of treatment goals should be sought.

The Cannabis Report: From the outset of the Commission's work, it was obvious that a good deal of the overt concern on the part of governments and the public in North America during the later decades of the sixties and in the early seventies, stemmed from the growing use of cannabis - marijuana and hashish - by all age groups, but particularly by the younger strata of society. By the early part of the present decade, it appeared to be no longer a question solely of whether cannabis use could be suppressed, but also whether its legal status should be altered to avoid bringing a significant proportion of the younger population into direct contravention of the criminal law.

Against this background, in the Spring of 1971, the Commission issued a special report on cannabis, reviewing all of the available scientific information to that point in time and setting forth a series of conclusions and recommendations regarding the legal status of the drug.

Before advancing recommendations, however, the Commission considered a number of related issues which it felt had particular social relevance. Noting that the "evidence of the potential for harm of cannabis is far from complete and far from conclusive", the commissioners characterized the cannabis controversy by pointing out that "explaining away the evidence on one side or the other has become a favourite pastime" of the involved parties.

With regard to the long-term effects of cannabis, the majority of the commissioners concluded that it would take many years of use by a large number of persons before a firm judgement could be made. This, they felt, was an important area for further inquiry in the years ahead. One significant note, however, did emerge:

"On the whole", they said, "the physical and mental effects of cannabis, at the levels of use presently attained in North America, would appear to be much less serious than those which may result from excessive use of alcohol."

On the question of the effects they added:

"The short-term physical effects of cannabis (apart from those which affect psychomotor abilities) are relatively insignificant on normal persons, and there is as yet no evidence of serious long-term physical effects from use at current levels of consumption in North America."

Some general areas of major concern were reviewed:

1. The effect of cannabis on adolescent maturation: The majority of the commissioners concluded that although experimental evidence was lacking, cannabis probably had a detrimental effect in this regard. In part, they expressed their concern thus:

"It seems completely unrealistic to assume that adolescents, beginning as early as the age of twelve, can persistently resort to cannabis intoxication with its hallucinogenic effects without seriously interfering with development of the capacity to cope with reality that is an essential part of the process of maturation. There is also the probability that the use of cannabis will have the effect of precipitating mental disorders in those who are particularly vulnerable to them."

2. Effect on driving: Referring to its own and other experimental research in this important regard, the Commission pointed out that the normal use of cannabis "produces significant distortion of perception and impairment of cognitive functions and psychomotor ability. These effects tend to increase with the dose and the complexity of the task involved, but they were observable at moderate doses. Cannabis also has an adverse effect on short-term memory, sustained attention and vigilance, all of which can have an important bearing on complex tasks involving the handling of machinery."

It was also pointed out that there is no clear line of demarcation between users of cannabis and users of alcohol, and that the notion that users of cannabis do not use alcohol has been disproven, although their consumption of the latter may be reduced. This, it was noted, was a further complicating factor related to driving and similar tasks, since the combined effect of the two drugs is additive.

3. Effect on mental health: Although admitting that their own examination of existing data indicated that cannabis has a potent effect on the mind, the commissioners stated that as yet "North American conditions have not revealed a clearly identifiable 'cannabis psychosis' which may be attributed to chronic use."

They also reviewed the evidence regarding what had been termed "personality change" or "amotivational syndrome" - a condition which, it had been suggested to the Commission on many occasions, resulted from the use of cannabis. The evidence, they stated, is inconclusive, and they go on to point out that there is a great difference of opinion as to whether certain changes of attitude or outlook which have been associated with the use of cannabis are to be considered as good or bad.

"All of these symptoms", said the majority report, "might be equally associated with a profound change of values and outlook which many might regard as salutary. Obviously, this is very controversial ground, but it is not unreasonable to assume that persistent resort to cannabis intoxication may produce mood changes and impairment of will and mental capacity that have nothing to do with freely chosen attitudes and life style, but may, for example, be the result of some biochemical effect on the balance of mood-regulating neurotransmitters in the brain."

4. Effect on multiple drug use: In reviewing the available evidence on this issue, the commissioners were confronting an often-presented notion that the use of cannabis led to the use of harder drugs and, eventually, to the use of heroin. This was the "contagion" or "stepping-stone" theory that had been advanced by cannabis opponents for several years.

The commissioners conceded that there was ample evidence available from research of multiple drug use in which cannabis played a part. But the question, they pointed out, was whether people would have used the other drugs had they not used cannabis. They admitted there was no way to find an answer to this question, but they traced a possible link between the use of cannabis and such hallucinogenic drugs as LSD, and between the intravenous use of amphetamines and the use of heroin. They concluded:

"The theory that cannabis leads to heroin because the vast majority of heroin users are found to have used cannabis has to be dismissed on the ground of faulty logic: the vast majority of heroin users may have used cannabis, but the vast majority of cannabis users do not use heroin. The real question is whether a significant number of heroin users would not have used heroin had they not used cannabis. Unfortunately, it is impossible to answer such a question".

