Part Three

Treatment and Rehabilitation

Section VIII

General Observations Concerning Treatment

We discussed the various approaches to treatment or management of the adverse effects of non-medical drug use in considerable detail in our *Treatment Report*. We do not propose in this report to go over all the ground that was covered in the previous report nor even to attempt to summarize what was said at that time. There are, however, certain matters that require further commentary because of their general importance for social policy, and in some cases because of developments that have taken place since the *Treatment Report*. It is also necessary in this report to keep before us a realistic appreciation of the general outlook for the treatment of adverse drug effects, and in particular for the treatment of drug dependence. An understanding of what we may reasonably expect from treatment has an important bearing on the priorities which we assign to other kinds of intervention.

Some critics of the *Treatment Report* complained that we were too pessimistic about the outlook for treatment. It was certainly not our purpose to be unduly pessimistic or to underestimate the efficacy of various methods of treatment. It was our purpose, however, to avoid creating unjustified expectations for treatment. We believe that more harm can come from excessive optimism than from excessive pessimism in this area. The obvious danger of excessive optimism or exaggerated claims of success is that people may be misled into thinking that there is a means of repairing the damage if dependence or other serious chronic effects result from experimentation with certain drugs. There is reason to believe, for example, that there has been widespread misunderstanding that methadone maintenance is a "cure" for opiate dependence, when in fact it merely alters the form of such dependence. On the whole, we found the outlook for treatment, particularly of drug dependence, to be a discouraging one. We felt it essential that this fact be clearly presented so that people might appreciate the serious risk of long-term problems resulting from experimentation with dependence-producing drugs, and so that the importance of efforts at prevention should be placed in proper perspective. It was not our intention to disparage or discourage the efforts to

improve existing methods of treatment and to discover new and more effective ones. We must continue to give those who are engaged in treatment all the support they deserve, but at the same time we must have realistic expectations concerning success and reasonable criteria of progress in this most difficult field of activity that is so full of frustrations and disappointments. In the long run, such limited expectations and criteria of success will do more to encourage treatment personnel to persist with the task than the disillusionment and abandonment of constructive efforts that so often follows on unrealistic expectations and standards.

In appraising the general outlook for treatment a distinction must, of course, be made between the treatment of acute or short-term physical and mental effects, and the treatment of dependence. On the whole, available treatment methods are able to cope quite effectively with short-term effects, and with many of the consequences of chronic drug use. It is in the treatment of dependence that the major difficulty lies. The various approaches to the treatment or management of dependence include the following: efforts to achieve abstinence or "cure"; maintenance, which involves the continuation of a form of drug dependence; the use of antagonists or substances which block the action of a dependence-producing drug without themselves producing significant dependence; the use of substances which produce an adverse or unpleasant reaction when the dependence-producing drug is used; and, more recently, the possibility of active immunization against the dependence-producing properties of a drug.

It is generally acknowledged that the various approaches to achieving abstinence or cure have a disappointingly low rate of success. Some appear to be more successful than others, but the best can only reach a very small proportion of the drug-dependent population. Among the most successful has been Alcoholics Anonymous in assisting alcoholics to achieve abstinence. For one reason or another there has not yet been comparable success with the same approach in the treatment of opiate dependence. Former opiate-dependent persons have been employed to a considerable extent in treatment, but they do not appear to have been able to achieve success on anything like the scale of Alcoholics Anonymous. If anything, the short-term outlook for the cure of 'speed' or intravenous amphetamine dependence is even more discouraging than in the case of opiate dependence, although there are suggestions that very heavy 'speed' use may be a transient phase and some 'maturing out' may occur after a few years with most individuals. Efforts to promote abstinence in drug-dependent individuals by long periods of confinement in prison or hospital settings have yielded poor results in the long run. The effectiveness of individual psychotherapy in the treatment of drug dependence has not been adequately demonstrated, and in any event, it is prohibitively expensive, and there are not enough therapists for the task. Group therapy, and in particular the encounter technique of the rigorous therapeutic community, has had some encouraging results, but they affect only a comparatively small proportion of the drug-dependent population. However, because of the

relative importance of this form of treatment among those directed to abstinence or cure, we comment on it in greater detail in subsequent sections. There has not yet been a serious effort to achieve the potential of what is sometimes referred to as the "one-to-one" approach—the various forms of personal support and practical assistance given by a dedicated person to the drug-dependent person to help him or her to find a new basis for life. We shall have more to say about the importance of this approach in a later section.

Opiate maintenance, or the substitution of one dependence-producing drug for another, is discussed in detail in the following section. The increasing recognition that it holds out the best hope for management of opiate dependence is a reflection of the great difficulty of achieving abstinence or cure. Maintenance is generally not spoken of with respect to other forms of drug dependence, although there are undoubtedly many cases of persons who have become dependent on other drugs, such as the barbiturates, and are maintained on such drugs as a form of medical treatment. Maintenance would not appear to be practical as a means of managing amphetamine or 'speed' dependence because of the difficulty of stabilizing doses at levels which do not cause significant disruption of normal physical or mental function. Such maintenance was apparently tried at one time in Sweden, with disastrous results. Basically, maintenance involves the decision as to whether, on balance, there is sufficient benefit to be gained from it to justify the risks necessarily involved in making a dependence-producing drug legally available for the management of dependence.

Therapeutic techniques employing the use of antagonists in the treatment or management of opiate narcotic dependence have not yet been fully developed. There are various drawbacks to existing antagonists, often including unpleasant side effects and a short duration of action. More adequate antagonists are in various stages of development and testing. It is assumed that it will be possible to develop a satisfactory antagonist that can be given orally at intervals of several days, or implanted in the body and gradually released into the blood stream, providing opiate blockade over a long period of time. However, antagonists do not eliminate the craving for opiate narcotics in dependent users, nor do they deal effectively with the tension or depression from which many users seek relief. Consequently, even if satisfactory antagonists are made available for the management of dependence, they are likely to be willingly accepted by only a small proportion of the opiate-dependent population. As yet there are no generally adequate antagonists for the other major drugs of dependence, such as alcohol, barbiturates, amphetamines and tobacco, although significant research is currently being conducted in some of these areas. Antabuse® (disulfiram) does not block alcohol effects, but inhibits the use of alcohol by producing very unpleasant toxic interactions when the two drugs are taken simultaneously. Although Antabuse®, when administered chronically or implanted, reduces alcohol consumption, such

treatment is acceptable to only a very small proportion of the alcohol-dependent population.

In our *Treatment Report,* we recommended that research on the development of an effective antagonist for amphetamines be encouraged. The suggestion met with some unfavourable reaction on the ground that because of the likely mechanisms of action of amphetamine in the brain, and its similarity to natural body hormones such as adrenalin, an effective amphetamine antagonist would interfere significantly with the normal functioning of the nervous system. Although this may be a likely possibility, because of the present uncertainty as to the actual mechanisms by which amphetamine produces the effects which reinforce or reward its use in humans, we felt that the development of a satisfactory antagonist which might reduce amphetamine self-administration could not be ruled out *a priori.* Since our *Treatment Report,* significant advances have been made in this area. In Sweden, a compound is currently being investigated which significantly reduces the reinforcing effects of oral and intravenous amphetamine use. Available data, although limited, suggest no serious side effects or interference with normal physiological and psychological function. For further details, the reader is referred to Appendix A.3 *Amphetamines and Amphetamine-Like Drugs and Their Effects.*

There is a significant possibility of developing techniques for the active immunization of persons against the effects of various drugs. This would produce a drug-neutralizing effect similar to that of a chemical antagonist, although the effect would result from a different biological process. Employing antibodies originally developed for drug analysis (immunoassay), active immunization in animals has met with some success in reducing drug reaction, but it has not yet been tried in humans. There is the potential drawback, however, that such immunization might be irreversible. In the case of opiate narcotics, effective immunization (or long-acting chemical antagonists) would likely deprive the treated person of the medical use of opiate narcotics, as in the relief of severe pain. With amphetamine immunization, there could be complications arising from the similarity between amphetamine, adrenalin, and related hormones, as noted above.

Even if satisfactory techniques were developed for the neutralization or blockade of the major dependence-producing drugs, the overall impact of such treatment on multiple drug use might be disappointingly limited. The number of psychotropic drugs available is vast. Even within general pharmacological classes, there is often significant variability in chemical structure and in the mechanisms of action of different drugs. Specific antagonists would not be uniformly effective against all drugs. Consequently, the elimination of the use of one substance might do little more than change the form of dependence or the drug used. Taking the antagonist approach to an extreme, multi-drug use would ultimately require multi-antagonist treatment, which would be clearly impractical. Consequently, it is likely that antagonist treat-

ment will be of limited value, except to certain persons seeking this type of assistance.

A significant change in non-medical drug use which may be included in a broad concept of "treatment" is elimination or reduction of use brought about by recourse to various forms of self-control, inspiration, meditation and involvement in other interests. These were discussed to some extent in our *Treatment Report*, in the Appendix entitled *Some Other Therapeutic Approaches*. These approaches, although often strikingly effective in individual cases, depend so much on particular circumstances, including the personality of the subject and the other persons from whom he derives assistance, that it is difficult to generalize about their efficacy.

Certain pharmacological issues relevant to treatment are discussed further in Appendix A *The Drugs and Their Effects*.

In conclusion, a word should be said about treatment capacity, or the adequacy of existing facilities for treatment in Canada. In our *Treatment Report* we made recommendations for a community-based network of treatment and rehabilitation services, and in Appendix H *Treatment Capacity in the Provinces* we have attempted to convey some idea of existing facilities for methadone maintenance, treatment in therapeutic communities, and treatment in general and allied special hospitals. It is our overall impression that Canada still lacks sufficient treatment facilities of various kinds to meet the real and potential need of its drug-affected population. We have not made a detailed survey of facilities for the treatment of alcoholism, but there is reason to believe that they fall well below the need for such treatment. In several cases, reports suggest that existing treatment facilities are operating at under-capacity. This would appear to be true, for example, of some of the methadone programs and the residential therapeutic communities. In many of these cases, however, this is probably due to limitations of staff, or to failure to exert sufficient "out-reach" to make patients aware of available treatment and to attract them into it. Regardless of physical accommodation, the effective capacity of treatment programs is limited by the number of qualified staff. There is a need to attract many more persons into the treatment of drug-related conditions and to provide the necessary training for them. We have further occasion to discuss the need for increased government initiative and support in developing treatment facilities and attracting drug-dependent persons into treatment in subsequent sections.

Section IX

Opiate Maintenance

METHADONE MAINTENANCE

Growing Support for Methadone Maintenance

Because of the difficulty of curing opiate dependence, there has been increasing support for methadone maintenance as the most effective means of managing such dependence. Methadone maintenance programs are multiplying at a brisk rate, and this treatment approach is receiving an increasing measure of official approval and support. In fact, it is fair to say that the substitution of methadone for heroin has become the favoured response to heroin dependence.

It seems to be undeniable that methadone maintenance is presently the means by which the largest number of heroin dependents can be removed, to a significant extent, from dependence on the illicit market in heroin and from involvement in drug-related crime. There is considerable variation in the results that are claimed for methadone maintenance on various measures of success—retention in the program, reduction in illicit drug use, reduction in crime, increase in gainful employment, and general social and personal adjustment. The retention rates of 80 per cent and better that are claimed for some programs are considerably higher than the general average. Moreover, retention rates reflect varying criteria of admission and compliance. Nevertheless, the poorest rates of success on any of the above measures in methadone programs, given the total numbers who can be beneficially affected, would appear to suggest that the total effectiveness of this method of managing opiate dependence is superior to other forms of treatment or management. As yet there has not been a basis for estimating the potential effectiveness of a satisfactory antagonist for opiate narcotics since such antagonists are still in the development and testing stage. (See Section VIII *General Observations Concerning Treatment* above and Appendix A.2 *Opiate Narcotics and Their Effects,* "Opiate Narcotic Antagonists".)

Some programs with a drug-free goal, particularly some of the therapeutic communities, do claim success rates which compare favourably to those

in methadone maintenance but they are suitable for a much smaller proportion of addicts, and the results are based on the performance of a highly selected population with a particularly good prognosis for this particular form of treatment.

Thus the superiority of methadone maintenance as a means of managing opiate dependence lies essentially in the numbers or proportion of the total addict population with which it can apparently deal. It must be recognized that there is a high rate of dropout from methadone programs (and indeed from virtually all other programs as well), in some cases as high as 50 per cent,[1] and also that there is a significant amount of illicit drug use and unemployment among those who remain in the programs, but the overall proportion of those who can be kept substantially out of the illicit heroin market and usefully employed is impressive. It is estimated that with adequate facilities at least 40 per cent of the heroin-dependent population in the United States could be stabilized on methadone maintenance.[2] On the other hand, it is felt that therapeutic communities could deal effectively with at the very most ten per cent of the total addict population.[3]

Concerns About Methadone Maintenance

While methadone maintenance has its strong supporters, and they are increasing in number, many people have serious misgivings about it and some are strongly opposed to it. The most vocal critics are those who favour a drug-free goal for treatment, in particular, those who favour the technique of the therapeutic community. They contend that it is essential to take the drug-dependent person off drugs altogether and not to encourage him in his reliance on them. They see methadone maintenance as simply catering to the desire of the drug user and evading a real solution of his problem.

There is also a very real concern that while methadone maintenance may result in a reduction of drug-related crime and some undermining of the illicit market in heroin, it may lead to an overall increase in opiate dependence. There is concern that we are creating a legal supply of a new opiate narcotic from which there will inevitably be diversion to an illicit market. There is also concern that because of the availability of methadone maintenance people will be more willing to run the risk of opiate dependence by experimenting with heroin or other opiate narcotics, and that once dependent they will be less inclined to make the effort to become abstinent. Many fear that methadone maintenance will not displace the use of illicit heroin but will merely add to or compound the overall problem of opiate dependence.

There is no doubt that the increasing availability of methadone for the treatment of opiate dependence in withdrawal therapy and maintenance has brought problems as well as benefits. There are four primary dangers in connection with the use of methadone. The first is the danger of making patients dependent on methadone when they do not yet have an opiate dependence. This can result from failure to make adequate tests for dependence. This

danger is greatest when a physician who administers or prescribes methadone does not have access to the necessary laboratory facilities for urinalysis. Successive daily urinalyses to determine whether heroin is being used daily is one, although by no means the only, indicator of heroin dependence. It cannot be said, however, that every reasonable precaution is being taken to avoid a mistaken diagnosis of dependence if urinalysis is not available. Persons who are not yet dependent on opiate narcotics may be made dependent on methadone as a result of unwillingness to turn them away when they present themselves for treatment. Sometimes the reasoning in such cases is that where a person is experimenting with heroin and there is every likelihood that he will become dependent it is better to remove him from the illicit market at the first opportunity rather than run the risk of losing him for a considerable period of time.

The second danger is the diversion of legal supplies of methadone to an illicit market. This danger is greatest where methadone is prescribed instead of being administered on the premises under supervision. There has been evidence of the creation of an illicit market in methadone and the creation of primary methadone dependence through over-prescribing by physicians in some areas. There is also concern that the extensive use of methadone maintenance will lead to an illicit market in methadone as a result of a growing demand for the drug and the refusal to make it legally available to those who are not yet dependent. The reasoning is that if heroin-dependent persons are willing to accept methadone in substitution for heroin, the drug can be expected to be increasingly sought after by drug users. In this way, it is said, making methadone maintenance widely available is likely to increase the total clientele for opiate narcotics and the total amount of opiate dependence. It is not only introducing another dependence-producing drug but it is making it legally available. Thus it is facilitating or encouraging the development of opiate dependence.

The third danger is that experimentation with heroin will be encouraged by the erroneous belief that methadone offers a 'cure' if heroin dependence results. There is concern as to whether drug users understand the full implications of methadone maintenance—that it not only produces dependence but a dependence that is confirmed and reinforced by regular daily administration. There is an insufficient understanding that methadone maintenance itself involves a dependence, albeit one which relieves the opiate dependent of the need to seek his drug in the illicit market. People who think of methadone maintenance as a 'cure' are very gravely mistaken. It is not a cure but a substitution of one dependence for another—a dependence which is as fully tenacious as that of heroin and perhaps more.

The fourth danger is that a heavy reliance on methadone maintenance will discourage treatment personnel and patients from pursuing the more difficult goal of abstinence or additional goals, like the ones that are pursued and often attained through serious therapeutic efforts: a sense of responsibility, of commitment, of understanding of the self and its limitations and the

like. (It is noteworthy, however, that there is increasing evidence in American therapeutic communities of resort to methadone maintenance by a certain number of the staff and members, although it is not possible to estimate the effect of this development on the traditional goals and general effectiveness of the therapeutic community.) There is concern that if we commit ourselves unreservedly and overeagerly to this method of treatment we may gradually abandon our efforts to seek means of effecting cure. As official support concentrates on methadone maintenance, there may be less support available for the more expensive approaches to treatment with a drug-free goal. At a time when public health costs constitute a very large and increasing proportion of government budgets, one of the great attractions of methadone maintenance to governments is its relatively low cost.

There is also concern that we do not know enough about the long-term effects of methadone, although it is thought to be unlikely that they will turn out to be more harmful than those of heroin. There has also been relatively little attempt to determine the effect of methadone on psychomotor functions involved in driving or the handling of other machinery. At the present time we are allowing persons on methadone maintenance to drive automobiles, operate other potentially dangerous machinery, and perform other types of complex tasks without adequate assurance that this is a safe or reliable procedure. As well, there is little systematic information regarding the interaction of methadone with alcohol and other drugs used medically and non-medically. The possibility of enhanced behavioural or physiological toxicity is of particular concern.