5. Cannabis and other crimes: Reviewing the evidence, the majority of the commissioners commented that it was impossible to verify the alleged connection between the use of cannabis and the commission of crime and there was little or no evidence in Canada to support an association with crimes of violence. Rather, they reasoned that the link of cannabis use with deviance may have had more to do with fear on the part of the public that the widespread use of the drug could lead to a diminution of those qualities which were essential for the preservation of society. Essentially, they concluded that this was an ethical issue also opposing the present values of western society and favouring, instead, a less aggressive, less materialistic and more contemplative life and simpler demands and pleasures.

In arriving at a set of conclusions and recommendations regarding a cannabis policy for Canada, the commissioners were unable to achieve consensus. Three of the five (Le Dain, Lehmann and Stein) agreed on a broadly liberal policy, retaining some forms of control. One other commissioner (Bertrand) advocated the removal of most controls and the sale and distribution of cannabis through government-controlled channels. Commissioner Campbell advocated retention of most existing controls, with a relaxation in the severity of the penalties for possession of cannabis. Following are summaries of the three positions.

Commissioners Le Dain, Lehmann and Stein

1. Although research has not clearly established that cannabis has sufficiently harmful effects to justify the present legislative policy towards it, there are serious grounds for social concern about its use; this concern calls for a continuing policy to discourage its use by means involving a more acceptable cost to the individual and to society than that of present policies.

2. The focus of our social concern should be on the use of cannabis by adolescents, and the principal object of our social policy should be to restrict its availability as much as reasonably possible by the methods which appear to be most acceptable on a balance of benefits and costs.

3. The only policy which can impose a significant restriction on availability is a prohibition of distribution. Under a system of administrative regulation or licensing, availability would be virtually unrestricted. A policy of making cannabis available to adults would have the effect of making it more available to minors (as learned from our experience with alcohol) and would also make the drug appear to be relatively harmless. Further, there is no reason to believe that we could effectively control potency and encourage moderate use by a system of administrative regulations or licensing. People will consume the quantities they require to achieve the desired level of intoxication or they will seek more potent forms - if necessary, in the illicit market. Moreover, our present knowledge about cannabis would not permit a policy of legal availability that could be accompanied by suitable assurances as to what might constitute moderate and relatively harmless use.

4. The costs to the individual and society of maintaining a prohibition of distribution are severe but they are justified by the probable effect of such a prohibition on availability and perception of harm, in contrast to the likely effect on both of a policy of legal availability.

5. The costs of a policy of prohibition of distribution are only acceptable, however, if the possible penalties for illegal distribution are reasonable in relation to the seriousness of the offence. Having regard to the potential for harm of cannabis in relation to other drugs, the extent of the involvement of young people in its distribution, and the general level of sanctions in other countries, the present penalty structure for the illegal distribution of the substance is grossly excessive. In some cases it does not leave the courts sufficient discretion, and in others it leaves them too much.

6. We recommend the following changes in the law respecting the illegal distribution of cannabis:

- a) Importing and exporting should be included in the definition of trafficking (as under the Food and Drugs Act), and should not be subject to a mandatory minimum term of imprisonment. It might be appropriate, however, to make them subject to somewhat higher maximum penalties than for other forms of trafficking.
- b) There should be an option to proceed either by indictment or by summary conviction in the case of trafficking and possession for the purpose of trafficking.
- c) Upon indictment, the maximum penalty for trafficking or possession for the purpose of trafficking should be five years, and upon summary conviction, eighteen months. It should be possible in either case to impose fine in lieu of imprisonment.
- d) In cases of possession for the purpose of trafficking it should be sufficient, when possession has been proved, for the accused to raise a reasonable doubt as to his intention to traffic. He should not be required to produce proof which carries a preponderance of evidence or a balance of probabilities.
- e) Trafficking should not include the giving, without exchange of value, by one user to another of a quantity of cannabis which could reasonably be consumed on a single occasion.

7. The costs to a significant number of individuals (the majority of whom are young people) and to society in general, of a policy of prohibition of simple possession are not justified by the potential for harm of cannabis and the additional influence which such a policy is likely to have upon perception of harm, demand and availability. We therefore recommend the repeal of the prohibition against the simple possession of cannabis.

8. The cultivation of cannabis should be subject to the same penalties as trafficking, but it should not be a punishable offence unless cultivation is for the purpose of trafficking. Upon proof of cultivation, the burden should be on the accused

to establish that he was not cultivating for the purpose of trafficking, but it should be sufficient for him (as in the case of possession for the purpose of trafficking) to raise a reasonable doubt concerning the intent to traffic.

9. The police should have power to seize and confiscate cannabis and cannabis plants wherever they are found, unless the possession or cultivation has been expressly authorized for scientific or other purposes.

Commissioner Bertrand

Dissenting from the views of her colleagues, Commissioner Bertrand advocated a policy of legal distribution of cannabis. In summary, her conclusions and recommendations were based on the following general factors. Historically, prohibition of distribution and use of cannabis have been both costly and ineffective. If the law concerning the use of cannabis is to have an educative value for the public, it must be "consistent with those laws regulating the use and sale of other drugs, such as alcohol, that have a potential for harm at least as great as that of cannabis."

Given the existing situation, there are no controls on the price, quality and potency of the cannabis sold in the illicit market. The effects of the drug on the mind and body, on mental health and maturation are not such as to continue its prohibition. Likewise, there is no proof of the contention that the use of cannabis leads to the use of more dangerous substances.

Reviewing the arguments against legalization of the distribution and use of cannabis, the Commissioner admitted that with legalization the number of users would increase; she also pointed out that the Commission surveys and other research demonstrated that use of the drug was already established in Canada and that it would not be possible to eliminate the use of all psychotropic drugs in the country. She also rejected the argument that it would not be possible to produce a cannabis product of controlled potency and quality in Canada. She then concluded as follows:

"With legalization, there is strong possibility that the number of regular users will increase and that the effects of cannabis intoxication will be observed in a greater number of people. It is also expected that a certain number of cannabis users would go on to other hallucinogens and would make greater use of barbiturates, tranquillizers and alcohol, as well.

"The probable consequences of legalization seem to me to be less harmful than the evils of prohibition. Prohibition is very expensive economically, socially and morally. It undermines the educative value of the law. The majority of my colleagues, though they would remove the prohibition against simple possession, do not take into account that the necessity of dealing in an illegal market will foster criminality among users.

"A moratorium, which would serve only to postpone the decision which cannabis presses on this country, would not be in keeping with the information which we have taken so much trouble and time to accumulate.

"I believe that it is not acceptable to claim that it is enough to 'decriminalize' cannabis use. An important economic activity is developing in this country and would continue to develop without controls on price, on quality or on the involvement of organized crime ('decriminalization' of cannabis use alone would inevitably expand the illicit market and encourage this involvement). Cannabis users would continue to be supplied by distributors who will doubtless sell more dangerous products at the same time. Users would have to learn to deal with this situation with no assistance from society or its laws."

Recommendations

"The federal government should remove cannabis from the Narcotic Control Act, as the Commission recommended in its Interim Report.

"The federal government should immediately initiate discussions with the provincial governments to have the sale and use of cannabis placed under controls similar to those governing the sale and use of alcohol, including legal prohibition of unauthorized distribution and analogous age restrictions. Furthermore, this government-distributed cannabis should be marketed at a quality and price that would make the 'black market' sale of the drug an impractical enterprise.

"The federal government should initiate a programme to develop efficient practical methods for cannabis production and marketing in Canada. A standard form of natural marijuana would seem to be most feasible at this stage, but hashish and synthetic preparations should also be explored.

"The federal government should initiate prospective and multi-disciplinary epidemiological research to monitor and evaluate changes in the extent and patterns of the use of cannabis and other drugs, and to explore possible consequences to health, and personal and social behaviour, resulting from the controlled legal distribution of cannabis.

"All stages of the production and marketing of cannabis should be conducted by the federal and/or provincial governments."

Conclusions and Recommendations of Commissioner Campbell

Commissioner Campbell was "in almost full agreement" with his colleagues regarding the various aspects of cannabis and its use, but he dissented from their recommendation regarding repeal of the offence of possession of cannabis and partially dissented from their recommendation regarding cultivation. He feared that repeal of the existing law against possession could be interpreted by the young as reflecting a judgement that cannabis was safe or that its use was condoned by the majority of society. Rather than repeal, Commissioner Campbell favoured the imposition of a fine for conviction of possession of cannabis. He proposed a similar penalty for cultivation of cannabis for personal use.

The Final Report: In December 1973, the Commission presented its Final Report to the Canadian Government. This was a document of almost 1,200 pages, although the report itself was contained in the first 273 pages; the remainder of the document was a series of technical appendices to the final report.

The report was divided into five parts comprised of: an introduction (Part One); legal controls (Part Two); treatment and rehabilitation (Part Three); non-coercive influences (Part Four) and additional conclusions and recommendations (Part Five).

In the introduction, the commissioners reiterated their interpretation of their terms of reference and reviewed a number of preliminary observations regarding the approaches they had taken to investigation of non-medical drug use in Canada and what they felt to be appropriate responses to the phenomenon. They summarily reviewed the causes of non-medical drug use, stressing the need to understand motivation if prevention is to be effective. They also considered the general proportions of the problem, noting that alcohol is "and is likely to remain, Canada's most serious non-medical drug use problem."

In Part Two - (legal controls) - the commissioners reviewed the main issues regarding the use of the criminal law against non-medical drug use, including its effectiveness as a control mechanism and its economic and social costs. The various legal instruments, international and national, for controlling the availability of drugs, as well as the administrative organs for these laws were analysed. A number of recommendations were advanced in this regard, including: a rejection of the institution of a special penalty for distribution of illicit drugs to minors, in view of the discretion left to Canadian courts to impose a sentence of life imprisonment. They also stated that in their opinion the Canadian legislation with respect to trafficking in opiate narcotics appeared to be sufficiently severe to give law enforcement authorities all the legislative base they require for effective action. They also rejected any change in the maximum penalties for trafficking and possession for the purpose of trafficking in the controlled and the restricted drugs.