The Commission's Position on Methadone Maintenance

In its *Treatment Report* the Commission expressed cautious support for the increased availability of methadone maintenance under suitable controls. It acknowledged the criticism of this form of treatment or management of opiate dependence, especially from those favouring the therapeutic community, as well as its essentially experimental nature, but concluded, "for better or for worse, methadone maintenance provides to date the cheapest and most effective weapon we have for dealing with large-scale heroin dependence," (p. 30). The controls recommended by the Commission, which are also referred to in the present report in Appendix G.1 *Methadone Control Program of the Government of Canada,* consisted essentially in the requirement that, as a general rule, methadone should be administered only by physicians affiliated with and acting under the general supervision of an accredited specialized clinic equipped with the necessary laboratory facilities and other ancillary services.

In view of continuing concern about methadone maintenance and the introduction of a control program by the Federal Government the Commission has reviewed its position since the *Treatment Report.*

Notwithstanding the concerns expressed above, methadone maintenance continues to win support. Its major claims, apart from relative cost, are that it can handle large numbers, and it can, in a significant degree, take them out of the illicit market and drug-related crime and permit them to function in a reasonably effective manner. These are the major social objectives in connection with heroin dependence today. In the large urban centres of the United States people are more concerned about the increase in crime as a result of heroin dependence than they are about the effect of dependence on the individual. If they cannot cure the dependence they at least desire to reduce drug-related crime. A certain proportion of persons on methadone maintenance may still commit crime because of a general pattern of criminal behaviour, but they have less reason to commit the crime required to support their opiate habit.

The danger that a heavy emphasis on methadone maintenance will discourage efforts to pursue treatment with a drug-free goal is only a matter of real concern to the extent that the latter treatment offers a significant chance of success. We must not abandon our efforts to effect cure but we must be realistic about the present prospects. The experience with treatment goals of abstinence has been very discouraging and justifies the generalization that heroin dependence is virtually incurable. There are very few documented cases of individuals who have remained abstinent after release from imprisonment or civil commitment. While the success rate claimed for therapeutic communities is often high, on closer examination the number who respond favourably are seen to be a very small proportion of those who originally make contact with such communities. A high proportion of those who make contact turn away when they realize what is involved. A further high proportion drop out, or 'split', after a short period in the community. The founder of Synanon himself expressed the opinion that only about one in ten of those who seek help from the community would be benefited by it.[4] As noted previously in this section observers have estimated that therapeutic communities are not likely to be suitable for more than ten per cent of the opiate-dependent population.[5] Certainly it is essential that a sufficient number of them be supported for those who can benefit from them. It is generally agreed, however, that they could not make a sufficient impact on the overall problem of opiate dependence to remove the need for some other form of management. Moreover, methadone maintenance can always be regarded as a stabilizing and transitional measure that enables a person to withdraw from the illicit market and drug-related crime and to fashion the elements of a reasonably normal life; it does not preclude the subsequent pursuit of cure, if the dependent person feels able to make the necessary effort. As noted above, methadone maintenance is in fact being used by members of therapeutic communities.

For these reasons—and despite the very real concerns expressed above —we see no alternative but to continue to make methadone maintenance available to as many opiate dependents as possible for whom it is appropriate.

It must, however, be surrounded by suitable controls to reduce the dangers referred to above as much as possible. In view of the introduction of the Federal Government's methadone control program since the publication of the Commission's *Treatment Report* it is necessary to re-examine the question of control.

Before dealing with this subject we wish to emphasize again that the potential of antagonists as a means of managing opiate dependence has not yet been developed, although there are promising indications, and the concentration in the foregoing discussion on methadone maintenance and the therapeutic community is not intended to suggest that in the long-term the options are necessarily confined to these two forms of treatment or management.

The Methadone Control Program of the Federal Government

The methadone control program introduced by the Federal Government in 1972 following the recommendations of a Special Joint Committee on Methadone established by the former Food and Drug Directorate of the Department of National Health and Welfare and the Canadian Medical Association, as well as the recommendations of this Commission in its *Treatment Report,* are described in detail in Appendix G.1 entitled *Methadone Control Program of the Government of Canada.* There reference is made to the abuses which gave rise to governmental concern, the recommendations of the Special Joint Committee, the recommendations of the Commission, the announcement of the proposed methadone control policy by the Minister of National Health and Welfare, the new *Narcotic Control Regulations* respecting the use of methadone, the policy guidelines developed by the Health Protection Branch of the Department of National Health and Welfare, the manner in which the new control policy has been implemented, the number of specialized treatment units approved, and the number of physicians, both affiliated with such units and unaffiliated, who were authorized as of November 1972, to use methadone in maintenance and withdrawal therapy or in withdrawal therapy only.

What emerges from a consideration of these developments is that the Federal Government has had to try to reconcile two objectives: the need to make methadone sufficiently available in Canada for the treatment of opiate dependence, and the need to surround it with sufficient control to reduce the dangers of abuse or misuse as much as possible—in particular, the danger that persons who are not yet dependent will be introduced to opiate dependence through methadone, the danger of diversion to an illicit market through "prescription shopping" or over-prescribing, and the danger that the opiate dependent's problem may be aggravated by inadequate administration and failure to monitor illicit drug use.

At the present time there is a conflict between the need to make methadone sufficiently available to meet the requirements of the opiate-dependent

population and the need to surround its availability with all reasonable controls. Although the idea of assuring effective controls and good medical practice in the use of methadone through a system of accredited clinics or specialized treatment units with which private physicians must be affiliated is a good one in theory, it has encountered certain practical difficulties. There has been a significant increase in the number of special treatment units suitable for accreditation but there are not yet enough to make such a system workable at the present time. (See Appendix G.1 *Methadone Control Program of the Government of Canada.*) There are not sufficient organized and fully-equipped methadone programs in Canada today to make it feasible to restrict the use of methadone to physicians who are able to establish an affiliation with an accredited treatment program. There are too many localities that would not be adequately served if that rule were enforced today. Nor apparently has it been considered practicable to restrict its use to physicians who have access to the necessary facilities for urinalysis nor to insist that methadone be administered under supervision and only prescribed in the most expectional circumstances.

In effect, the Federal Government has had to abandon, at least temporarily, the idea of a control system based on accredited treatment units or programs and settle for a system which gives it a closer monitoring control over physicians. It is highly doubtful if the policy which has been implemented can meet the control objectives of a safe and effective use of methadone which were originally announced. An effective system of controls requires adequate laboratory facilities to confirm opiate dependence and to monitor the use of illicit drugs, administration under supervision as opposed to ordinary prescription, and the necessary resources for follow-up and evaluation. There is no particular magic in the notion of a specialized clinic or treatment unit; the necessary facilities can exist or be accessible to physicians outside of such a clinic or unit; but they will generally only be available within an organized program.

Jurisdictional Issues

The Federal Government feels that it is under some constitutional restraint. (See Appendix F.1 *The Constitutional Framework* for a general discussion of the distribution of legislative jurisdiction with respect to non-medical drug use.) It clearly has the jurisdiction, in virtue of its criminal law power, to restrict the availability of harmful substances and to impose conditions upon their use, but it does not have a general jurisdiction to establish and regulate treatment facilities outside of the criminal law system and other specific areas of federal constitutional responsibility, such as the armed forces, immigration, and Indian affairs. As indicated in Appendix F.1, the general jurisdiction with respect to health services is provincial, and there is a serious doubt, for reasons of constitutional policy, whether the Federal Government could successfully invoke its general power under the "Peace, Order

and Good Government" clause as a basis for the delivery of treatment services in the field of non-medical drug use, even if it were politically prepared to do so. In the present constitutional climate of Canada, with the strong provincial insistence on jurisdiction with respect to matters of health and social welfare, it is unlikely that such an initiative would appear desirable or feasible. The provision of facilities for the treatment of opiate dependence and other adverse effects of non-medical drug use would involve an incursion of a comprehensive nature into the complex field of health and social welfare services. The proper treatment of heroin dependence involves much more than simply making drugs available. It involves a whole network of services, including institutions and professional personnel over which the provinces have regulatory jurisdiction.

The Federal Government could consider providing the necessary facilities to make methadone available under properly controlled conditions. Its right to impose various conditions upon the distribution of dangerous substances would appear to include the right to provide that such substances will not be available except through government owned or sponsored facilities. But there is a difference between mere distribution and treatment, which is what is involved in the use of methadone in maintenance or withdrawal therapy. The latter is not simply the distribution of a dangerous substance but the delivery of a health service.

Another important consideration in connection with a federal attempt to regulate the use of a drug by physicians is that while the Federal Government may validly impose conditions upon the use of a drug, the general jurisdiction to regulate the practice of medicine is provincial. In regulating the distribution of drugs by physicians the Federal Government does come very close at times to regulation of the practice of medicine. It is one thing, from a policy point of view, to say that a particular drug shall not be available for use by any physician, as in the case of thalidomide. It is another thing to say, as in the case of methadone, that only physicians specially authorized by the Federal Government shall have a right to use it. When the Federal Government imposes conditions upon a physician's right to use a certain drug, in the exercise of its jurisdiction to restrict the availability of harmful substances, it does not usurp the provincial jurisdiction to regulate the practice of medicine.[6] But the control contemplated by the new federal methadone regulations involves a judgment on the professional competence and responsibility of individual physicians. Moreover, the federal approval of specialized treatment units and the authorization of physicians necessarily involve a consideration of the manner in which methadone is to be used as a matter of good medical practice. (The Guidelines referred to in Appendix G.1 contained clear suggestions in this regard.)

Nonetheless, once it is conceded, as it must be, that the Federal Government has jurisdiction to prescribe the conditions upon which a certain drug may be made available for use by physicians, there would seem to be no limit to the nature of the conditions that can be imposed so long as they are genu-

inely related to a concern with the availability and use of a dangerous substance and not to the assumption of a regulatory jurisdiction over a course of treatment in the interests of a certain theory of treatment efficacy.

Of course, there may be a close relationship in practice between the two concerns—protection of the patient from harm and treatment efficacy—and it may often be difficult, if not impossible, to draw the line between them. Clearly, a requirement that there be proof of opiate dependence before methadone is used relates to a *bona fide* concern for the harm that may be caused by a dangerous substance. On the other hand, a requirement that there be certain ancillary services for purposes of follow-up and social rehabilitation may appear to go beyond issues of safety into questions of treatment efficacy. Yet even such questions can be seen as part of a general concern to limit the use of methadone to the extent that is absolutely necessary. Thus there would not appear to be a serious basis for challenging federal jurisdiction to enter into details of treatment as conditions upon which a particular drug will be made available.

The decision to pass upon the qualifications of individual physicians to administer methadone could involve the Federal Government in some awkwardness with the medical profession and the provincial governing bodies. In fact, as indicated in Appendix G.1 *Methadone Control Program of the Government of Canada,* the Drug Advisory Bureau consults with relevant provincial bodies, the Methadone Advisory Committee is representative of the interests of the medical profession, and the Department had not, as of November 1972, refused any application for authorization, although some temporary authorizations were withdrawn during the summer of 1972 by agreement between the Bureau and physicians. The federal policy appears to be to encourage the adoption of satisfactory standards and practices but to refuse or withdraw the right to use methadone only in cases of clear abuse, and even then, the withdrawal of the right has been brought about by negotiation. This reflects the concern which the federal authorities feel about effective interference with the right to practice medicine, even as a necessary incident of their clear jurisdiction to control the availability of harmful substances. The monitoring of methadone prescription by the Bureau of Dangerous Drugs is only calculated to detect cases of extreme abuse. It cannot monitor good medical practice in the use of methadone. If there were to be a more confident and rigourous evaluation of professional competence or experience in the use of methadone, to meet generally accepted criteria of good medical practice in this area, it would have to be exercised by provincial authorities, or at least by some federal-provincial cooperative mechanism.

Commentary on the Federal Control Program

As indicated in Appendix G.1, the federal methadone control program started out with a firm affirmation of and commitment to the requirement of

affiliation with a specialized treatment unit, but it has had to adjust, at least as an interim measure, to certain operational realities.

As we say above, there is no magic in a requirement of affiliation with an approved treatment unit or program. It is a means, however, of assuring good medical practice in the use of methadone since such practice cannot be assured simply by a review of prescription records. This was the thinking behind the Commission's recommendation of the requirement of affiliation in its *Treatment Report,* and presumably it was also the thinking behind the recommendations of the Special Joint Committee, which expressed the view that methadone therapy should only be carried out as a general rule within specialized treatment programs. (See Appendix G.1.) **Physicians who are not affiliated with such a program may be capable of good medical practice in the use of methadone, but in our opinion they are not adequately equipped for such purpose unless they have access to the necessary laboratory facilities to confirm dependence and monitor illicit drug use, and have the necessary training and specialized clinical experience and also probably, unless they have the support of the necessary ancillary services to supervise and assist the social rehabilitation of the patient.** Specialized programs may also lack these facilities but they are more likely to be able to provide for them. Such programs may also be guilty of poor medical practice in the use of methadone, but with their specialized personnel and facilities they should be less exposed to this possibility.

One thing that emerges very clearly from a consideration of our experience with treatment so far is the necessity of adequate after-care and follow-up to assist the patient to establish a new pattern of life. Methadone maintenance which consists simply of the daily dispensing of drugs may do some good but it is not sufficient. The individual must find satisfactory employment and establish new relationships. Proper treatment requires follow-up over a long period by people who care and who can devote the necessary effort to solving the practical problems involved in the restructuring of a life. Virtually all treatment today suffers fom a lack of sufficient follow-up with the problems of social reintegration. There is a great need for enough trained personnel to assist in this task and for a receptive attitude on the part of society.

There is some contention that methadone maintenance will be effective even without ancillary services if the goal is simply to remove a person from dependence on the illicit market and drug-related crime, but help in putting together the elements of a stable life would seem to be essential to ensure against relapse into the life of the criminal addict through attraction of the old associations, if not the illicit drug, and also to lay the basis for the possibility of cure.

In addition to these ancillary services directed to social rehabilitation, there is also a need for a research and evaluation component in methadone programs. We are in need of further research information in numerous areas,

such as the determination of optimal doses, maintenance side effects (including changes in intellectual functioning and psychomotor skills), interactions with other drugs, and the treatment potential of longer-acting methadone derivatives. At least some of this research would best be conducted in a clinical setting, or in a clinically-associated experimental program. Facilities for adequate research and evaluation are most likely to be available to an organized and properly equipped clinical program.

Despite differences in opinion on the necessity or even the desirability of urinalysis to confirm dependence and to monitor illicit drug use, we are still firmly of the view that it is essenial in order to minimize the risks of creating dependence where none yet exists and of aggravating opiate dependence by allowing methadone to be a convenient adjunct to heroin dependence. Once again, it appears to be clear that many physicians are unlikely to have immediate access to the necessary laboratory facilities unless they are affiliated with an accredited treatment program. Although the omission of a requirement of urinalysis by the Federal Government in the implementation of its program may have seemed justified on grounds of temporary practical necessity—that an insistence on it would severely reduce the availability of methadone maintenance at the present time—we do not think it can be justified as a permanent policy. It is noteworthy that the most experienced special programs in the country regard urinalysis as essential.

Furthermore, as noted in Appendix A.2 *Opiate Narcotics and Their Effects,* extremely simple techniques are available for the preliminary extraction of urine on ion-exchange paper, which obviates the need for immediate access to chemical analysis facilities. After the extraction (which requires only the most rudimentary personnel training and supplies) the dried paper can be taken or mailed to a central laboratory for routine urinalysis. The transportation of actual urine samples is totally unnecessary. If medical support staff were instructed in the application of this simple procedure, and appropriate central analytic services were provided (either on a provincial or federal basis), urinalysis would not present a significant practical problem for the individual clinician, regardless of his location and affiliations.

In many methadone maintenance programs in North America, patients are required to urinate while under direct observation. We do not feel that this humiliating practice is appropriate or necessary. Accurate urine temperature measures, taken immediately after urination in privacy, would likely detect any attempt by the patient to substitute another sample for his own, and such measures should be taken routinely.

To reduce the dangers of "prescription shopping" and diversion to an illicit market, as well as eliminating the opportunity for the patient to reduce or avoid the prescribed dose (e.g., to facilitate the effects of illicit heroin use), the administration of methadone should be under supervision.

For those cases where it is necessary because of distance or other compelling reason to provide the patient with a prescription, pharmacists should

be requested to directly supervise its administration on the premises. Where, in exceptional cases it is necessary to send a supply to a remote location, such as a logging camp, a responsible person in such location should be asked to directly supervise administration. There would undoubtedly be some practical problems to be solved before a decentralized pharmacy-based methadone administration system could be put into general operation. Some pharmacists might object to such a program, and may prefer not to be involved in routine supervision of methadone administration to heroin addicts in their stores. If daily urine samples were required of patients, as well as daily supervised drug administration, it would be greatly advantageous to have both functions performed at the same location. Consequently, in order for a pharmacy-based distribution system to be an improvement on the central clinic approach, it would also be necessary for the pharmacist to be responsible for obtaining urine samples on the premises. This added responsibility could conceivably lead to significant staff and space problems in certain pharmacies.

There are clear indications that the potential problems inherent in a pharmacy-based methadone administration and urine collection system are not insurmountable, and that solutions can often be facilitated at the local community level. Such a system has been in practice on a small scale in Edmonton for over a year. This program, involving six volunteer pharmacies, is no longer considered a temporary or experimental treatment component, but a regular part of the services available in that community. All patients must initially attend the central clinic routinely, but if sufficient progress is demonstrated, certain individuals are allowed the option of obtaining and consuming methadone under supervision at certain designated local pharmacies. In some instances, pharmacists take urine samples, as well. Other similar programs are in operation in the United States.

It would appear that generally where methadone is administered for maintenance rather than withdrawal therapy it should be administered at sufficiently high doses to block the effects of heroin; otherwise it may simply make it easier for the opiate dependent to maintain his habit in the illicit market by supplementing his supply of heroin and removing some of the pressure of "hustling". Erratic dose administration may aggravate a problem of opiate dependence by facilitating rather than eliminating the continued use of heroin. However, some flexibility should remain in the selection of dose at the clinical level, since we do not yet have adequate information for establishing the optimal dose to be employed. There is currently considerable controversy in this area, and further research is clearly needed. (See Appendix A.2 *Opiate Narcotics and Their Effects*, for a summary of methadone pharmacology.)

Longer acting derivatives of methadone, which extend the "coverage" to two days or more, are currently being developed and tested. Such compounds would significantly reduce the expense and inconvenience of super-

vised administration. However, certain problems remain to be solved, and it seems unlikely that methadone itself will be replaced in routine maintenance in the immediate future.

Responsibility for Establishing the Necessary Treatment Capacity

Since the introduction of the Federal Government's Methadone Control Program there has been a significant increase in the number of organized methadone treatment programs (see Appendix G.1 *Methadone Control Program of the Government of Canada*), but there does not appear to be sufficient capacity, with suitable controls, to meet the potential demand for such treatment in the country (see Appendix H *Treatment Capacity in the Provinces*).

It is impossible to determine from the records of the Drug Advisory Bureau whether there is sufficient capacity in the country as a whole to meet the real need for methadone maintenance. To do this it would be necessary to know the potential capacity of each approved treatment unit, as well as the capacity of authorized physicians, in relation to the estimated population of opiate dependents in their area. There are too many unknowns. Methadone programs in Canada do not maintain waiting lists as they do in the United States. They do not report the extent to which they are obliged to refuse applicants who meet their criteria for admission. It is a safe assumption, however, that the potential demand for methadone maintenance by qualified applicants exceeds by several times the number who are presently being treated in this way.

Apart from the question of capacity, however, we are obviously not yet beginning to approach the potential for the *use* of methadone maintenance in the management of opiate dependence. Opinions vary as to the proportion of the opiate dependent population that could be effectively treated with methadone maintenance. Some are considerably more optimistic than others. As indicated earlier in this Section a conservative estimate in the United States is that about 40 per cent of heroin dependents who are not incarcerated or in other forms of treatment could be persuaded to respond to methadone maintenance programs with reasonably strict controls.[7] There appears to be a general consensus that methadone maintenance is likely to be acceptable to four or five times as many heroin dependents as therapeutic communities. It is estimated that at the end of 1971 in the United States there were 40,000 heroin dependents in methadone maintenance programs and 8,000 in therapeutic communities out of a total estimated population of 375,000 opiate dependents.[8]

In Canada, we estimate that there are less than 1,500 opiate dependents in methadone maintenance. The capacity of all programs is severely restricted by limitations of staff and financial resources. The two oldest and most experienced programs in the country, the Narcotic Addiction Foundation of

British Columbia and the Addiction Research Foundation in Ontario, accommodate between them not more than 500 regular patients on methadone maintenance.

We have an impression that there is not yet a firm, governmental commitment to development of the capacity required to meet the potential demand for methadone maintenance in Canada. This lack of initiative and support to some extent reflects the misgivings which are still felt by many treatment professionals concerning this form of opiate dependence management—misgivings which have been referred to above—but it would also appear to reflect concerns of a jurisdictional and financial nature.

The Federal Government takes the position that it cannot assume the initiative for the creation of treatment facilities; that this is a matter of provincial responsibility. It can, however, assume a good deal of initiative, in consultation with the provinces, to encourage the development of new facilities and to participate in the financing of them. The provinces, on the whole, appear somewhat apathetic about establishing the necessary facilities for the treatment of drug dependence. This can be explained in part by uncertainty as to whether there is any form of treatment worth supporting. It is no doubt also due in substantial measure to concern about the cost.

It might appear more prudent to take the view that we should still regard this form of treatment as in the experimental stage, but there is a real danger in the present lack of certainty and full-bodied commitment. We should always adopt an experimental approach to methadone maintenance (as to other forms of treatment), in the sense that it should be accompanied by research and evaluation, but there should be a firm commitment now to make it as fully available as possible under proper controls. There is no virtue in a half-hearted policy. Such a policy may rescue a small percentage of opiate dependents from the illicit market but it cannot have a significant impact on the overall problem. So long as we are administering methadone to hundreds of patients we have passed the experimental or tentative stage. There is no good reason not to go all the way. There are definite dangers in a policy of legal availability of opiate narcotics, but once embarked upon it we should do what is necessary to obtain the maximum advantage from it. We should create the capacity and the outreach that will draw as many heroin dependent persons into it as possible.

If methadone maintenance is to be made available under properly controlled conditions and at a reasonable cost to the addict it must receive the financial support of government. The provincial governments have the primary responsibility for assuring these conditions of availability, although they may well call on the Federal Government for assistance. But someone has to assume responsibility for seeing that there is a proper program wherever it is needed.

We believe that the necessary government initiative must be taken to make it possible for all physicians authorized to use methadone to be

affiliated with an organized program having the necessary specialized staff, laboratory equipment and ancillary services. We see grave risks in allowing the development of methadone maintenance through administration by private physicians without a control system based on affiliation with clinics that are adequately staffed and equipped. The experience of other countries, such as Great Britain and Sweden, is that if maintenance is left to private physicians there is a serious danger of abuses resulting in epidemic spread of use. **We therefore strongly recommend that there be the necessary federal-provincial cooperation to establish the clinics or treatment units required to assure that methadone maintenance can be made available under properly controlled conditions to as many heroin addicts in Canada as possible. What is required is a national system of clinics or treatment units with a coordinated approach to monitoring and information exchange to prevent "prescription shopping" or "double doctoring".**

Despite all efforts it may not be reasonably possible because of the widespread areas which must be served to require affiliation of all physicians, but at the very least the government should require evidence, as a condition of authorization, that a physician has made reasonable efforts to establish affiliation or that it is practically impossible for him to do so.

Monitoring of Methadone Patients

Certain practical, ethical and legal questions arise in considering the mechanics of an effective national methadone monitoring system. It is well known that many heroin users are unwilling to identify themselves to medical authorities for fear of subsequent legal repercussions. Consequently, a significant number of such individuals register for methadone maintenance under pseudonyms; this practice is acknowledged by many clinicians involved in methadone maintenance and is usually not considered cause for serious concern from the treatment standpoint. Many clinicians feel that stressing positive personal identification early in treatment, or requiring it as a prerequisite to acceptance in a program, often impedes therapeutic progress and would likely deter many heroin users from accepting methadone maintenance. However, effective monitoring obviously requires an accurate system of identification to prevent an individual from obtaining methadone from more than one source.

Prescription and other authorized use of methadone is currently monitored by the Bureau of Dangerous Drugs, and, consequently, associated information is potentially available to law enforcement authorities. **We feel that in light of the incriminating nature of the personal information collection inherent in the methadone monitoring process, such data should not be accessible to law enforcement officials unless some specific infraction of the methadone control regulations is involved. Such data should not be used for identifying, for law enforcement purposes, persons who are or have been**

users of illegal drugs, such as heroin. We feel that methadone prescription monitoring must be conducted by a regulatory body which is separate from law enforcement. If some infraction of prescription or program registration regulations is detected, the monitoring body should have the option of rectifying the problem through treatment channels, if strict legal action is not considered by them to be necessary or appropriate. Furthermore, pharmacists should be prohibited from releasing identifying information to anyone but the designated monitoring authorities. The responsibility for initial identification of the patient must rest with the medical authorities conducting the clinical program. As we have suggested elsewhere in this report, effective monitoring of medical use of all prescription drugs would be facilitated by the inclusion of the patient's social insurance number and the physician's registration number on the prescription.

The United States Special Action Office for Drug Abuse Prevention (SAODAP) has proposed a "Unique Identification System", based on a computerized footprint analysis and centralized data bank, which allows positive detection of duplicate registration in methadone maintenance programs without personal identification of the patient. Each person, when he enters a methadone program, provides a footprint sample, and is assigned an arbitrary identification number. Registration in different programs is detected if a second footprint sample from the same individual is submitted to the central clearinghouse. Individuals are never personally identified in these government records. This system is currently on limited experimental trial in Washington, D.C. and some surrounding areas, and is reportedly functioning satisfactorily. We do not recommend this system for Canada at this time, but do suggest that the development of the program in the U.S. be carefully observed. This system should be reconsidered at a later date if there is sufficient change in the present heroin and methadone situation in this country.

Relationship of Methadone Maintenance to Other Treatment Programs

Concern for the individual—and for the effect on others of a steadily increasing opiate-dependent population—demands that we persist with our efforts to find effective means of achieving cure. Most observers feel that the path to success lies along the lines of a multi-modal approach in which methadone maintenance is only one of several approaches. In this multi-modal approach, designed to help the patient to find the way that is most congenial to him, methadone maintenance can play a stabilizing and transitional role. It can take the pressure and stress of living in the illicit market off the drug user, and give him the opportunity to begin to try to reorganize his life, to find work, to build new relationships, and generally to recover a new sense of self-worth. Thus stabilized and supported, the individual may then be more amenable to other approaches directed to helping him to give up drug

altogether. Many will argue that it is illusory to think you can move towards a drug-free goal by starting off with methadone maintenance since this reinforces the reliance on drugs. So long as the individual can obtain the drug at little inconvenience and no cost he is not going to think seriously about giving up drugs. The answer to this may be that the individual cannot have very promising prospects for cure until some relief of stress and some relative stability have been introduced into his life.

HEROIN MAINTENANCE

If methadone maintenance is to be generally available, the question that inevitably arises is, why not heroin maintenance? In approving methadone maintenance we have approved a policy of legal availability of an opiate narcotic for maintenance purposes. Why not, then, heroin maintenance as well?

There are reasons why methadone maintenance is preferred to heroin maintenance: the fact that it is longer-acting, produces less euphoria and is effective when administered orally. All of these are thought to make it more compatible with normal functioning. It has not been proved in controlled tests that persons can function more effectively on oral methadone than on intravenous heroin, but this is the assumption of those who favour methadone, and it is a reasonable inference from the fact that methadone requires less frequent administration and produces less peak psychotropic effect.

Many physicians are strongly opposed to the intravenous administration of a drug if it can be avoided because it is regarded as a potentially dangerous procedure. Opponents of heroin maintenance point out that after a time it can become very difficult to find suitable places in the body for intravenous administration. They also stress the difficulty of establishing and stabilizing the dose level required to keep the dependent person out of the illicit market. Tolerance develops to heroin much more readily than to methadone. Finally, there is the difficulty of detecting the illicit use of heroin under heroin maintenance.

There can be little doubt, however, that fewer opiate dependents can be reached with methadone maintenance than could be reached with heroin maintenance. An American authority has estimated that about twice as many would respond to heroin maintenance.[1]

While the movement in Great Britain has been away from heroin maintenance towards methadone maintenance (although the extent to which methadone is administered intravenously removes much of the significance of the change), heroin maintenance is still used to attract into treatment opiate-dependent persons who will not accept methadone. (See Appendix G.2 *Some Aspects of the "British System".*) The reasoning is that once the clinics have made effective contact with such persons, they can be more easily

persuaded to go onto methadone, or even to attempt abstinence. This was the reasoning behind our recommendation in the *Treatment Report* that heroin maintenance be permitted on a controlled, experimental basis, as a treatment adjunct to be used in exceptional cases. After expressing certain misgivings and degrees of support for this proposal among the members of the Commission, we said: "On balance, however, we believe that the availability of heroin maintenance will increase the capacity of the overall treatment process to win patients from the illicit market and for this reason it is a justified experiment." [P. 22.]

The Canadian Medical Association and the Federal Government expressed themselves as opposed to the proposal, although their rejection was not accompanied by any particular attempt to articulate reasons. This deep-seated, and almost instinctive, opposition becomes increasingly difficult to reconcile with the growing official commitment to the alternative policy of legal availability of opiate narcotics in the form of methadone maintenance. It may be that one of the unspoken reasons for opposition to the proposal of a controlled experiment with heroin maintenance is that it will attract American addicts into Canada, in much the same way as Canadian addicts were attracted to Great Britain by the "British system" in the 1960s. This need not be the case if suitable controls are exercised. With the greatest respect for those who rejected our proposal we reaffirm our belief that it would be a useful experiment under the controlled condition specified in the *Treatment Report* as follows:

> As in the case of methadone maintenance we believe that heroin should be administered only by physicians accredited to specially authorized treatment centres, and then only after a panel of three physicians in the centre have approved such administration. It should be administered on the premises, and the patient should be required to remain on the premises until he is judged fit to leave. [P. 21.]

A similar experiment in heroin maintenance has been advocated by the Vera Institute of Justice in New York. The following are selected passages from a summary of its proposal entitled "Heroin Research and Treatment Program" (1972):

> . . . the proposed experimental program would test a new treatment approach for addicts who have failed on methadone . . . .
>
> . . . It would not involve prolonged heroin maintenance. What is being proposed is an experiment where heroin would be used for limited periods of time in order to attract, retain and stabilize patients who would subsequently be transferred within one year to treatment such as methadone maintenance, abstinence, or a narcotic antagonist (naloxone or cyclazocine) . . . .
>
> . . . In contrast to the British system, all heroin used in the program would be administered within the clinic under close supervision to prevent its sale or diversion . . . .[8]

One of the research objectives of the program would be "to compare the effectiveness of a treatment program that employs heroin (in combination with injectible methadone) as a treatment drug with a methadone maintenance program".[3] Up to now there have not been any published studies in Great Britain (where there is a natural laboratory for such purposes) of the comparative effects of heroin and methadone maintenance on the capacity to function in a socially acceptable manner, although there are some studies presently in progress. The reason for the lack of such studies in Great Britain may well be the heavy reliance on intravenous rather than oral methadone.

At the time of writing this report the Vera Institute of Justice had not yet been able to obtain the necessary approvals for its proposed experiment from federal and state regulatory agencies.

For the present, our recommendation is not that heroin maintenance be made as generally available as methadone maintenance, but that it be something which 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.

NOTES

Methadone Maintenance

1. M. Krakowski and R. G. Smart, "Report on the Evaluation of the Narcotic Addiction Unit's Methadone Maintenance Treatment Program," Unpublished manuscript, Project C 214, Substudy No. 492, Addiction Research Foundation, Toronto, 1972, p. 4.
2. W. H. McGlothlin, U. C. Tabbush, C. D. Chambers and K. Jamison, "Alternative Approaches to Opiate Addiction Control: Costs, Benefits and Potential," Paper prepared for the U.S. Department of Justice, Bureau of Narcotics and Dangerous Drugs, February 1972, mimeographed, p. 21.
3. Ibid., p. 40. See also Section X *The Therapeutic Community.*
4. E. M. Brecher & the Editors of Consumer Reports, *Licit and Illicit Drugs: The Consumers Union Report on Narcotics, Stimulants, Depressants, Inhalants, Hallucinogens, and Marijuana—Including Caffeine, Nicotine, and Alcohol* (Boston: Little, Brown, 1972), p. 78.
5. See note 3 above.
6. *R. v. Gordon,* 49 C.C.C. 272.
7. See note 2 above.
8. McGlothlin et al., "Alternative Approaches to Opiate Addiction Control," pp. 5–6.

Heroin Maintenance

1. W. H. McGlothlin, U. C. Tabbush, C. D. Chambers and K. Jamison, "Alternative Approaches to Opiate Addiction Control: Costs, Benefits and Potential," Paper prepared for the U.S. Department of Justice, Bureau of Narcotics and Dangerous Drugs, February 1972, p. 34.
2. Vera Institute of Justice, "Heroin Research and Treatment Program," New York, May 1972, (mimeographed), pp. 1–2.
3. Ibid., p. 5.

Section X

The Therapeutic Community

In discussing the role of methadone maintenance, reference has been made to the therapeutic community as the approach which stands most strongly today for treatment with a drug-free goal. Because of the importance which the therapeutic community has assumed in the debate concerning the proper approach to treatment, some further observations on this approach are appropriate. There have been, and there continue to be, strong differences of view between those who favour the therapeutic community and those who favour other approaches to treatment or management, in particular, methadone maintenance.

We examined the therapeutic community in some detail in our *Treatment Report*, and while we indicated certain limitations and cited some critical appraisal, we came, generally speaking, to favourable conclusions. We recommended that the Federal Government encourage the development of this form of treatment as "*one option available in any national multi-modal drug-dependence program*". We did not, as some have suggested, take the view that the therapeutic community was the preferred form of treatment in all cases of drug dependence. In the case of opiate dependence we expressed the view that methadone maintenance "provides to date the cheapest and most effective weapon we have for dealing with large-scale heroin dependence". In the case of dependence on the intravenous use of amphetamine or 'speed', however, we expressed the opinion that "*Small therapeutic communities, restricted to speed users, offer the best hope for successful treatment and rehabilitation*".