Although in their report on cannabis the commissioners had recommended that the giving without exchange of value by one user to another of a quantity of cannabis which could reasonably be consumed on a single occasion be excluded from the definition of trafficking, they felt that this would be inappropriate for trafficking in narcotics, controlled drugs or the restricted drugs.

With regard to production of drugs for medical purposes and surveillance of prescribing practices, the Commission generally argued for greater vigilance in limiting the production of a number of depressant drugs and strict levels of controls. It also called for greater sophistication in monitoring prescribing trends, although concluding

that, in the long run, the only answer to the problem of controlling prescribing practices was reliance on the good judgement and self-restraint of physicians, accompanied by more intensive efforts to educate the profession in the responsible use of drugs.

In suggesting modification of the existing classification system for psychoactive drugs which would more accurately reflect their relative dangers and apply appropriate control measures, they also called for the re-classification of cannabis, by removing it from the Narcotic Control Act (where it was subject to the same restrictions and penalties as heroin and cocaine) and placing it under the Food and Drugs Act.

In reviewing the issues with respect to the control of the user of illicit drugs, the report reviewed the international and national requirements as well as a number of programmes that had been attempted for this control without resorting exclusively to criminal sanctions. After assessing the outcome of the use of these sanctions in Canada, the Commission strongly recommended against "any further extension of the offence of simple possession", arguing instead for a gradual withdrawal from the use of the criminal law against the non-medical user of drugs rather than extending its application. The report went on to call for the retention of imprisonment for simple possession of those drugs scheduled in the Narcotic Control Act, excluding cannabis. (This represented a modification of the position adopted by the Commission in its Interim Report when it recommended against the penalty of imprisonment for simple possession of any drug.) The commissioners rejected, however, the use of imprisonment for possession of any other drugs. In the case of opiate-dependent persons, they argued that they saw the use of the criminal law against these individuals "as a necessary device of catchment and referral for treatment or management". They expressed the belief that, while the courts should avoid the use of imprisonment as much as possible for opiate dependents, it must remain as a sanction for refusal to comply with the conditions of supervised release into the community. They recommended, however, that the maximum sentence to imprisonment for simple possession of the opiate narcotics and cocaine should be two years.

The commissioners advanced a number of recommendations regarding the way in which criminal law controls might be employed to bring the opiate dependent into effective contact with the various components of the treatment system, although they rejected the notion of civil commitment for prolonged periods, limiting such periods to between one and three months. If, at the end of this period, the patient refused to follow a course of treatment he should be discharged.

Finally, the Commission rejected the creation of an offence of use, to be enforced through compulsory urinalysis. This, they felt, would extend the application of the criminal law against the user, rather than making an orderly withdrawal from it.

In Part Three of the report, the Commission dealt with the areas of treatment and rehabilitation of drug abusers. As noted earlier, this subject was covered quite comprehensively in the Treatment Report produced the previous year. The commissioners felt, however, that some issues meriting further consideration had arisen since the publication of the earlier report. They also felt it necessary to respond to a limited number of criticisms made in connection with the Report.

With respect to the use of opiate maintenance, the Commission again stated that despite some real concerns expressed about this form of dependence management, they saw no alternative but to continue to make methadone maintenance available to as many opiate dependents as possible for whom it was appropriate. The report went on to examine the optimal level of programmes, particularly within the framework of the various stages of political jurisdiction in Canada.

The issue of heroin maintenance was also taken up by the Commission in its Final Report. After considering the dangers and benefits of the use of this substance, the commissioners stated their position as follows:

"For the present, our recommendation is not that heroin maintenance be made generally available as methadone maintenance, but that it be something that approved treatment units should be able to resort to as a transitional measure to attract from the illicit market opiate dependents who will not respond to methadone.

"The controlled experiment with heroin maintenance would be directed to its use as a last resort in selected difficult cases when every reasonable effort has been made to withdraw the addict from the illicit market by other means."

Finally, in Part Three the report briefly reviewed the issues surrounding the rôles of the therapeutic community and programmes of social rehabilitation, but made no further recommendations.

In Part Four of its Final Report, the Commission considered the non-coercive influences that might be brought to bear as factors in the control of the non-medical use of drugs.

The first issue was that of the rôle of research and information in the control and prevention of non-medical drug use. It will be recalled that the Commission was pessimistic and critical in reviewing these subjects in its Interim Report, and admitted in the Final Report that the situation in Canada had improved substantially since then.

After briefly examining the functioning of both provincial and federal governmental programmes with respect to research, the commissioners stressed the need for improved information feedback in making the decision-making process more efficient. They particularly recommended a relaxation of the prevailing strict policy regarding authorization to conduct research with drugs which were considered illicit. They also reiterated the need for facilities to analyse drugs being trafficked in order to have some indication of trends in that regard.