Since our *Treatment Report* there have been some critical appraisals of the therapeutic community that have tended to emphasize the limited nature of its role in the treatment of drug dependence. In a report prepared for the Bureau of Narcotics and Dangerous Drugs of the U.S. Department of Justice, McGlothlin and his associates stated that:

> Even if therapeutic communities were made widely available, admission requirements reduced, and no competing treatments existed, it is doubtful if more than 10 per cent of the addict population could be maintained in this modality.[1]

The Consumers Union report on *Licit and Illicit Drugs* was even more critical, suggesting that support for the therapeutic community had been positively misleading, and had given people false expectations as to the possibilities of cure.[2] The Ford Foundation report *Dealing with Drug Abuse* suggested that "it would be surprising if careful evaluation showed that more than five per cent of those who come into contact with the [therapeutic community] are enabled to lead a reasonably drug-free, socially productive life."[3] As so often in these areas of uncertainty and controversy, there has been something of action and reaction.

Everyone is agreed that a major difficulty in coming to sound conclusions about the therapeutic community is that there is very little reliable data on which to base evaluation. Generally speaking, therapeutic communities have not encouraged such evaluation. They tend, understandably enough, to emphasize the total numbers who remain drug-free for a reasonable period of time, rather than the comparatively small proportion of the drug-dependent population who are attracted to the therapeutic community in the first instance and the large proportion of those who drop out of the program or "split" after a short time. In a field in which it is so difficult to effect cure, any cures are noteworthy and welcome, whatever their number. Critics of the therapeutic community are concerned, however, about its relative yield in relation to its cost. Because of the low numbers involved, particularly the number of those who "graduate", and the need for residential facilities, the therapeutic community is an expensive form of treatment, although it is less expensive than incarceration or hospitalization. Its cost does, however, invite a much closer look at its efficacy.

While we recommend continued support for the therapeutic community as one alternative in a multi-modal approach to treatment, we do so with recognition of its relatively limited role but also in the conviction that it is our duty, as a society, to make the most effective means of pursuing the difficult goal of abstinence sufficiently accessible to those who wish to pursue it. Obviously, it is more difficult and costly to pursue the goal of abstinence than it is to apply the policy of opiate maintenance. But we must continue to encourage the goal of abstinence and to hold it out as a real possibility, and for this it is necessary to maintain sufficient therapeutic community facilities. It is not an either-or proposition; we must have both opiate maintenance and therapeutic community. (Moreover, as we have said elsewhere, the therapeutic community does not exclude some acceptance of methadone maintenance.)

A report on "414", a residential therapeutic community run by the Addiction Research Foundation in Ontario, suggests that experience with the therapeutic community as a form of treatment of the adolescent user of 'speed' has been somewhat discouraging.[4] The report indicates that about 85 per cent of those who enter drop out or 'split' before the completion of the program, and that because of the restlessness and desire of adolescent

residents to return to the outside world it is very difficult to implement the idea of a peer controlled therapeutic community, which is one of the main characteristics of the Synanon model. Indeed, there may be some conflict between the goal of re-entry into society, recommended in our *Treatment Report* and now more and more widely accepted by therapeutic communities and funding agencies, and the goal of maintaining some continuity of leadership by experienced members of the community. The report on "414" also stresses the phenomenon of "burn out" which is discussed in Appendix M *Innovative Services*. There is no doubt that constant contact with young persons dependent on 'speed' is an exhausting experience, and there must be realistic assumptions concerning the need for a regular renewal of staff after fairly short periods. The report suggests that the functional life of a staff member in such a community is between twelve and eighteen months, and that a staff member should not be expected to commit himself for much longer than a year.

The report on "414" contains this sombre conclusion concerning the efficacy of the therapeutic community in the treatment of the adolescent abusers of amphetamines:

> Based on what we already know, however, we have severe reservations about whether therapeutic communities are *the* answer for effective treatment of this population. We find the financial costs to be high, and the human costs in terms of staff "burning out" to be considerable. The high rates of splitting especially after very short periods of time in the program contribute heavily to costs and make it unlikely that significant benefits are derived by these residents. The greatest positive changes in residents, we expect, will be found among graduates who comprise less than 15 per cent of persons who enter the program. (And, it is not always clear that many of these persons would not have significantly improved had it not been for their experience at "414". Our follow-up study should help clarify this point.) [Pp. 20-21.]

Our comment on these observations is that we are not surprised by the difficulties that have been encountered. The question is whether we have anything better for the intravenous user of amphetamine or 'speed'. The truth is that this form of drug dependence appears to be the most difficult to treat or manage, since we do not have an acceptable form of maintenance for amphetamine dependence nor, as yet, a fully satisfactory and operational antagonist. If the therapeutic community cannot succeed then we frankly do not know what can. We suspect that the best results are still to be obtained by a one-to-one relationship with an inspirational human being, where that can be developed. Meanwhile, we believe that we should continue to apply the technique of the therapeutic community as effectively as possible, accepting the fact that the results will continue to be fairly disappointing. Once again, we must offer the opportunity, for those who are prepared to take it, to escape from amphetamine dependence.

There has been a considerable increase in the number of therapeutic communities in Canada in the last year or so. Appendix H on *Treatment Capacity in the Provinces* contains a list of some 28 therapeutic communities, with a total residential capacity of slightly over 600, as of February 1973. Many of these have received financial assistance from the Federal Government through the Non-Medical Use of Drugs Directorate. At the time of our survey many of these communities were operating under capacity. The total number of persons in residence was under 400. Thus, it is far from clear how much more capacity of this kind, if any, is required in Canada to meet the potential for the therapeutic community approach to treatment. As we suggest, however, in Section VIII *General Observations Concerning Treatment,* this operation at apparent under-capacity may be due in many cases, not to a lack of need or demand for the therapeutic community form of treatment, but to an insufficiency of qualified staff.

There is now recognition of the necessity of reintegration into the general community and a greater emphasis, as there must be, on the need for evaluation of results. Such evaluation calls for follow-up on graduates in the general community for a period of several months or even years to assess their performance in terms of the goals of abstinence from harmful drug use and social rehabilitation. The overall goal is sometimes described as the development of a "positive life style" reflected in abstinence from dependence-producing drug use and criminal activity, stablized accommodation, school attendance or stable employment, and satisfactory personal and social relationships. Such evaluation will always involve a large measure of subjective judgment, but the obligation to evaluate and to render some accounting will encourage the development of a self-critical attitude and the disposition to make necessary changes in approach from time to time. It is doubtful if there can ever be satisfactory comparative evaluation of the results achieved by the therapeutic community and other forms of treatment or management. Apart from a difference of goals in many cases, there is the difficulty of establishing suitably matched control groups. We simply have to accept the fact that the therapeutic community is a form of treatment which offers some reasonable hope for the person who seeks to become abstinent, and as such deserves its place in a multi-modal treatment program. At the same time, we must be mindful of its relative cost in our total allocation of financial resources for the treatment or management of drug dependence.

NOTES

1. W. H. McGlothlin, U. C. Tabbush, C. D. Chambers and K. Jamison, "Alternative Approaches to Opiate Addiction Control: Costs, Benefits and Potential," Paper prepared for the U.S. Department of Justice, Bureau of Narcotics and Dangerous Drugs, February 1972, mimeographed, p. 40.
2. E. M. Brecher & the Editors of Consumer Reports, *Licit and Illicit Drugs: The Consumers Union Report on Narcotics, Stimulants, Depressants, Inhalants, Hallucinogens, and Marijuana—Including Caffeine, Nicotine, and Alcohol* (Boston: Little, Brown, 1972), p. 82.
3. P. M. Wald & P. B. Hutt, *Dealing with Drug Abuse: A Report to the Ford Foundation* (New York: Praeger, 1972), p. 195. Further, Smith and Gay in *"It's so good don't even try it once"* observed that:

   > Out of every hundred who seek help in a "[therapeutic] community" program, more than 90 are rejected at the door or leave the program after only a few weeks. Of those who remain, 80-90 per cent remain heroin-free and crime-free for at least one year. [Englewood Cliffs, N.J.: Prentice-Hall, 1972, p. 10.]

4. R. C. Brook & P. C. Whitehead, "'414': A Therapeutic Community for the Treatment of Adolescent Amphetamine Abusers," Unpublished manuscript, London, Ontario, January 1973.

Section XI

Social Rehabilitation

In previous sections of this report and in several of the Appendices we have referred to the importance of social rehabilitation or reintegration in the treatment and control of drug dependence. Its importance is particularly reflected in the experience with parole (see Appendix I *Treatment of Opiate Dependents in Federal Penitentiaries in Canada* and Appendix K *Parole of Heroin Dependents in Canada*), although it is also important in voluntary programs of treatment. It will be recalled that one of the reasons for the failure of the treatment program in the American hospitals at Lexington and Fort Worth was the absence of follow-up in the community. The role played in reinforcing drug dependence by the lack of the required ability or opportunity to obtain regular employment and to establish normal relations, as well as the attraction of the associations and style of life in the drug subculture is emphasized in several places in the report. (See, for example, Appendix C.4 *Patterns of Use*, "Termination of Use".) It would be difficult to exaggerate the importance of this problem.

Treatment and rehabilitation are overlapping processes. As treatment proceeds rehabilitation should be taking place. But the essence of rehabilitation is reintegration into the community—the restructuring of a life. Whether the goal of the treatment be abstinence or some form of management, as with maintenance or the use of an antagonist, its essential purpose is to bring the drug use under control. If this achievement is to have enduring effect there must also be a new basis for life which may strengthen the person's capacity to resist the temptations to engage in certain forms of drug use.

The drug-dependent person is frequently lacking not only in the self-confidence but in the capacity to obtain and hold regular employment and to establish and sustain normal personal and social relationships. He or she needs a lot of encouragement and assistance in these efforts. Every one of them can appear as an enormous and insurmountable challenge.

Helping a person in these circumstances requires a great deal of time, patience and energy. Frequently what the person needs most is someone to talk to who can be available for moral support at the right time. There is

also a need of practical assistance in finding suitable employment and accommodation and new relationships and interests in life.

We have stressed the need for more probation and parole officers to assist with this work. There is also a need in established treatment facilities for more trained personnel to assist with social rehabilitation. It has been suggested that the effectiveness of treatment programs in stimulating the motivation of patients depends in a considerable measure on the extent to which they are themselves able to provide assistance with these practical problems.[1] Finally, there is a large field of action here for volunteer men and women who can provide companionship, moral support and practical help for persons seeking to break from the old associations which are so closely identified with the drug dependence itself.

The number of cases to which any worker can do justice is very limited—perhaps as few as half a dozen. This gives some idea of the numbers required for the work of social rehabilitation. The numbers required cannot possibly be recruited and maintained on a regular professional basis. They must be supplemented by a large pool of voluntary effort, with some assistance in the way of minimal training from established agencies.

Persons involved in the work of social rehabilitation, whether professionals or laymen, require a good understanding of what they face, of the nature of drug dependence and the difficulties the drug-dependent person encounters in the process of rehabilitation. It is the kind of knowledge that will keep them from becoming too easily discouraged. They must be persons of optimism and faith and great patience. While being sympathetic and good listeners, they must be fundamentally "doers"—persons who are good at getting out and about and getting practical things done. Too much time can be spent examining the past in a manner that still further undermines the drug-dependent person's sense of personal adequacy. What is required is to increase the person's sense of self-confidence by success in some practical undertakings and by increased involvement with other people in a socially acceptable pattern of life. The goal of rehabilitation is an enhanced sense of personal dignity and worth and satisfactions in life which fill the need for which the drug and the former associations were sought.

NOTE

1. Edward C. Senay and Matthew Wright (Illinois Drug Abuse Program, Museum of Science & Industry, Chicago), "The Human Needs Approach to Treatment of Drug Dependence," Paper presented at the 30th International Congress on Alcoholism and Drug Dependence, Amsterdam, September 1972.

Part Four

Non-Coercive Influences

Section XII

Research and Information

INTRODUCTION

The primary role of science in the area of the non-medical use of drugs is to provide information to better enable individuals and society to make informed and discriminating decisions regarding the availabilty and use of particular drugs, and the appropriate responses to such use. As we suggested in the *Interim Report,* scientific research may, in principle, provide useful information and guidance in certain areas, but the scientific method itself is not a policy-making process. Rather it is a practical system designed to explore and test, in abstract fashion, certain kinds of notions or hypotheses. While the aim of scientific research is to maximize objectivity, the interpretation and application of scientific data, as well as the original delineation of the problem or area to be studied, is usually a subjective venture, regardless of the controls maintained in the formal analysis. The practical use of technical data in the personal and social sphere often involves aesthetic, economic, legal, philosophical and moral issues which are not easily amenable to scientific study as we know it today.

In principle, even if there were complete agreement regarding the "scientific facts" of non-medical drug use, the formulation of the appropriate social response at various levels of government would necessarily be based on subjective value judgments regarding the ultimate meaning and implications of the available technical information. It is important to realize the central role of personal concepts of morality and reality in this procedure, and to make explicit the value judgments underlying the interpretation and use of scientific data. At the same time, we must make every effort to assure that this essential subjective evaluation process has the benefit of the most complete and objective scientific and technical information possible.

In the *Interim Report,* we observed that there was general agreement that society lacked sufficient reliable information to make sound social policy decisions and wise personal choices in relation to many aspects of non-medical drug use. Not only citizens, but administrative officials, legislators, physicians,

scientists and other experts felt that they had an inadequate basis for judgment on this subject. This lack of adequate information at the decision-making level was considered to be the result of problems or gaps in various stages of research, evaluation of existing technical data and information communication. The overall situation has improved substantially since the *Interim Report,* but much remains to be done to improve this aspect of society's non-coercive response to non-medical drug use.

In recent years considerable attention has been focussed on the role of government in science and on the difficulties in efficiently acquiring, processing, and disseminating scientific information. In the past decade Canada has made considerable progress in developing more coordinated general national and international science policies. A number of major reports on various aspects of Canadian scientific research activities and policies have been published by government and non-government groups, including the Science Council,[1] the Senate Special Committee on Science Policy,[2] the Association of Universities and Colleges of Canada (AUCC),[3] and the Organization for Economic Cooperation and Development (OECD).[4] In 1971 the Ministry of State for Science and Technology (MOSST) was established and given general responsibility for the formulation and implementation of federal science policy in Canada.[5]

The Science Council has also published several detailed studies of Canadian *scientific and technical information* (STI) facilities and needs, and has made specific proposals for the development of federal STI policy.[6] The Task Force on Government Information made two relevant reports in 1969,[7] and the OECD published a major review of Canadian technical information capabilities and policies in 1971.[8] Since then both the Senate Special Committee reports and the AUCC reports cited above have dealt further with these issues. As well, the annual reports of the president of the National Research Council contain significant STI discussion.[9] Several background papers on documentation and information in the area of non-medical drug use were prepared for the Commission,[10] and the basic issues have been discussed in our previous reports. We will not attempt to duplicate here the detailed presentations in the various reports noted above, but will focus on certain drug-related concerns within the framework of the developing federal general science and information policy.

In most respects, the research and technical information needs in the area of non-medical drug use are similar to those in many other scientific fields. It would be inefficient and unrealistic to attempt to create a national drug research or technical information system which was not an integral component of the broader Canadian research and STI networks and programs currently evolving. However, the multi-disciplinary nature of the study of non-medical drug use, certain legal and ethical considerations regarding the substances used, and constitutional issues involving education and health care pose some problems in this area which require special consideration.

In the discussion which follows, the topics of Research, Illicit 'Street Drug' Analysis Facilities, and Scientific and Technical Information are dealt with in primarily separate, but overlapping presentations.

RESEARCH

Until very recently there had been no coordinated general federal effort in non-medical drug use research. Prior to the appointment of the Commission, various related research efforts in universities and other institutions had been supported directly or indirectly by the Federal Government through regular granting channels such as the Medical Research Council (MRC) and, less commonly, the National Research Council (NRC), the Canada Council (CC), National Health and Welfare grants, and National Mental Health grants. In addition, certain relevant research projects had been conducted from time to time in government chemistry laboratories and other federal facilities and agencies. The Federal Government has had little direct involvement in alcohol studies. Although it was possible for government to permit experimental pharmacological research with cannabis and certain other illicit drugs under the federal *Narcotic Control Act* and *Food and Drugs Act,* within the framework of the United Nations *Single Convention on Narcotic Drugs, 1961,* no such studies were authorized in Canada until 1970. In several instances during the previous decade certain government officials actively discouraged interested scientists from working in this area. Practical roadblocks to such research had existed at both the federal and provincial levels.

In 1946, the former Department of Pensions and National Health published a small booklet entitled *Smoking.* However, it was another decade before tobacco began to be recognized as a high priority national health problem. In 1963, the first Canadian Conference on Smoking and Health was held, bringing together representatives of federal and provincial governments, volunteer agencies, professional associations, and the tobacco industry. It was recommended by the conference that the Department of National Health and Welfare assume a coordinating and supporting role in a national program of smoking research and health education. Practical implementation of the federal Smoking and Health Program began in 1964. The Program became involved in studies of extent and patterns of tobacco use, related morbidity and mortality data, chemical components of tobacco smoke, and experimental education programs and smoking withdrawal clinics. The Program did not give research grants, but occasionally issued contracts for scientific work in certain areas. The Smoking and Health Program now operates within the Non-Medical Use of Drugs Directorate. Recently a Cancer Research Coordinating Committee was established which involves the active participation of the Medical Research Council, the Department of Health and Welfare, the National Cancer Institute and the Ontario Cancer Treatment and Research

Foundation—the four major Canadian sources of funds for cancer-related research. These agencies have provided considerable support for tobacco studies and certain other drug-related investigations.

For a number of years, the Addiction Research Foundation (ARF) of Ontario has been the major Canadian center of scientific activities in the area of non-medical drug use. Although this provincial agency was originally devoted almost exclusively to alcoholism treatment, education and related research, in the past decade the Foundation has become increasingly involved in a wide range of activities pertaining to non-medical drug use in general. In addition to a significant intramural research program, some of which is conducted jointly with the University of Toronto, the Foundation administers a small grant program which provides financial support for research projects in universities and other institutions. Other provinces also support agencies with somewhat similar but generally more limited mandates for various information, education, treatment and research activities. Perhaps most notable are the Narcotic Addiction Foundation (NAF) of British Columbia, and the Office de la prévention de l'alcoolisme et des autres toxicomanies (OPTAT) in Quebec.

While private industry is primarily interested in the medical use of drugs, much research which is relevant to non-medical drug use is conducted by pharmaceutical companies. For example, they often collect considerable data on toxicology and drug adverse reactions. Although the Commission has obtained a significant amount of research information from certain drug companies, much of their data is not readily available to the scientific community in general.

Perspectives and Recommendations of Previous Commission Reports

As noted earlier, in the *Interim Report* we indicated that there was a great lack of adequate research in many important areas concerning the non-medical use of drugs.* Until very recently there had been limited scientific investigation of certain illicit drugs, such as cannabis, because of a variety of factors, including the lack of general medical use or previous widespread non-medical use in the Western world, the illegal nature of the drugs involved, and the reluctance of governments to authorize or encourage such research. Many scientists had communicated to the Commission feelings of dissatisfaction and frustration with government research policy in this field. We felt that in some areas, public policy, including research policy, had been influenced more by law enforcement considerations than by scientific concerns.

We recommended that the Federal Government actively encourage, solicit and finance research into the effects, the extent, the causes, and the prevention and treatment of dangerous aspects of non-medical drug use,

* *Interim Report*, pp. 224–234.

and that government should ensure an environment of flexibility and freedom for such work. We recommended that the Federal Government make standard samples of drugs, such as cannabis, available to bona fide researchers for scientific purposes. While cooperation with other countries was advised, we recommended that Canada take the initiative to develop an independent research program, including Canadian production of cannabis supplies for experimental research. At the time of the *Interim Report* a major emphasis was on problems of cannabis research, although the bulk of our discussion was addressed to non-medical drug use research in general.

We recommended the establishment of a national scientific agency to stimulate and coordinate research, and to collect, evaluate, and disseminate the resulting data. We felt that this responsibility could best be carried out by an independent agency, free from political interference, with no connections with responsibility for law enforcement. We contemplated that such an agency might best be independent of government, but should result from careful federal-provincial consultation. While not ruling out a significant contribution by government research personnel, we stressed the importance of involving independent scientists in universities and other institutions in the overall research effort. We emphasized that government policy and action in this area should be explicit, and the basis for government decisions made public. In the *Treatment Report* and the *Cannabis Report* we dealt with certain general scientific issues and made a number of specific suggestions as to directions and priorities for future research, but did not provide significant further commentary on the Federal Government's regulatory and financial activities and responsibilities in this area.

The Non-Medical Use of Drugs Directorate and Related Federal Programs: An Overview

In January 1971 the Department of National Health and Welfare inaugurated a non-medical use of drugs program as a separate division of the Health Protection Branch (HPB). The program was designed to coordinate the federal effort in research, information, treatment and prevention of problems associated with non-medical drug use. Since its initiation the program has undergone numerous changes in organizational structure and senior administrative personnel. In the fall of 1971, it was temporarily reorganized as a separate directorate of the Department of Health and Welfare, but in 1972 it was altered again, and the director of the Non-Medical Use of Drugs Directorate (NMUD) now reports to the Assistant Deputy Minister in charge of the Health Protection Branch. A committee of experts was appointed from various disciplines, representing government and non-government sectors, to act principally as an advisory group to NMUD with respect to goals, priorities and policy, and to review research grant applications. The Directorate's internal structure is currently under-

going reorganization. New evolving bureaux are functioning at differing levels of activity and completeness. Most of their programs are still in the early stages of development.

The NMUD research program was initiated as a combined effort of the Health Branch and the Welfare Branch of the Department of National Health and Welfare, with the Medical Research Council. The program presently administers its own research budget and is no longer dependent on external support from National Health and Welfare grants; contributions to research funds from these sources were transferred directly to the program in 1972–73. The research program, which is basically extra-mural, has remained a joint endeavour with the Medical Research Council. The granting procedure is based primarily on the MRC model and general mode of operations. As noted above, applications are reviewed and decisions are made by expert committees assisted by outside consultants, many of whom are peers of the applicants in the scientific community. In addition to providing financial support through grants and contracts, the Directorate arranges federal authorization when needed and standard drug samples for animal, human and chemical research. Supplies of certain restricted drugs have been made available from the U.S. National Institute of Mental Health.

The Directorate has initiated a program to provide information and educational materials to the public and various special groups. As well, a scientific and technical information service for NMUD personnel and other researchers is being developed. Support for innovative service projects has accounted for a major part of the non-operating expenditures of the directorate. The activities of the Federal Government in this area are discussed in detail in Appendix M *Innovative Services.* The Smoking and Health Program, formerly under the Health Services Branch, was taken into NMUD in 1972 relatively unchanged, but with an increased budget.

In the first full fiscal year of its existence (1971–72) the non-medical drug use program operated on a budget of approximately $4 million, most of which was accounted for by operating expenses. The estimated total expenditures (including services, contributions and grant funds channelled from other sources) for 1972–73 and 1973–74 were approximately $8.5 and $8.8 million, respectively. Table 1 provides a more detailed breakdown of these estimates.

For the last three years NMUD has provided summer research scholarships for graduate and undergraduate students working with established scientists. In the past, there were some problems coordinating the allocation of these student scholarships with general research funds and drug supplies for laboratory studies, but the program has improved considerably and appears to be making a valuable contribution to research and training in this area. For summer 1973, $315,000 were allocated for 180 such scholarships.

There are other sections of the Health Protection Branch (HPB) which also deal with various aspects of non-medical drug use. The Drugs Unit of

HPB has three bureaux: the Drug Advisory Bureau, the Bureau of Dangerous Drugs, and the Drug Research Laboratories. The Drug Advisory Bureau administers the Poison Control and Drug Adverse Reaction Programs, maintains supplies of drugs for distribution for research or analytic purposes, and is responsible for maintaining standards of quality control in the pharmaceutical area. The role of the Drug Advisory Bureau in controlling the medical use of methadone is discussed in detail in Appendix G.1 *Methadone Control Program of the Government of Canada.* The Bureau of Dangerous Drugs (BDD) monitors drug importation, manufacture, distribution and, in some instances, prescriptions and medical use. BDD is also involved in other aspects of the enforcement of federal drug laws, and keeps national records of certain illicit drug users and offenders. The regional laboratories of the HPB Field Operations Directorate, along with the Drug Research Laboratories in Ottawa, provide most of the federal forensic drug identification, and are also involved in certain intra-mural research projects.

TABLE 1

NON-MEDICAL USE OF DRUGS DIRECTORATE
ESTIMATED EXPENDITURES*

	1972–73	1973–74
	in thousands of dollars	
Operating		
(a) General drug program	3,018	2,527
(b) Tobacco program	386	400
(c) Other	99	57
TOTAL	3,503	2,984
Grants and Contributions		
(a) Information & education	—	100
(b) Innovative services	3,750	3,950
(c) Sociological & biomedical research	1,100	1,520
TOTAL	4,850	5,570
Capital	15	15
TOTAL DIRECTORATE ESTIMATES	8,368	8,569
Services by Other Departments	174	262
TOTAL COST OF PROGRAM	8,542	8,831

*Canada. *Estimates for the fiscal year ending March 31, 1974.* Ottawa: Information Canada, 1972.

Various other departments and agencies of the Federal Government, such as the Departments of the Solicitor General, Manpower and Immigration, and Secretary of State, and the National Research Council Laboratories

have been involved from time to time in research projects relevant to the non-medical use of drugs. Most such studies are of a statistics-gathering nature or involve evaluation or monitoring of some of the agency's activities. Data from many of these projects are discussed in the appendices to this report. In 1970–72 the Department of Agriculture and the Department of National Health and Welfare conducted a joint botanical research program in Ottawa which, in addition to exploring certain genetic aspects of cannabis, provided a standard Canadian supply of marijuana for research purposes.

General Observations and Recommendations

In the first year of the NMUD research grant program numerous scientists communicated to the Commission that they were frustrated with various aspects of the Directorate's services. The problems generally centered around unexpected and unexplained delays in decision-making, subsequent feedback, and the delivery of grant funds and experimental drug supplies after committee approval. The major administrative difficulties underlying these problems have apparently been resolved, but recent communication with Canadian scientists indicates that some dissatisfaction still exists, even though there has been substantial improvement in these services. **Further effort will be needed to make the decision-making process more efficient and to improve the quality of the feedback provided to both successful and unsuccessful applicants. We feel that special effort should be made to communicate detailed critical and constructive comments to unsuccessful applicants to guide them in preparation of future proposals. New researchers in the area must be encouraged and assisted in learning the essentials of "grantsmanship" within the context of this program. Additional effort should be made to operationalize, quantify and communicate the specific criteria and decision-making processes employed in distributing research funds.**

In principle, the NMUD research committee must deal with applications requesting one or more of the following: (1) authorization to possess narcotic or restricted drugs for research or analytic purposes; (2) standard supplies of such materials or a licence to obtain them independently; (3) financial support for specific research projects. There has been some controversy regarding the appropriate criteria to be employed in the various situations which arise, and the legal obligations and limits of jurisdiction of the Federal Government in this regard. Researchers or analysts must obtain federal authorization for work with narcotic or restricted drugs, and such scientists typically also request supplies of the drugs and often financial support as well, but this is not necessarily the case. For example, a researcher may work under non-federal or independent support and might have other legitimate sources of the drugs in question.

Because of competition among scientists for obviously limited funds, highly selective procedures must be employed in allocating financial support, with the primary criteria essentially being: (1) the relevance of the topic

with regard to research priorities; and (2) the scientific excellence of the specific proposal and researchers involved. Assuming that ethical requirements have been met, these dimensions are assessed by the research committee and its external referees—principally the applicant's peers in the scientific community.

Similarly, if a researcher has requested drugs which are in limited supply, a highly selective process would be indicated, as with grant applications. However, if financial support is not involved, and only authorization is requested, or authorization and drugs in common supply, then a much simpler procedure is generally appropriate. In such situations, the obligations and powers of government, within the framework of the *Narcotic Control Act* and the *Food and Drugs Act* and related regulations, are rightly limited to establishing: (1) that the request involves a bona fide scientific effort; (2) that appropriate drug records are kept and precautions are taken to prevent diversion to illicit use; and (3) that the drugs are employed in a safe and ethical manner. With the present protocol, the responsibility for ensuring that the ethical requirements are met has been delegated to independent ethics committees—typically within the university or other institution involved. Approval from such a group is required before an application is considered by the NMUD research committee. Conditions of drug records and storage are subject to assessment by Health Protection Branch officials. Establishing that the drugs are to be used scientifically would rightly seem to be the duty of the research committee of peers appointed by the Federal Government, as is now the case.

The Commission feels that the Government need not declare itself on the merit of a particular research project if only a supply of drugs and/or research authorization is requested. Such applications should be routinely approved unless there is serious doubt about the credentials and qualifications of the scientist involved. We appreciate that there may be reasonable concern as to the likely value of certain research efforts, and that the temptation is strong to try to dictate quality at the bureaucratic level. But we feel that, in the long run, a substantial degree of flexibility and freedom for the individual researcher, within reasonable ethical and financial limits, is essential for the proper atmosphere for scientific advancement. In any event, the long-term output or quality of a researcher's work is generally under considerable assessment and control through various other processes within the institution or local community in which he works and need not be the direct responsibility of the Federal Government.

At the present time, authorization to conduct research with narcotic or restricted drugs is in some respects tied too closely to specific projects. **Given the necessary and continual evolution of research strategy and techniques, the government should ensure that the regulations do not place undue restriction on the flexibility necessary for the timely and effective pursuit of scientific goals. We feel that some form of general licensing of qualified**

scientists, rather than specific project authorization, may be more appropriate and efficient in the long run.

Determining scientific research priorities, keeping them flexible and timely, and communicating them effectively to the appropriate researchers is a very difficult task. Priority lists, especially in the area of non-medical drug use, rapidly become out-of-date unless subject to continual review and re-evaluation. If priorities are presented too dogmatically there is a very real danger of precipitating a 'bandwagon' effect at the top of the list, which may drastically reduce efforts which might in the long run have fruitfully gone into other important topics. **It is necessary that the Federal Government determine and communicate the general and specific areas of research which it feels are most in need of attention and are most likely to receive financial support—both immediate and long-term. It is also essential that there is reasonable flexibility in the granting system, and that procedures are developed which can provide rapid bureaucratic decisions and funds for work involving important emerging ideas, new approaches, 'crisis' situations, and transient and unique opportunites for scientific inquiry which might otherwise not be effectively supported. It is important to appreciate differences in priorities at the national, provincial and local levels. While the major problems of non-medical drug use are clearly of national concern, local conditions or crisis situations may vary considerably among geographic areas. The Federal Government should increase its capacity to share the costs of provincially directed, problem-oriented research.**

In the first two years of its research program NMUD predominantly supported cannabis studies in the biochemical, physiological and psychopharmacological areas. Relatively little work has been initiated or supported in the social-behavioural fields. NMUD has changed its early emphasis on biomedical cannabis research and is expanding the breadth of the coordinated program.

NMUD should continue to stress grants to scientists in universities and other institutions which are relatively independent of government. However, it should include specific contract projects and also research by government scientists in special situations which could not be efficiently handled through the grant program. In certain circumstances, the Directorate should provide or contribute to salaries on a contract or grant basis for researchers not working under traditional institutional auspices. (Note that the MRC grant program presently does not cover principal researcher salaries.) In most instances (e.g., universities and drug research foundations) senior researcher salaries come primarily from provincial sources.

Many aspects of non-medical drug use research are relatively new to the Canadian scientific community. Although the nation's research capabilities in this general field are expanding, significant areas exist where there are serious deficiencies in available scientific personnel—either because of an absence of researcher interest or a lack of appropriately trained or ex-

perienced investigators. This situation, of course, has significant bearing on the success and growth of the NMUD national research program. Considering the present stage of development of the NMUD program, the Directorate's overall budget for 1973-74 (see Table 1 on page 187) may be adequate. **However, as the capabilities and interests of the Canadian scientific community expand in this area, and as the NMUD program becomes more complete in its coverage of drugs and research topics, a significant increase in funds will be necessary.**

Compared to other research disciplines, the social sciences have traditionally been weak in Canada. Until recently there were few, if any, adequate facilities for advanced training in sociology and anthopology in this country. As a result, most Canadian social behaviour researchers have taken the bulk of their graduate studies in other countries—primarily in the United States or England. Similar situations exist in other specialized areas relevant to the study of the non-medical use of drugs, such as psychopharmacology. **The Federal Government should work with the provinces to generally strengthen relevant social science programs in Canada, and should initiate through NMUD a limited program of pre-doctoral and post-doctoral fellowships in various scientific disciplines specifically for advanced training in research in the area of the non-medical use of drugs.**

There is a general need for a coherent macroscopic approach to research in the field of non-medical drug use. There are significant questions requiring intensive investigation in relatively restricted and well-defined areas, but cooperative multi-disciplinary studies involving input from experts in various fields will be necessary for effective advancement of scientific knowledge of many important general topics. **The Federal Government should encourage multi-disciplinary research efforts, and generally act as a catalyst to arrange or facilitate communication and cooperative studies among scientists working in related areas. While some degree of geographic centralization is preferable for such team efforts, it is not always essential if adequate communication channels exist. The Federal Government should work with the provincial governments to strengthen existing multi-disciplinary research groups or to develop new ones within appropriate universities, provincial drug treatment and research foundations, hospitals, and correctional or other institutions. Such efforts should include necessary financial support. A loosely coordinated, decentralized network of research groups across the country would seem preferable to a single national research institute located in one city such as Ottawa or Toronto, for example.**

International conventions and controls regarding psychotropic drugs are discussed in Sections VI and VII of this report. Unlike the *Single Convention on Narcotic Drugs, 1961*, which did not attempt to regulate conditions for scientific study, the *Convention on Psychotropic Substances*, 1971, presents special provisions for controlling research with certain drugs. Article 7 of the Convention requires strict controls on the manufacture, distribution, possession and record keeping of hallucinogens (including THC) for research purposes. Furthermore, parties to the Convention are required to "prohibit all

use" of such substances "except for scientific and very limited medical purposes by duly authorized persons, in medical or scientific establishments which are directly under the control of their governments or specifically approved by them." No attempt is made in the Convention to define the word "establishment", or to specify the nature of the governmental "approval" to be required for non-government research bodies. **We feel that this clause should not be interpreted so as to exclude research by bona fide scientists working alone or in private or independent laboratories. If such interpretation is considered to be unavoidable Canada should not become a party to the Convention without suitable amendment or reservation on this point.** In our opinion the present Canadian provisions and protocol for authorization of research with narcotic or restricted drugs, as described above, satisfy the specific approval requirement of the Convention. The Convention provides for special licensing of researchers and approved establishments, and does not necessarily require separate specific approval for individual studies or projects by authorized scientists. The present Canadian system of control and regulation of drug storage and record-keeping by researchers is consistent with the Convention, and seems adequate to prevent diversion to an illicit market. **With the above reservation, we feel that Canada can provide an adequate atmosphere for scientific inquiry within the framework of the Convention.**

Many general and specific suggestions for research are made in the context of the discussions and reviews presented in other sections and, in particular, in the appendices to this report. In addition, our previous reports contain research recommendations. A separate section in the *Cannabis Report* was devoted to important topics and priorities for scientific study; that discussion is still appropriate in spite of significant recent advances in certain areas. The general issues dealt with there have relevance to research involving other drugs as well, and should be considered in that broader context.