With respect to the improvement of information resources, the Commission advanced a number of recommendations aimed at not only improving the quality of library and clearinghouse holdings, but also the communications network among the various sources and their users.

Referring to its own research in the area of drug education, the Final Report reiterated the principles enunciated in the Interim Report. In particular, it emphasized that the most promising education programmes which had been identified in Canada placed drug education in a "broad perspective as part of the development of understanding about how to live effectively", emphasizing the need for finding viable alternatives to drug use.

Reviewing briefly its own research and that of others on the rôle of the mass media in the phenomenon, the Commission made a number of recommendations regarding the advertising of psychoactive substances. It felt that while a total prohibition of the advertising of such substances would not appear to be desirable, nevertheless federal government authorities should be empowered and encouraged to exercise a closer control over the general tone of such publicity, which should be confined to a truthful, matter-of-fact description of the use of these substances, merely to inform people of their availability but not to encourage their use. Additionally, the Commission argued for the establishment of effective controls over the "nature and quantity of the advertising directed by pharmaceutical manufacturers and other distributors in the medical profession, including the use of samples".

With respect to the advertising of alcoholic beverages, the report recommended that such publicity should include a warning of the dangers of excessive use.

The final sections of Part Four of the report dealt with the rôle of such institutions as innovative services, the family and spiritual influences as factors in the control of the non-medical use of drugs, although no recommendations were advanced beyond those contained in the Interim Report.

The conclusions and recommendations of the commissioners were not unanimous in every respect and the points of departure were therefore included in Part Five of the Final Report.

Commissioner Bertrand, in stating her own policy proposals, advanced five recommendations:

1. The government should establish a permanent commission responsible for examining and rectifying the prescribing practices of the medical profession, to inquire into the use of medical drugs in prisons, penitentiaries, mental hospitals and institutions for the aged and for disturbed and hyperkinetic children. It should also exercise close control and continued surveillance over all aspects of the importation and manufacture of drugs for medical purposes, especially the amphetamines, barbiturates and tranquillizers.

2. There should be no offence subject to criminal law sanctions for the possession or use of any drug, although opiate narcotics should be legally classified with the controlled drugs and should be subject to confiscation if found by police during investigation of crimes or misdemeanours.
3. Provincial or regional clinics should be established responsible for determining the state of opiate dependence of any individual who consents to submit to the necessary tests.
4. These clinics, having determined that an individual is drug dependent, should be responsible for providing him with the necessary substances at very moderate prices.
5. Special committees or boards should be appointed by federal and provincial health ministers to assure strict supervision of these clinics and to carry out a continuous evaluation of them during at least their first three years of operation.
6. Genuine efforts should be made at the various levels of government, in co-operation with the medical profession, colleges of pharmacists and parent and teacher associations, in order to create a climate of moderation, restraint and control with regard to the use of drugs for medical purposes, tobacco, alcohol and other drugs.

Commissioner Campbell also differed with the majority of the commissioners on the question of the most appropriate response to the handling of the user of opiate narcotics. In his conclusions and recommendations, he argued for an amendment to the law which would make unauthorized use as well as unauthorized possession of opiate narcotics an offence. He also recommended a sentence of one to three years for anyone not dependent on them. Parole could be permitted for these individuals provided they agree to refrain from further drug use and submit to checks to determine this. For those found guilty of the above offences but who are found to be opiate dependent, he recommended a sentence of three to ten years. Probation could also be applied here under the same conditions as above, except that if an individual is unable to remain free of drugs he could be placed in a regime of high-dosage methadone maintenance.

He also recommended that for purposes of accuracy, cocaine should be reclassified by removing it from the Narcotic Control Act and placing it in a special section of the Food and Drugs Act.

APPENDIX I

Research Projects Conducted by the CommissionA. Drug Effects

Critical review of research on drug effects.

Investigation of cannabis psychosis.

Drug-induced poisoning and death in Canada: An analysis of government statistics.

Survey of Ottawa-area physicians regarding the non-medical use of drug.

Survey of LSD researchers in Canada.

The effects of cannabis and alcohol on some automobile driving tasks.

A comparison of the effects of THC and marijuana in humans.

The effects of marijuana on visual signal detection and the recovery of visual acuity after exposure to glare.

The effects of cannabis and alcohol on psychomotor tracking performance.

Drug use and non-drug crime.

Non-medical drug use as a factor in hospitalization: A survey of Canadian psychiatric diagnostic records.

B. Chemical and Botanical Aspects

An examination of street drug analysis needs and facilities in Canada.

An historical review of hemp cultivation in Canada.

Chemical analysis of street drugs in Canada: Non-forensic aspects.

Chemical analysis of police seizures in Canada.

Chemical aspects of cannabinoids and their metabolites: A review of existing information.

Botanical and agricultural aspects of cannabis.

The effects of combustion on cannabis.

C. Sources and Distribution

Illicit drug trafficking in Canada.

Organized crime involvement in drug trafficking in Canada.

Importation, production and marketing of psychotropic drugs in Canada.

International aspects of heroin distribution.

The history of the medical use and availability of cannabis in Canada.

D. Extent and Patterns of Use

Participant observation of street-level drug users in major Canadian cities, summer 1970.

Participant observation study of suburban youthful drug users in the Montreal area.

Participant observation study of street-level drug users in Toronto.

Alcohol consumption and alcoholism in Canada.

Critical review of the international literature on the extent and patterns of amphetamine use.

Mediating drug factors and use at rock festivals.

The non-medical use of drugs and associated attitudes: A national household survey.

Secondary school students and non-medical drug use: A national survey of students enrolled in grades seven through thirteen.

University students and non-medical drug use: A national survey.

Co-ordination of sociological information on heroin with selected reviews.

Synopsis of non-medical drug use surveys in Canada.

Participant observation study-level drug users in London, Ontario.

Historical, theoretical, and descriptive study of drug use in Amsterdam, The Netherlands.

Interviews with "straight" adult cannabis users.

Self-reporting of drug use patterns by regular cannabis users: A log book study.

Review of sociological research on cannabis, hallucinogens, barbiturates, and volatile solvents.

Alcohol use among Canadian Indians.

Continuing participant observation study of committed drug users.

Comparative international study of alcoholism.

Tobacco use in Canada: Epidemiological and treatment aspects.

Continuing survey of sensitive observers in Canada: The final monitoring project.

Relationships among the patterns of use of different drugs.

E. Motivation and Causal Factors

A selective review of the sociological literature bearing on drug use with emphasis on policy.

Social change, alienation, and youth: A sociological analysis.

Sociological approaches to non-medical drug use and drug dependence: A non-critical review.

Growing up in a new world: A sociological analysis.

Drug use in contemporary society.

Sociological aspects of non-medical drug use: A private Commission symposium, Montreal, December 1970.

Review of the psychological, psychiatric and pharmacological literature on drug use and drug dependence.

Theories of drug use and addiction.

F. Law and Law Enforcement

Canadian federal drug prosecutors.

Comparative study of foreign legislation respecting psychotropic drugs.

Economic implications of the current drug phenomenon.

The decision-making flow with respect to Canadian drug offenders.

Demographic patterns of law enforcement in Canada.

Interviews with Canadian police forces in Canada.

Sentencing attitudes and practices with respect to drug offenders in Canada.

The use of probation in dealing with drug offenders in Canada.

A study of certain correctional institutions with particular reference to their effect on drug offenders.

The handling of drug offenders in the criminal system of Quebec.

Study of UN conventions for the control of psychotropic drugs.

The extent and patterns of drug-involved convictions and sentences in Canada.

A doctrinal study of law in relation to drug control.

Entrapment and violence in the enforcement of drug laws.

Review of research on the psychological and behavioural effects of imprisonment.

Law enforcement practices with respect to drug offences in Canada: An analysis and summary of related projects.

Law enforcement aspects of non-medical drug use: A private Commission symposium, Montreal, March 1971.

Comparative international study of drug law enforcement.

Civil commitment and compulsory treatment of drug users in Canada.

Civil commitment and compulsory treatment of drug users in the U.S.A.

The Methadone Control Program of the Government of Canada.

Probation for heroin dependents in Canada.

Parole of heroin dependents in Canada.

G. Medical Treatment and Related Services

Study of innovative services in Canada.

An analysis of selected addiction treatment programs.

Review of approaches to the treatment of alcoholism.

The treatment of chronic amphetamine users.

Survey of community treatment services in Canada.

Adverse reaction to LSD: Treatment and epidemiological aspects.

A summary of treatment methods for medical problems associated with psychotropic drug use.

Treatment aspects of non-medical drug-use: A private Commission symposium, Montreal, January 1971.

A critical review of methadone therapy programs.

Medical treatment: A summary of related projects.

The "British System": The treatment of opiate-dependent persons in the United Kingdom.

Treatment capacity in the provinces.

H. Information and Education

Drug education, information and services in selected Toronto schools.

Documentation of scientific and technical information on psychotropic substances.

Community drug education programs.

A brief review of the literature in the field of drug education.

Drug education: An analysis and summary of related Commission projects.

Drug education in Canadian public schools.

An investigation of drug education efforts by large organizations.

Drug education for professionals and others in universities and community colleges in Canada.

A comparative study of drug education in selected foreign countries.

Problems with government statistics.

Students and drug education.

I. Mass Media

The media and the social context of drug use: General aspects and summary of related Commission studies.

A survey of responses by Canadian daily newspapers and periodicals to non-medical drug use.

The underground press.

Drugs and literature.

Drugs and music.

The rôle of advertising in promoting attitudes to the use of drugs.

Drugs and Canadian films.

Radio, TV and drugs.

Drugs and the plastic and environmental arts.