ILLICIT 'STREET DRUG' ANALYSIS FACILITIES

Systematic analysis of 'street drugs' for non-forensic purposes was first undertaken in Canada at the Addiction Research Foundation (ARF) in 1969. Technical assistance and reference samples were provided to the Foundation by the Federal Food and Drug Directorate (now Health Protection Branch [HPB]). From time to time various other laboratories across the country were involved in 'street drug' analysis on a more limited and less systematic basis. The legal position of the analysts and of persons presenting the illicit drug samples for analysis was ambiguous, but a number of laboratories operated on the premise that such work was justified under provincial health statutes. As a result of local pressure from law enforcement officials, in early 1970 the ARF collection and analysis of illicit 'street drug' samples was temporarily suspended, pending legal clarification. Some critics felt that the services provided by the Foundation in this project facilitated the refinement of certain illicit drug manufacturing and trafficking activities—

in other words, they were concerned that such analyses and subsequent feedback would provide a source of quality assessment for the illicit market. The foundation, on the other hand, contended that the laboratory project had not become a service to the 'black market', but was a significant aid to medical treatment, a valuable source of epidemiological data for research and educational purposes, and a potentially important independent source of information input to the criminal-justice system.

In our *Interim Report* discussion of 'street drug' analysis, we observed:

> It is feared by some that such facilities and information may encourage the use of drugs by advertising their availability and reducing dangers. It has been further suggested that distributors will take advantage of these facilities to have their products tested and, as it were, approved. Whatever force there may be in these arguments, they are outweighed, it would seem, by the necessity of a thorough and effective commitment to know as much as possible about what is happening in non-medical drug use and to make such knowledge available for the benefit of those who may be prudent enough to be guided by it. We have more to fear from willful ignorance than we do from knowledge in this field .... Sample analysis and wide dissemination of the results can only serve in the long run to deglamourize drugs and drug taking. [P. 228.]

In the *Interim Report*, the Commission pointed out that the existing facilities could not meet national requirements for the analysis of illicit market drugs in non-medical use. The FDD and RCMP laboratory facilities were not considered timely or appropriate sources of information for persons involved in medical treatment and research. The ARF laboratory project had been suspended; at any rate it had been a significant service primarily to those in Southern Ontario only. At the time we recommended:

> ...that the Federal Government actively investigate the establishment of regional drug analytic laboratories at strategic points across the country.... Such laboratories should not be connected with government or law enforcement, and should be free from day to day interference by public authorities. [P. 228.]

In November 1970, amendments to the *Food and Drugs Act* and the *Narcotic Control Act* were passed which clarified the legal position of those involved in such laboratory operations, and provided a protocol for federal approval and authorization. Under these regulations, physicians were permitted to receive samples of narcotic, controlled, and restricted drugs from individuals under their professional care, and to transmit such samples to a scientist authorized to conduct the analysis. Feedback from the analyst regarding the contents of illicit samples was restricted to the physician. In 1971 and 1972, certain aspects of the regulations were further altered, and, currently, physicians can receive drug samples for analysis from persons other than their patients. Applications for authorization to conduct analyses were considered from university, hospital, government, and private laboratories.

However, until recently, the Federal Government did not provide direct financial support for analytic projects outside of the Department of National Health and Welfare, since it was felt that such activities fell within the area of the delivery of health services and, consequently, would be more appropriately developed through provincial auspices and support. In the summer of 1971, the Food and Drug Directorate conducted workshops on illicit drug analysis designed to provide chemists from across the country with up-to-date information on standard techniques for the quantitative and qualitative analysis of drugs likely to be encountered on the street. A technical manual entitled "Some analytical methods for drugs subject to abuse" was produced and distributed.[11] Since 1972 the Federal Government has provided financial support for a few research-oriented, non-government 'street drug' projects through the NMUD analytical services program.

In 1971-72, the Commission surveyed all authorized laboratories, requesting information on the alleged and identified contents of samples received, general analytic methods employed, sources of funding, and relations with local law enforcement, medical and Federal Government authorities.* Today the bulk of the non-forensic analysis of illicit drugs in Canada takes place at the Addiction Research Foundation in Toronto, although many other laboratories across the country are involved from time to time in such work.

By early 1973, over 100 individuals in more than 50 different laboratories had received authorization to conduct analyses of illicit drugs. However, relatively few are seriously involved in 'street drug' work, and less than half a dozen have a program of notable magnitude. Although they are fully authorized, technically qualified, and generally adequately equipped, most of the laboratories are not actively involved in 'street drug' analysis for a variety of reasons. Lack of adequate financial support has been a considerable stumbling block and, as a result, some labs either charge for the service (as much as $40.00 per sample) or have abandoned illicit drug work altogether. Those laboratories with somewhat successful programs have generally had to incorporate their costs into existing hospital, research or university budgets. In many locations, the anticipated street drug workload has not materialized, either because of an absence of local interest or need, or because of a lack of information and knowledge of such facilities by treatment personnel, illicit drug users and the general public.

In order to obtain more complete information on the composition of illicit drugs at the street level, the Federal Government expanded the facilities of the Health Protection Branch laboratory in Ottawa and the five regional laboratories. In 1971, the HPB initiated a special police drug seizure analysis program concerned with exploring the strength and purity of illicit drugs. In addition, the HPB has continued on a relatively small scale to analyse 'street drugs' for physicians "on an emergency basis".

* Some of the results of these studies are discussed in Appendix A *The Drugs and Their Effects* and in Tables A.8 and A.9 and note *c* to that appendix.

Overview of Issues and Recommendations

As discussed in detail elsewhere,* in order for controlled laboratory research to have practical social relevance it is necessary to maintain accurate information regarding the identity, purity and potency of the drugs being consumed from illicit sources. Furthermore, such knowledge is necessary for adequate public health protection and treatment, and is essential to meaningful administrative control and regulation. The potential importance of drug analytic services to physicians in aiding them in the diagnosis and treatment of drug-related problems has been widely discussed.

There is still some disagreement as to the most practical system for obtaining the necessary information about illicit drugs. **As suggested in the Cannabis Report,† it is our belief that up-to-date systematic selection and analysis of police seizure samples, supplemented by information from a few medically oriented and other 'street drug' analysis programs in the primary urban centres, could provide an adequate basis for monitoring the general picture as to the drugs available on the illicit market. The special HPB study of police exhibits represents a significant step in this direction, but more systematic sampling is necessary.‡**

The effective use of 'street drug' analysis in the diagnosis and treatment of acute and chronic drug effects poses somewhat different problems. It is frequently said that rapid 'street drug' analysis would be of considerable value to the treatment of adverse reactions. However, our studies suggest that immediate drug identification would typically not be as significant a contribution to the management of psychological adverse reactions as is often contended, since drug-specific treatment is generally not available in any event. The handling of such cases is usually based on the interpretation of behavioural symptoms, and most commonly involves 'talking down' and, often, the administration of minor tranquilizers, regardless of the original drugs involved.§ In cases of severe physical poisoning, rapid identification of the chemicals taken would be invaluable, but traditional drug analysis methods are usually unable to provide the necessary information quickly enough to be of effective use, even in the uncommon event that adequate samples of the drugs taken are immediately available. Currently, emergency poisoning or overdose treatment is primarily based on observable symptoms and verbal

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* Appendix A.1 *Introduction*, individual drug discussions, and notes *b* and *c* to that appendix; *Cannabis Report*, pp. 25–32; and *Interim Report*, pp. 228–229.

† *Cannabis Report*, p. 155.

‡ See Appendix A, note *b*, and the text of that appendix for discussion of this special study. What is needed to improve this project is not analysis of a greater number of samples than are currently included, but the development of a more systematic sample selection procedure and a clearer delineation of the seizure populations and samples involved. Furthermore, the special analysis might be expanded to include an occasional inquiry into possible herbicides, pesticides and toxic fungi in natural plant materials such as marijuana, and an assessment of insoluble particles in those drugs likely to be injected by the user.

§ On the other hand, the availability of data correlating chemical identification with adverse reaction symptoms might well provide a basis for the subsequent development of more drug-specific treatment methods.

reports by the patient or his friends as to the chemicals involved. Immunoassay of drug, blood or urine samples might require only minutes for drug identification, and would be extremely useful in many such emergencies, but very few treatment facilities in North America are presently equipped for such methods.* In treating the effects of chronic drug use, chemical identification of the substances taken is generally not of paramount importance, since, again, drug-specific treatment is generally not provided or available—particular physical disorders and symptoms, and behavioural conditions are treated instead. As discussed in detail in Appendix A *The Drugs and Their Effects,* even though there is considerable misrepresentation, confusion and fraud within the illicit drug market, the deliberate mixture or adulteration of single drugs with other chemicals† or the substitution of more dangerous chemicals for an alleged drug is relatively rare in Canada. Drug users are presently more likely to be cheated than injured by the information gap regarding the identity of illicit drugs.

It would appear that the apparent 'street drug' analysis crisis of a few years ago is not now as important an issue as it was at the time of the *Interim Report.* However, some further attention is warranted: **We make the following recommendations:**

(1) The Federal Government should continue, but refine, the present HPB special studies of police drug exhibits.

(2) The Federal Government should continue to provide authorization, standard methods, and standard chemical samples for illicit drug analysis to bona fide scientists.

(3) The Federal Government should continue to provide funds for a few key 'street drug' analysis research projects in the main urban centres across the country. As suggested in the Interim Report, the financing of such facilities could well be a matter of federal-provincial cooperation.

(4) The Federal Government should encourage the correlation of chemical characteristics of the samples with the medical, social and legal conditions leading to the analysis. In this context, the Federal Government should explore the feasibility of coordinating drug identification with certain aspects of the present Poison Control Program of the HPB.

(5) The Federal Government should encourage uniform central reporting and dissemination of the results of drug analyses, and should make the data from the HPB police seizure studies rapidly available to researchers for analysis and publication.

SCIENTIFIC AND TECHNICAL INFORMATION

Prior to the appointment of the Commission, a small information program was conducted by the former Drug Abuse Secretariat of the Depart-

* See Appendix A.2 *Opiate Narcotics and Their Effects* for discussion of immunoassay techniques.

† With the exception of LSD-PCP mixtures.

ment of National Health and Welfare. The federal Smoking and Health Program has been providing tobacco information, films and various teaching aids on a national scale for almost a decade, but almost no federal effort has been invested in alcohol information. Numerous provincial groups, most notably the Addiction Research Foundation of Ontario (ARF), but also the Office de la prévention de l'alcoolisme et des autres toxicomanies (OPTAT) of Quebec, and the Narcotic Addiction Foundation (NAF) of British Columbia have developed significant information and educational materials dealing with a wide range of drugs. In the past few years certain private groups, such as the Council on Drug Abuse (CODA), have also entered the field. ARF has for years been the primary Canadian source of scientific information in this area, and has regularly supplied such materials to individuals and organizations in all provinces and in numerous foreign countries. There has been little specific effort to coordinate the various drug information resources available in Canada.

Perspectives and Recommendations of Previous Commission Reports

In the *Interim Report* we observed that there was an urgent need for some coordinated system on a national scale to collect, classify, index, evaluate and disseminate timely information on various aspects of non-medical drug use.* We stressed that there must be some efficient source of disinterested and authoritative opinion, independent of political pressures and responsibilities for law enforcement, to which those seeking information could turn for guidance for public policy, education, medical, scientific and personal decisions. We recommended that the creation of an appropriate national information program be given high priority. We acknowledged the important role of the news media in this area and recommended that the Federal Government keep the media as fully informed as possible of its own information about non-medical drug use. (See also Section XIV *The Mass Media* in this report.)

In the *Treatment Report* we noted the need for factual information and educational material for use and dissemination by community treatment services.† In addition to scientific and technical data, reliable information is needed regarding existing agencies which deal with various specific problems, including medical, legal, educational, and occupational situations. We suggested in the *Cannabis Report* that a centrally coordinated documentation, information-gathering and alerting network would greatly facilitate effective communication among researchers.‡ Because of the accelerating growth of scientific information on non-medical drug use, traditional modes of publication, communication and information retrieval have become increasingly inadequate. We suggested that international cooperation and co-

* *Interim Report*, pp. 224-234.
† *Treatment Report*, p. 94.
‡ *Cannabis Report*, p. 161.

ordination in this area might be effectively conducted through the World Health Organization.

In the *Interim Report* we observed that the development, collection and evaluation of technical information was one thing and the effective dissemination of processed information to the public for educational purposes another. These two functions typically involve different skills and expertise and, consequently, might best be carried out by different individuals or agencies. We felt that the national scientific agency which we recommended to conduct the Federal Government's coordinating and financial initiative in research should also be responsible for the collection, evaluation and communication of the resulting technical data. We discussed a number of mechanisms by which this information might subsequently be used in drug education or otherwise effectively disseminated to the public. We noted evidence that many young people lacked confidence in certain official sources of drug information, and that to be accepted such information might best be disseminated by local groups or individuals having high credibility with youth. We also discussed the Canadian Medical Association's suggestion for the formation of a coordinated network of regional non-governmental multi-disciplinary groups or "teams" to provide information, policy guidance and other services at the community level.

The division between the collection, evaluation and distribution of scientific and technical information, on the one hand, and the actual preparation of educational materials and the process of education, on the other, is admittedly sometimes ambiguous and necessarily arbitrary. Because of constitutional provision for provincial responsibility in the area of education, the distinction between drug information and drug education is of considerable significance in determining the appropriate role for the Federal Government in this area.

We noted in the *Interim Report* that:

> In the Commission's view, the notion of drug education implies more than a mere random conveying of information; it implies selection, system, purpose and perspective. [P. 229.]

The objective of the information system is to provide timely scientific data in usable form as objectively as possible. The goal of the educational process is to present these data and other relevant information in a manner which prepares or enables individuals to make informed and wise personal choices. The provision of evaluated technical information is clearly within the federal sphere. Further, as we suggest in Appendix F.1 *The Constitutional Framework,* provincial responsibility for formal education in the school system does not preclude an important federal role in communications of general educational value and in collaboration on the development of drug educational materials and techniques. As noted in the Interim Report, we feel that there should be a federal-provincial body for the development of

drug education materials and methods, making use of information collected and evaluated at the national level. There are further observations on drug education in Section XIII of this report.

The Range of Information Services Needed

An ideal national information network would be capable of providing various services to a wide range of users: scientists; medical and other treatment and rehabilitation personnel; legislators and government administrators; educators, teachers and students in various levels of school and university; industry; other private organizations; news media reporters; justice and law enforcement personnel; the clergy; librarians; and other citizens, including drug users of all ages. The potential users of such information can be considered in three groups with somewhat different, but overlapping, needs: (1) researchers and other scientific or technical experts; (2) persons who are not technical experts, but who deal in their work with certain aspects of non-medical drug use; and (3) the lay public.

It is clear that scientists must be aware of, and have efficient access to, the existing scientific literature and relevant data, and must be informed as to new developments, ongoing and anticipated research, and scientific meetings. The second group is more likely to need secondarily prepared materials such as selected bibliographies and book lists, critical summaries and reviews, text books and other evaluated or predigested information. The third group, the lay public, is most likely to receive information indirectly through individuals in the second category. A wide variety of intermediate sources involving further information processing and selection would undoubtedly be involved, including news media, formal drug education programs, and so on.

The Non-Medical Use of Drugs Directorate Information Program

As part of its overall information effort, in the fall of 1972 the Non-Medical Use of Drugs Directorate (NMUD) began work with the Health Protection Branch Library on a coordinated scientific and technical information network and data base in Ottawa. A computerized system was designed to provide specialized bibliographic searches of the scientific literature, and altering and up-dating services. Considerable progress was made towards creating the basic data bank, but many problems and issues remain to be resolved. The National Science Library services (e.g., Canadian Selective Dissemination of Information [CAN/SDI]) are presently available to the NMUD system. Direct on-line connections with the U.S. National Clearinghouse for Drug Abuse Information (NCDAI), Medical Literature Analysis and Retrieval Systems (MEDLARS) and other American services have been established. The immediate goal of the data base was to serve the

needs of NMUD personnel, although certain services for researchers and other groups were also intended and are currently being explored.

Plans were made at NMUD for data evaluation and further processing of scientific information for possible use in fact sheets, review articles, text books, audio-visual presentations, etc. In addition to the existing government communication agencies, such as the Canadian Broadcasting Corporation, the National Film Board and Information Canada, new federal and provincial information channels are being considered for dissemination of this information. NMUD has distributed special bibliographies and other information to certain research, treatment, and education groups, and has held a number of national conferences and meetings designed to stimulate and facilitate communication among workers in various areas. However, little substantial progress has been made in many aspects of the anticipated information programs, and in certain respects the NMUD system is still in the early stages of planning and development.

The Role of Existing Information Resources

A considerable number of specialized drug information resources already exist in Canada and other countries. **It would not be advisable to attempt to duplicate these collections in a central data bank anywhere. Instead, the Federal Government should emphasize the development of a coordinated network of complementary information resources in Canada, establish open two-way communication with information centres in other countries, and proceed to identify and fill gaps in the collective system on a multi-lateral basis. Research and information in this area clearly transcend traditional provincial and national boundaries, and a major cooperative effort must be made involving various levels of government. We need to improve our ability to absorb and use information from foreign sources, and should avoid undue duplication of resources available to us from other countries. Additional funds must be made available for the rapid translation of important foreign language articles into one or both of the official languages. A standard but flexible multi-lingual international thesaurus of key retrieval index terms dealing with non-medical drug use is clearly needed.**

The major relevant information collections and services now existing in Canada include: the National Library, the National Science Library and certain federal departmental libraries and their information systems (e.g., CAN/SDI); the Addiction Research Foundation (ARF), Office de la Prévention de l'Alcoolisme et des autres Toxicomanies (OPTAT) and certain other provincial agencies; university libraries (e.g., Laval); the Commission library; and the NMUD data base currently being developed. Primary foreign resources include the various U.S. National Institute of Health clearinghouses (e.g., NCDAI), the U.S. National Library of Medicine (e.g., MEDLARS), the U.S. Library of Congress, the Student Association for the Study of Hallucinogens (STASH), the Rutgers Alcohol Centre (e.g., CAAAL), the

Smithsonian Institution, the Fitz Ludlow Memorial Library, the various United Nations divisions and libraries, the Institute for the Study of Drug Dependence in London, the Automated Subject Citation Alert (ASCA), *Excerpta Medica,* and the various sociological, psychological, biological and chemical abstracts. The major pharmaceutical companies in various countries have significant specialized information collections as well.

The Federal Government should maintain an up-to-date inventory (e.g., indexed lists of project titles, researchers and abstracts) on current drug research in Canada and other countries. Considerable progress in identifying and listing Canadian scientific efforts has been made by the National Research Council through the National Science Library's Information Exchange Center (IEC). **Further efforts should be made to include provincially and privately funded and conducted research as well as university projects financed through federal sources.** The Ministry of State for Science and Technology (MOSST) is extending the present coverage through the phased establishment of an Inventory of Scientific Activities, incorporating the functions of the IEC. **Descriptions of publicly funded research projects should be routinely published and made available to the public.**

A comprehensive catalogue of the total holdings in the various Canadian drug information collections must be established and an efficient referral system developed. The National Library and the National Science Library maintain a general union catalogue of major library holdings of books and periodicals in the country. **Additional special effort will be necessary to obtain adequate coverage of the primary non-medical drug use collections in Canada.**

Coverage of the social science and humanities literature by the available technical abstracting and information services around the word is generally inadeqate. Attention is being focussed on this discrepancy in some countries, but much remains to be done to remedy this situation. **The Federal Government should ensure that special effort is made to improve Canadian communication in this area. Recent efforts by the Social Science Research Council and the Association of Universities and Colleges of Canada to set up a data clearinghouse for the social and behavioural sciences should receive further support and guidance to ensure adequate coverage of Canadian non-medical drug use research needs in this area.**

Government Statistics

There is a considerable body of national information on non-medical drug use available or potentially available to the Federal Government from its law enforcement, corrections, health and other statistics and activities. The Commission has had access to a great deal of useful information made available by various government departments, and has been impressed with the potential value of some of the existing federal data sources. Of particular interest are the drug sections of the Statistics Canada publications, *Mental health*

statistics and *Causes of death,* the data from the Poison Control and Drug Adverse Reaction Programs, the Health Protection Branch drug analysis reports, various drug production, distribution and medical prescription data, and law enforcement and correctional statistics. Information from these and other federal and provincial data sources are discussed in detail in the various appendices which follow. Certain problems with the data are identified in those discussions and, in some instances, specific suggestions are made for improving the statistics.

In many cases, serious methodological, technical and practical problems limit the usefulness of the national government statistics presently available. **We feel that a special effort should be made to improve the quality of drug-related data and to coordinate the collection and interpretation of related federal statistics.** The frequent inconsistency in format used in reporting associated national data, even within the same department, and alternate use of fiscal and calendar year summaries often renders comparison and interpretation difficult. There is a great need for more uniform reporting of law enforcement, justice and correctional statistics. The delays involved in the present systems for the collection, collation, basic analysis, and publication of national statistics greatly reduce the value of the information. **Greater effort should be made to automate and otherwise speed up the processing of such data.**

If a major effort were made to generate more valid and useful national statistics, additional funds and staff would be necessary at various levels in the information collection and distribution process—often from the initial data source on up to the final analysis and publication stage at the Federal Government level. Such an endeavour would require considerable federal-provincial cooperation. In the health and criminal-justice areas, for example, national statistics are, in part, based on data abstracted and coded by provincial authorities from local reports, and consequently the Federal Government has little direct control over many basic aspects of the data.*

The International Classification of Diseases (ICDA) coding system, currently employed in the collection of much national health and death data, is in some respects ambiguous and inappropriate for the present North American phenomenon of non-medical drug use.† **The Federal Government should work for appropriate revision of the classification system on an international scale, and proceed immediately to refine the presently available categories for future national statistics.**

Although various collection, coding and communication limitations restrict the present usefulness of the non-medical drug use data available through the Poison Control and Drug Adverse Reaction Programs, these information systems provide a potentially invaluable source of epidemiological

* With regard to national health statistics, see Appendix A and notes *e* and *m* to that appendix.

† See Appendix A and notes *e* and *m* to that appendix.

and pharmacological data.* **We recommend that additional funds be made available to increase the utility of these programs, and that the Federal Government explore the feasibility of an integrated non-regulatory agency with a broader mandate for collecting, analysing, interpreting, and disseminating national statistics on adverse effects of chemicals on the human body.**

In many instances there are inadequate communication channels or even explicit restrictions which inhibit the effective analysis and use of the available national statistics. In certain areas (e.g., information on drug-related deaths) provinces may restrict the subsequent use of detailed data provided to the Federal Government. Clearly, the citizen's right to privacy must be taken into careful consideration before data can be released for analysis. **However, we feel that much could be done to improve government statistics, to make them more openly available and timely, and to facilitate and encourage the scientific analysis and communication of such information by independent and government researchers.** Federal and provincial provision should be made for the release of health records and vital statistics for research purposes in a form which does not disclose the identity of the patients or subjects involved.

The Non-Medical Use of Drugs Directorate might usefully work with the various government agencies involved to monitor and improve national non-medical drug use statistics and to aid in their routine interpretation.

Further Observations and Recommendations Regarding the NMUD Programs

We recommend that the preliminary efforts of the Non-Medical Use of Drugs Directorate to develop a special data base and information network receive further support, and that NMUD be given responsibility for the primary Federal Government initiative in ensuring adequate non-medical drug use technical information services on a national basis, following the general principles outlined in this section of the report.

We specifically recommend that the NMUD program provide national coordination among existing Canadian information resources, including both the specialized drug collections and the various general components of the overall federal STI system, and that it be responsible for identifying and filling the gaps in the collective network. Furthermore, NMUD should coordinate and improve access to relevant drug data collections and services in other countries. For example, certain major foreign alcohol and tobacco resources have not been tapped; they should be linked with the network soon.

Immediate action should be taken to establish working links with the major Canadian non-federal resources—in particular the facilities of the Addiction Research Foundation and the collections of OPTAT and Laval University. The holdings of the library and documentation services at ARF have recently been combined, and are in immediate need of further uniform

* See Appendix A and note *f* to that appendix.

indexing for retrieval. **The Federal Government should provide consultation and financial support to ensure the efficient and continued availability of the ARF collection to Canadian researchers and other workers in the area.**

The services of the national information system must be available at low cost to the user. Access to information and referral to data sources must be provided in a way which minimizes the problems often caused by geographic distance or institutional affiliations. Reasonable service must be made available from coast to coast. The services should be well advertised to the various potential users, and adequate instruction must be provided to enable users to make effective use of the system.

Further study will be necessary to determine which aspects of the total national drug information system would best be administered under central control and which components would more appropriately be included in an associated decentralized network. **We support in principle the overall emphasis on decentralization in Canada's general STI policy.**

As noted earlier, in the *Interim Report* we stressed that the national agency responsible for research and information be free of political pressure and responsibility for law enforcement, and perhaps independent of government in general. NMUD has no law enforcement role, but is not in principle free from potential political interference. **We feel that a system which coordinates research and data resources, and distributes technical information to researchers and other experts can be adequately developed within the present NMUD government context. However, additional effort should be made to ensure that the process of evaluating data and preparing summaries and reviews is appropriately independent. We suggest that such work be supervised, and the resulting materials regularly reviewed, by an independent federal-provincial expert committee made up predominately of non-government scientists. The dissemination of the information should be subject to the committee's approval.**

Some form of frequent national report or newsletter providing a general overview of current developments in non-medical drug use information would be invaluable to workers in the field. *The Journal,* a monthly drug information newspaper published by the Addiction Research Foundation of Ontario, has filled a major communication gap in this area. With further development, including more specific bibliographic documentation, it could provide an even more effective vehicle for rapid information dissemination to a wide range of people. **The Federal Government should explore with the Foundation and other provincial authorities the possibility of supporting or "nationalizing" The Journal on a federal-provincial basis.**

There is an apparent lack of appropriately trained science writers and reporters capable of effectively communicating technical information on drug use to non-experts and the general public. **NMUD should support specialized training in this important area.**

The Federal Government should explore, with the provincial governments and the various medical bodies, ways in which medical schools and associations can improve the education of physicians with respect to general, as well as treatment, aspects of non-medical drug use. Family doctors and general practitioners are commonly turned to for information in this area, in spite of the fact that most physicians have had little or no special education pertaining directly to non-medical drug use. As well, general non-science courses exploring the many facets of drug use in society would be a valuable addition to the general undergraduate and graduate curricula of universities in Canada.

NMUD should support scientists in the preparation of relevant literature review articles and books on a regular basis, and should regularly organize or fund conferences and meetings to maximize rapid communication. In addition, the Directorate might usefully provide a concise annual public report summarizing significant developments in its own activities; other Canadian research, education and treatment efforts; government policy and administrative regulations; various federal and provincial government statistics; and major foreign information.

NMUD should actively participate in the further development of Canada's general national and international scientific and technical information policy, to ensure adequate awareness and coverage of present and future needs in the field of non-medical drug use.

We suggest that the Federal Government's research and information policies and activities in this area be critically reviewed by an independent group, such as the Science Council, within three years of the release of this Final Report, and at regular intervals thereafter. Such evaluation should be made public.

NOTES

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Section XIII

Drug Education

In the *Interim Report* we made certain general observations concerning drug education. In particular, we suggested that it was necessary to tell the whole truth about drugs as far as humanly possible, that it was unwise to base drug education on a strategy of fear, and that drug education should be seen as part of general education for living. We said that the purpose of drug education should be to provide the basis for informed and wise personal choice. In a similar vein, we said that drug education, as part of general education, should have as its objective the kind of understanding that will permit an individual to live wisely, in harmony with himself and his environment.

Since the *Interim Report* we have attempted to learn about various efforts in Canada to develop programs in drug education and also to profit from experience elsewhere, particularly in the United States. In the last few years there has been a second look at drug education and the extent to which we can rely on it to achieve our objectives of social policy in relation to non-medical drug use. There has been difficulty in finding any broad measure of agreement on objectives, suitable content, and appropriate measures of effectiveness. In many quarters there has been severe criticism of current drug education efforts on this continent, and even scepticism about what we can hope to achieve with this form of social response.

The Commission conducted a survey of the drug education policies of provincial educational authorities and local school boards across Canada,[1] made an in-depth study of the programs in certain schools,[2] questioned students on their response to drug education,[3] and identified some of the more innovative and promising programs.[4] What the Commission learned from these studies is summarized here.

Provincial authorities provide general support and guidance for local school boards in the development of drug education programs, but programs are developed at the local level and vary considerably in their approaches. Programs are adapted to local circumstances and requirements. When the Commission made a survey of 584 local school boards in 1971 (of which

369 or 63% responded), less than half of the respondents said they had drug education programs or specific policies concerning drug use in the school.[5] The proportion with drug education programs may be assumed to have increased considerably since then.

The two main goals of drug education programs, as reported by the local boards, were information and counselling. Approximately half of those replying said they wanted to provide students with sufficient information so that they could make their own decisions based on knowledge. Others said they wanted their students to know the dangers of drug use. About 20 per cent of the responding boards were interested not only in providing their students with information but in counselling them with respect to drug use, as well as general values and problems in living.

About two-thirds of the boards which provided drug education did so through the health education course of studies. About 20 per cent provided it in other subject areas, usually guidance, and the remainder presented it as a separate course of study.

As for methods, about three-quarters considered student counselling important. The same proportion favoured small discussion groups and information dissemination in the form of lectures and pamphlets.

With respect to selection and training of teachers for drug education, about half the boards which provided drug education thought in-service teacher training important and provided it. About half of these chose teachers on the basis of demonstrated empathy with students or because they volunteered, while the remainder simply designated certain teachers, usually those who taught the course of which drug education was a part. Resource personnel or materials used in teacher training, in the order of preference given by reporting boards, were the following:

1. physicians or other medical personnel;
2. printed or audio-visual materials;
3. law-related personnel, especially policemen;
4. a specialized agency, such as an addiction foundation;
5. former and current drug users;
6. students;
7. parents;
8. personnel from innovative services and street-workers.

With respect to evaluation, about one-third of the reporting boards said that they evaluated their drug education programs. The main method of evaluation was seeking the opinions of students as to the effectiveness of the program. About three-quarters of the boards considered their programs to be moderately effective or better. The degree to which certain criteria of evaluation were favoured by the boards was as follows: increase in

students' understanding and awareness (94.1%); increase in parents' understanding and awareness (64.7%); students with drug-related problems assisted (58.8%); attainment of specified information level (47.1%); non-users deterred from starting use (41.2%); overall decrease in drug use (29.4%); overall decrease in harmful use of drugs (5.9%).

The replies of the boards indicated that efforts in drug education were concentrated in grades seven to nine, although students in grades below and above this range were included by some respondents. Many of the drug education programs that came to the attention of the Commission were directed at junior high school students.

Researchers for the Commission conducted an in-depth study, by direct observation and discussion with teachers and students, of the drug education program in certain selected schools in a large metropolitan area.[6] The study covered three high schools and one junior high school. The researchers concluded that drug education as a part of health education and physical education courses was a failure. The reasons given were that health education and physical education were regarded as "token" courses, and that the teachers were rarely found to be capable of dealing effectively with the topic of drugs and with the personal non-drug issues that surround drug use. The study was also critical of special programs of drug education in auditoriums with guest speakers and films, at which attendance was compulsory, and in which the tone was "strongly and naively anti-drug". Most teachers who were interviewed agreed that there was little chance of success with this approach. The study concluded that drug education should not be propaganda for the traditional culture nor be the indoctrination of a particular value position. Information in the form of short, free pamphlets was thought to be useful. The study stressed that drug education should be placed in a more general perspective, related to the other problems of personal adaptation with which students are more generally concerned.

The researchers were critical of certain aspects of the system of general education which, they felt, led to boredom and other states of mind conducive to drug use. In particular, they stressed that students should be given more free time to pursue study interests of their own, with assistance from the teaching staff. Emphasis was also placed on the need for a wide range of practical information. The study referred to this free period and the supporting organization for it as "The People's Period" and "The People's Department". It also suggested an "Information Rack" to provide information on such matters as drugs, birth control, family problems, personal counselling, welfare, legal aid, housing, venereal disease, and general medical clinics. Some of these suggestions were adopted and put into practice by a local school board during the course of the Commission's work.

A survey of the response of high school students to drug education revealed some interesting conclusions.[7] The first was that there was a low rate of response to (or interest shown in) questions about drug education as compared to questions concerning other matters, such as the students'

backgrounds, their values, and their feelings about school life and their teachers. The main approaches to drug education reported by the students were special assemblies and films and lessons integrated into health or physical education classes. Only about six per cent of the responding students said that they were satisfied with their drug education programs, although about 48 per cent said they thought that drug education had increased their knowledge of drugs.

Students ranked drug education fourth as a source of information about drugs, well behind the first three choices: friends, television, and newspapers. The relative reliance on various sources of information differed according to the age of the students. More than 80 per cent of the students in junior high school grades relied on drug education to some extent, but only 25 to 30 per cent of the students in the senior high school grades mentioned it as a source at all. Almost 90 per cent of the senior high school students, but only about 60 per cent of the junior high school students, relied on their friends as one source of information. More of the younger students relied on their parents for information than did the older students, and more of the older students relied on their personal experiences for information than younger students did. (For a further discussion of this subject, see Section *XIV The Mass Media.*)

Almost three-quarters of the students said there was no teacher to whom they could, or would, go if they needed information about drugs. At the same time, about 70 per cent of the students thought drug information was available to them and that it would be useful. The kind of information that was most desired was information concerning the effects of drugs and the actual risks involved in various kinds of drug use.

As to the effects of drug education, slightly more than half of the students considered drugs other than cannabis to be more harmful after they had had drug education than they had thought before. The opinion of about a third remained unchanged, and the remainder considered the drugs less harmful than they had before drug education. Again there were variations according to the age of the students. Younger students were more likely than older students to consider the drugs more harmful than they had before drug education.

The most promising education programs which the Commission was able to identify in Canada place drug education in a broad perspective as part of the development of understanding about how to live effectively.[8] There is emphasis on developing the capacity for finding viable alternatives to drug use. One program stresses the importance of "living skills". It suggests that the inability to avoid drug-related problems may be due in some measure to a poorly developed repertoire of the skills which enable the individual to fill free time with constructive alternatives to drug use.[9]

There has been little progress made with the problem of evaluation of drug education programs. Most of what is spoken of as evaluation consists

of the impressions of a program's effectiveness from students and teachers. Indeed, there is some question as to how far there can be effective evaluation of drug education. We may test retention of information. We may test apparent effects of drug education on attitudes and behaviour. For this purpose, it would be optimal to conduct long-term follow-up studies with matched control groups, and even then we would be confronted with the very perplexing problem of assigning causal significance to the various factors which can influence or are otherwise associated with attitudes and behaviour. Although great emphasis is currently being placed on the necessity of evaluating drug education, adequate techniques for assessing its ultimate effects upon behaviour have yet to be developed and applied. In effect, we are presently acting on certain unverified assumptions concerning its efficacy with regard to various, often ill-defined goals and criteria.