J. Miscellaneous Projects

Analysis of unsolicited letters to the Commission.

Analysis of Canadian policy on non-medical drug use research.

Current research on psychotropic drugs: A survey of major studies in progress in Canada and abroad.

An examination of the attitudes and responses of religious, business, military, professional and other organizations to non-medical drug use.

An analysis of Interim Report critiques.

Co-ordination of tobacco information: Scientific and legal aspects.

Co-ordination of alcohol information: Scientific and legal aspects.

APPENDIX II

Commissioners and Senior Staff

Chairman: Gerald Le Dain, Q.C., Dean, Osgoode Hall Law School, York University, Toronto.

Commissioners: Marie-Andr e Bertrand, Professor, School of Criminology, University of Montreal.

Ian L. Campbell, Dean of Arts, Sir George Williams University, Montreal.

Heinz E. Lehmann, M.D., Director of Medical Education and Research, Douglas Hospital, Montreal; Professor and Chairman, Department of Psychiatry, McGill University, Montreal.

Peter Stein, Chairman, British Columbia Drug and Alcohol Commission, Victoria.

Staff: James J. Moore, Executive Secretary.

Ralph D. Miller, Director of Research.

Charles G. Farmilo, Research Associate.

Mel Green, Research Associate.

Lynn McDonald, Research Associate.

Ralph Hansteen, Research Associate.

Fred Walden, Research Associate.

PART FOUR

DRUG USE INVESTIGATION IN JAPAN

by

James J. Moore^{*/}

(on the basis of documents received
from the Japanese authorities)

^{*/} At time of the preparation of this publication, Research Expert at
UNSDRI.

While surveys and other investigative techniques using sampling methods are necessary in many countries in order to monitor trends in drug use, they are not absolutely essential if certain other systemic characteristics can make reliable data gathering possible. Perhaps because of its long concern with non-medical drug use, or perhaps because of the high degree of integration in its law enforcement structures, Japanese efforts in this regard are worth examining. But it should be kept in mind that not all law enforcement and public health systems lend themselves to adaptation of Japanese practices, nor do cultural and political characteristics in all countries allow for such simulation.

Among industrialized countries, Japan was historically the first to identify drug use of epidemic proportions at various times over the years and to respond with control measures combining both public health and law enforcement features. In order to comprehend the rationale for this approach to the social aspect of non-medical drug use, it is first necessary to grasp the way in which such drug use is viewed, at least officially, in Japan. This view is perhaps best reflected in a recent Japanese white paper outlining counter measures against addicts.

"How should we regard an addict?" the paper asks. "The foundation of counter measures against addicts is the way you perceive the addict. It seems that in some Western countries addicts are seen as sick persons or even victims, and those to be blamed are the narcotic traffickers. Is this opinion correct? The narcotic addicts are persons who are entirely dependent on narcotic drugs; therefore, in order to obtain narcotic drugs, they do not mind disposing of all household goods or losing their jobs; their sole concern is how to obtain drugs and they indulge in momentary pleasures at the expense of ambition, man's most precious quality. As a result, narcotic addicts become a source of other social evils, including theft, violence, prostitution, etc. They destroy not only themselves and their homes but also their country as the opium war, for example, shows. Such anti-social acts which serve only personal pleasures should not be overlooked.

"This is the reason why counter measures against narcotic addicts should include two points: namely, medical treatment, and penal approach."

It is this joint programme approach, coupled with meticulous attention to the collection of information about the characteristics of addicts that makes the operation of anti-drug campaigns in Japan of particular interest to those concerned in reliable methods for monitoring trends in drug use. The primary responsibility for control and investigation of drug offences lies with the Ministry of Health and Welfare. In recent years, however, in order to alleviate some of the pressures on officials in the Ministry, it was decided to cooperate with the national police, either by agreement as to which agency should conduct individual investigations or, where some overlap was inevitable, through joint investigative programmes. All the relevant information regarding drug cases is recorded both by the Ministry of Justice and the Ministry of Health and Welfare. This system of record-keeping has, over the years, enabled the Government of Japan to monitor the information gathered in order to arrive at conclusions regarding the state of non-medical drug use at given points in time.

In brief, the post-war experience with drugs in Japan falls roughly into three periods:

The first period immediately followed World War II (1946 to 1954) and was marked by significant incidence in the use of stimulants. Japanese officials estimated that during this period there were up to 5,000,000 abusers of methamphetamine. Concern over this situation resulted in the enactment in 1951 of a law to control stimulant drugs which was supported by vigorous enforcement and control and which resulted in the arrest of more than 160,000 persons between 1951 and 1956. By 1957 the number of arrests dropped to less than 1,000 persons, even though there was no relaxation in the enforcement of the law. This, the Japanese officials are convinced, was a demonstration of the effectiveness of the control legislation.

The second period of concern followed almost immediately on the heels of the successful suppression of amphetamine use. In this case, the drugs of abuse were of the narcotic type, chiefly heroin and in the peak years of 1961 and 1962 the number of heroin addicts in Japan was estimated at about 40,000. A subsequent revision of the narcotic control law in 1963 resulted in new measures which enabled authorities

to intervene more directly and effectively when addicts were discovered. For example, the revisions permitted compulsory treatment of proven addicts and required physicians to report cases where they discovered patients addicted to narcotics. This compulsory reporting also applied to prosecutors and officials of correctional institutions who came in contact with addicts.

Although narcotic maintenance is not used as an adjunct to therapy in Japan, there is a programme of psychological or occupational therapy to assist in the rehabilitation of narcotic addicts. This programme began with the enactment of the 1953 Narcotic Control Law and at the present time more than 200 counsellors are stationed in areas of high delinquency rates and drug use in the largest cities in Japan.

Perhaps for a variety of reasons, the incidence of narcotic use in Japan has dwindled almost into non-existence. Whereas in the three-year period from 1961 to 1963 a total of almost 4,500 new cases of heroin addiction were brought to the attention of the authorities, no new cases were reported in 1971. In the same year, however, there were 14 cases of morphine addictions and 41 cases of addiction to other opiate alkaloids.

The third significant period of observation of drug use in Japan extends from 1969 to the present. As noted above, narcotic addiction has declined almost to insignificance, although there was a period of marked increase in the use of stimulants. Whereas in 1969 there were a total of 704 arrests for stimulant drug offences, this had increased to 4,700 by 1972 and to more than 11,000 in 1973. Amendments to the Stimulant Drugs Control Law in 1973, which included intensified control over the raw materials used in the manufacture of stimulant drugs and an increase in statutory penalties for trafficking (including life imprisonment), resulted in a 30 per cent decline in the number of offences in 1974, although in 1975 they increased to more than 13,000.

Against such a background of reporting and control systems, it has generally been possible for the Government of Japan to maintain a profile of the characteristics of drug use throughout the country so as to assist in the process of monitoring trends, with a subsequent goal of devising specific policies and programmes to respond to the requirements of controlling the phenomenon.

CONTINUED

1 OF 2

Another recent example of this mechanism at work is related to the abuse of organic solvents, such as thinners and glues, which rose very rapidly during the latter part of the previous decade and the early years of the present one. In 1971, for example, approximately 50,000 youngsters were found to be engaged in this form of "sniffing", resulting in a high incidence of accidental deaths from overdoses (in 1969, 84 young people died accidentally in this way). In 1972 the Diet approved amendments to the Poisonous and Injurious Substances Control Law, which prohibited the sale of thinners and glues knowing they were going to be abused. Since that time the number of cases of glue-sniffing known to the police has declined sharply.

The relevant data necessary to assist in the formulation of control policies is generated from two sources:

- 1) the records available from the various stages in the criminal justice and public health systems as individual offenders come in contact with the system components;
- 2) clinical studies conducted by social and medical scientists in the institutions to which persons convicted of drug offences or confined for purposes of compulsory treatment are committed.

Evidently the data available from the Ministry of Justice regarding the disposition of individuals arrested on drug charges can be of considerable assistance to officials in attempting to calculate the approximate size or trend of the problem. It may be argued, of course, that arrest and court data do not complete the whole picture of drug use. It cannot be denied that an historical time series, although lacking precision regarding the exact epidemiological size of the problem, may give useful trend information over the years provided that a constant level of law enforcement rigour and a uniform policy for the handling of such cases were adhered to.

Clinical studies are, of course, most useful in attempting to determine the various characteristics of the types of drug use at a particular point of time. A number of examples of such investigated programmes could be cited: one was a study conducted from 1963 to 1966 of drug users who were treated in 853 mental hospitals in Japan in those years. This study identified not only the forms of drug use, but also

some of the behavioural characteristics of patients as related to the particular substance. During the same years, another national survey of drug users under the age of 20 (8,565 cases) was analysed with the help of local health authorities and police detachments. A further study analysed the types of diagnosis employed by physicians in determining whether an individual was to be considered drug dependent. Over a period spanning 1963 to 1967 an investigation also considered the epidemiological and behavioural characteristics of drug users undergoing treatment in hospitals and out-patient clinics.

As noted earlier, there should undoubtedly be concern about the degree to which the drug abuse investigatory methods employed in Japan could be applied elsewhere. It would appear that two important social and attitudinal characteristics would have to be present in order to rely on the Japanese type of data, particularly those derived from law enforcement records.

One cultural or social characteristic is a prevailing sense of citizen participation in the whole criminal justice and law enforcement process. In Japan this is exemplified to a large degree by such practices as, for instance, friends and family members reporting addicts to the authorities, whether in the regimes of justice or health.

A second characteristic, perhaps largely impressionistic and based on the limited literature available on the subject, appears to be a general refusal on the part of the Japanese public to tolerate most forms of illegal drug use. This frequently results in a high rate of reporting to police, leading to more frequent interventions.

Neither of these factors necessarily characterize aspects of other cultures.