These assumptions have been increasingly challenged in recent years, particularly in the United States, where, it is fair to say, there have been signs of growing disenchantment and even disillusionment with drug education. It is difficult to know how far the criticisms of drug education in the United States would be true of drug education in Canada. Our own impression is that there has not been in Canada anything comparable to the American proliferation of drug education materials, ranging in quality from apparently excellent efforts to obviously inadequate and possibly harmful programs. From all accounts, there has been in the United States such a great outpouring of inferior materials and programs that many have called for a halt or a "moratorium" on drug education efforts to give time for the selection of good materials and the development of wider agreement on objectives and methods. Characteristically, Americans appear to have embarked on a great variety of drug education programs with greater gusto than Canadians, with the inevitable excesses that such enthusiasm brings. Because of Canada's smaller population and fewer jurisdictions, it is easier for good drug education programs to gain in influence through imitation.

In addition to criticism of the quality of drug education materials and programs in the United States,[10] there have been doubts raised about the efficacy of drug education as an influence on behaviour.[11] Critics have said that we have placed too much reliance on it. They point out that information concerning the dangers of cigarettes has failed to bring about a significant decrease in the amount of cigarette smoking. These critics say that people's behaviour is not as much influenced by information as we might like to think. They point to more significant and longer-lasting influences in the personality and social background of the individual. There is also a suspicion that people may, by a process of "selective attention", avoid the impact of information that does not support their choice of behaviour. In other words, we cannot even be sure that the information reaches those for whom it is most appropriate. It has been observed, however, that we have not seriously begun to make use in drug education of existing scientific knowledge concerning the techniques of influencing behaviour.[12]

Apart from these questions concerning the positive efficacy of drug education, there is concern that it may often serve to arouse an unhealthy curiosity or interest in individuals who might not otherwise be attracted to particular forms of drug use. This is undoubtedly a danger in all discussion of forbidden things, particularly with young children. There is also the fear that while persons who are familiar with drug use are likely to have more credibility and therefore more effective educational impact than non-users, they may in many cases reinforce attitudes that are favourable to drug use.

Notwithstanding these doubts concerning the efficacy of drug education and these fears that it may sometimes produce harmful results, we believe that we should persist with it as one of several means of helping to develop the understanding and the capacity required to enable the individual to deal effectively with the personal challenges presented by drugs. As with any other kind of human problem, we have more to fear from ignorance than from knowledge in the field of non-medical drug use. Even if drug education is more effective in conveying information than in influencing attitudes or behaviour, its informational function is essential. Individuals cannot be said to be adequately equipped to make wise choices if they do not have the requisite informational basis. Helping our young people to develop an adequate understanding of the phenomenon of non-medical drug use in its essential implications for personal welfare is a duty that we owe to them.

At the same time, we must see the process of drug education in a much broader context than the formal program in the school system. We must not expect drug education in the schools to be able to overcome the lack of other constructive influences. Parents must be involved in drug education as well as teachers. Much of the knowledge about ourselves and how to live that is relevant to the ability to cope effectively with the challenges presented by drugs can only be imparted effectively in the home. This is the subject-matter of a later section of our report.

Perhaps a final word about fear is in order. When we said in our *Interim Report* that we did not think drug education should be based on a strategy of fear we had in mind a program that started out with the stimulation of fear as its objective. The notion of a strategy of fear implies that one will set out to inspire fear and to shape the message accordingly. Obviously, one should not distort the facts to produce fear, but if the facts objectively stated give rise to fear this is not a consequence to be avoided. We did not mean to suggest that fear resulting from a consideration of the objective facts was a bad thing.

There is a danger that in raising too great expectations or in being excessively critical about drug education we may inhibit or paralyse very worthwhile efforts. The same stimulation of self-doubt by a host of experts has played havoc in the field of child-rearing. It would be a pity if teachers were made unduly self-conscious or discouraged by all these second thoughts about drug education. It is very easy to set unreal standards. Only good can

come from a teacher who sympathetically assists students to develop a greater understanding of themselves and the problems of effective living, of which drugs are only one aspect. What is important in the long run is not the detailed, technical knowledge (although this should be imparted as accurately as possible) but the understanding of self and the role which drugs play in our lives. We have to come to this understanding by ourselves; drug education is only one of several means by which we may acquire it. With all its limitations it can play a useful role if it is carried out with candour and an awareness of the extent to which our individual values will inevitably determine our choices. As we said in our *Interim Report* the goal cannot really be more than to assist the individual to see where his true personal interest lies. In the final analysis we have no alternative but to place our faith in the value of this kind of understanding.

Reference has been made in the preceding section to the federal role in relation to drug education.

NOTES

1. Fred Walden and Barbara Myers, "An Analysis of Resources and Services Provided by School System Drug Education Programs," Commission Research Project, 1970–71.
2. Jeff & Hadie Solway, "Drug Education, Information, and Services in Selected Toronto Schools," Commission Research Project, 1970–71.
3. Fred Walden and Barbara Myers, "Students and Drug Education," Commission Research Project, 1971.
4. Fred Waldon and Barbara Myers, "Analysis of Courses of Study in Drug Education in Elementary and Secondary Public Schools in Canada," Commission Research Project, 1970–71.
5. Barbara Myers, "Drug Education in Canadian Schools: Results of a Survey of School Boards," Unpublished Commission research paper on the Project referred to in note 1 above.
6. Jeff and Hadie Solway, "Report on High School-Based Drug Information, Education and Services," September 1970 and "The Crisis in Our Schools," April 24, 1971, Unpublished Commission research papers on the Project referred to in note 2 above.
7. Barbara Myers, "Toronto Students and Drug Education," August 13, 1971, Unpublished Commission research paper on the Project referred to in note 3 above.
8. Christine Lohoar and Barbara Myers, "Background Papers on Drug Education in the Schools," Unpublished Commission research papers (May 1971) on the Project referred to in note 4 above. The program Moods Substances People of the Toronto Board of Education has been adopted by several other Boards. Two of the most interesting programs have been introduced by the Calgary and North York (Toronto) School Boards; Kenneth Low, "Intoxicant Problem Avoidance Capability, Instructions (Living Skills)," Calgary, Alberta; M. H. Coffeng, "A Submission to the Commission on Approaches in Education to Drug Concerns," Borough of North York Board of Education, Ontario, summer 1972.
9. Kenneth Low, see note 8 above.
10. Peter G. Hammond, "Why Drug Abuse Education is Failing in America," Paper delivered at the 30th International Congress on Alcoholism and Drug Dependence, Amsterdam, September 1972.
11. Amitai Etzioni, "Human Beings Are Not Very Easy to Change, After All," *Saturday Review*, Vol. 55, No. 23 (June 3, 1972), reprinted in *Grassroots* (September 7, 1972, supplement); Richard H. Blum, "A New Perspective on Drug Education," Address to the National Coordinating Council on Drug Education, reprinted in *Grassroots* (August 1972, supplement); Seymour Halleck, "The Great Drug Education Hoax," *The Progressive*, 1970, Vol. 34, reprinted in *Grassroots*, (January 1972, supplement); John D. Swisher and

Richard W. Warner, Jr., "A Study of Four Approaches to Drug Abuse Prevention," Final report on Project No. 0B083, U.S. Department of Health, Education and Welfare, July 31, 1971.

12. Reginald G. Smart, "Factors in the Effectiveness of Drug Education," Paper delivered at the 30th International Congress on Alcoholism and Drug Dependence, Amsterdam, September 1972.

Section XIV

The Mass Media

In Section III *The Causes of Non-Medical Drug Use,* we made some general observations concerning the role of the mass media of communication. As we suggested there, it is probably impossible to accurately determine the full effects of the media on attitudes and behaviour. An attempt may be made to determine how much people retain the impressions they receive from the media. They may be asked their opinion as to the extent they believe the media have influenced their conduct, but they may in fact be mistaken in their assignment of causal significance. Controlled experimental studies of the effects of the media, under natural conditions, would be extremely difficult if not impossible to conduct, because of the obviously complex interaction of a multitude of seemingly uncontrollable factors which influence attitudes and behaviour.

A significant role of the media which must necessarily be regarded as having causal effect is to make something known that would not otherwise be known to the individual. Without knowledge of a thing there can be no curiosity or desire concerning it. Thus, an important question is the extent to which the media have introduced individuals to knowledge about drug use (and in particular, non-medical drug use) which they would not have otherwise obtained.

In its national surveys[1] the Commission attempted to determine the relative importance of the media as a source of first information about drugs. Of course, the fact that a person first learned about certain drugs from the media does not necessarily mean that he would not have eventually obtained equivalent information from other sources. The Commission's national adult survey (based on a sample of households) indicated that the media ranked in the following relative importance with friends and ac-

quaintances as the source of first information about certain psychotropic drugs:

SOURCE OF FIRST INFORMATION ABOUT DRUGS

Drug	*From Media (%)*	*From Friends and Acquaintances (%)*
Hashish	58	8
LSD	68	7
Marijuana	62	10
Speed	47	6
Amphetamines	26	4
Barbiturates	37	6
Diet Pills	29	10
Solvents	53	9
Sleeping Pills	34	11

It should be emphasized that the sample in the national survey of households was composed mainly of adults who would presumably have less contact than younger people with friends using drugs whose possession is prohibited. The Commission's surveys indicated that the media were less important for high school students as a source of first information about drugs. Among those high school students who had ever used drugs non-medically, 27 per cent first learned of drugs from the media, while 62 per cent first learned from their friends and acquaintances. Among the non-using student population, 43 per cent first heard of drugs through the media and 28 per cent from friends and acquaintances.[2]

A pilot study to attempt to determine some of the salient environmental influences which may affect drug use among the young was undertaken in 1970 in California by Dr. Donald L. Kanter,[3] with special attention to the role that television advertising may play. In each of three phases of the study, 622 students from grades five, seven and eleven were asked to: a) recall the advertisements they remembered in their daily television viewing and radio listening; b) state their attitudes towards drugs and other related factors; c) view six advertisements, after which their general receptivity was studied.

In summary, the study found that advertising had very low salience among the students, when compared to other environmental influences. Most students felt that peer group influence and curiosity were more closely related to the first use of illegal drugs. The study also concluded that there is no indication that pharmaceutical advertisements were easier to recall than those of other heavily advertised products, although the students felt that advertising was a relatively strong influence on their feelings about medicine, but not about marijuana or other illicit drugs. The study noted, however, that fifth grade students tended to react most positively and least negatively towards advertisements for pharmaceuticals and cigarettes, and the same group ranked television programs as a relatively strong influence upon their

general feelings and knowledge of marijuana and other illicit drugs, a fact which was not stated by the older students in the study group. The youngest students tended to find the pharmaceutical and cigarette advertising claims more believable than the older students.

A number of the students, especially those in grade seven, felt that the advertisements for stimulants and depressants could lead to misuse of the product, and users of marijuana and 'pep pills' seemed to be more receptive and less negative to the six advertisements than were the non-users.

Kanter concluded that while advertising is not, by itself, responsible for student behaviour towards drugs and other products, substances and activities, it is potentially an influencing agent, particularly on the youngest students. He suggests that advertising functions as a reinforcing element in the entire complex of drug attitudes among the young by implying, symbolically, to the users that: "Everyone turns on in his own way." This, he points out, might be an important rationalization for the furtive user. In summary, he suggests that "it may just be that pharmaceutical advertising is one more cultural prop in the maintenance of favourable attitudes towards drug usage among the young". It is, after all, the elementary school children who tend to be most receptive and least critical of advertisements.

The significance of any impact that advertising may have on youth in relation to non-medical drug use does not appear to lie in the direct effect of individual commercial messages. Rather it appears to flow, as with adults, from the recurrence of themes which suggest easy access to material objects for alteration of the physical or psychological functioning of the human body. This message, in turn, appears to reinforce a growing reliance on the biochemical development of substances capable of controlling such aspects of human functioning as sleep, response to tension or coping with fatigue.

Advertisers have not hesitated to use drug-related themes to promote their products in recent years. The use of psychedelic themes, visually or verbally, characterized a good deal of advertising during 1968 and 1969. However, by 1970, many advertisers were convinced that these themes were not making an impact for their products in the market-place and, to a large extent, they had abandoned them, recognizing that in order to be effective, advertising must choose the style appropriate to the audience.

There is no evidence of direct encouragement of illicit drug use in advertising, but there may be some indirect influence on the phenomenon through the emphasis that advertising places on quick and easy solutions to such everyday problems as headaches, stress, fatigue and interpersonal strains.

As we suggested earlier, there is little empirical evidence documenting the influence of advertising on the behaviour of those exposed to it, but it is not unreasonable to assume that there is some effect. Otherwise, the very large investment in advertising can only be described as wasteful and illogical. In 1970, for example, Canadian advertisers invested a total of ap-

proximately $330 million in radio, television, newspaper and magazine advertising.[4] Of this amount, about $84 million, or 25 per cent, was spent on advertisements for alcohol, tobacco and over-the-counter pharmaceutical preparations.[5]

If the objective of social policy with respect to non-medical drug use is to reduce such use as much as possible, the question that presents itself is whether controls should be imposed on the advertising of drugs on the assumption that advertising encourages such use. The issue arises particularly with reference to the advertising of over-the-counter drugs, alcoholic beverages, and tobacco. Such advertising is thought to encourage a general climate of acceptance of and reliance on mood-modifying substances.

The jurisdiction to regulate advertising is an aspect of the jurisdiction to regulate trade and commerce, which is divided in Canada along the following general lines: the Parliament of Canada has exclusive jurisdiction with respect to trade and commerce which extends beyond the boundaries of a single province, and the provinces have exclusive jurisdiction with respect to trade and commerce which is confined to their respective territories. There is some overlapping in the federal and provincial jurisdictions, and in particular, federal jurisdiction extends to matters of intraprovincial trade and commerce the regulation of which is necessary to the effective exercise of federal jurisdiction over extraprovincial trade and commerce. (See Appendix F.1 *The Constitutional Framework.*) Conversely, enterprises carrying on extraprovincial trade and commerce are subject to a variety of provincial laws affecting the business which they carry on in a particular province. The Federal Parliament also has certain special bases for a regulation of advertising. It effectively controls advertising on radio and television in the exercise of its jurisdiction over these broadcasting media. It may also base the control of certain kinds of advertising on its criminal law power, in the interests of public morality, order, safety, health, and the prevention of fraud. The criminal law power affords a basis (in addition to regulation of trade and commerce) for controls over the advertising of drugs, including alcohol and tobacco. The extent to which there is a corresponding or comparable provincial jurisdiction for the protection of health is not so clear, but it appears to be generally recognized that the provinces may restrict the availability of substances in the interests of health (see Appendix F.1) and that restrictions on advertising may be related to such a legislative purpose. Provincial restrictions on liquor advertising have been recognized as a valid aspect of liquor regulation, and provincial restrictions on the advertising of tobacco have been held to be valid as a regulation of local trade and commerce.[6]

The advertising of narcotics,[7] controlled drugs,[8] and Schedule F prescription drugs[9] to the general public is prohibited. In effect, advertising of these drugs is confined to professional journals. Over-the-counter drugs and proprietary or patent medicines may be advertised to the general public, but subject to certain limitations. The *Food and Drugs Act* provides that no

person shall advertise any drug to the general public as a treatment, preventative or cure for any of the diseases, disorders or abnormal physical states mentioned in a schedule to the Act.[10] These include "anxiety state", "depression", "hypertension", and "hypotension". The Act further provides that no one shall advertise a drug in a manner that is false, misleading or deceptive or is likely to create an erroneous impression regarding its character, value, quantity, composition, merit or safety.[11] The Act also provides that the Government may make regulations concerning the advertising of a drug "to prevent the consumer or purchaser thereof from being deceived or misled as to its quantity, character, value, composition, merit or safety or to prevent injury to the health of the consumer or purchaser...."[12] This suggests the nature of the matters with which the Government is to be concerned in its regulation of advertising.

The Proprietary or Patent Medicine Act[13] also contains provisions concerning the advertising of the substances covered by it. As with the provisions in the *Food and Drugs Act* they are chiefly concerned with truthfulness. A proprietary or patent medicine must not be claimed to be a cure for any disease, and any advertising of it must not contain any false, misleading or exaggerated claims.[14]

The regulations of the Canadian Radio-Television Commission require that the advertising on radio and television of drugs which are governed by the *Food and Drugs Act* and the *Proprietary or Patent Medicine Act* must receive the prior approval of the Department of National Health and Welfare and a representative of the Commission.[15] In the exercise of this review the Department of National Health and Welfare is chiefly concerned, in accordance with its legislative framework, with truthfulness and proper disclosure. It does not attempt to interfere with the general tone of such advertising, insofar as it may have a bearing on the general encouragement of drug use.

The issue arises as to whether there should be a stricter control exercised over the advertising of over-the-counter drugs and patent or proprietary medicines. Many of these products, such as analgesics, cough suppressants and antihistamines, serve a useful function. It is not practicable that they all be made subject to the requirement of prescription because of the additional expense and inconvenience that would be caused to consumers. So long as over-the-counter preparations serve a useful function, for example, in the relief of pain and allergy, it is desirable that accurate information concerning their uses and any dangers be made available to the public. There would be more harm than good in a lack of adequate information concerning these medications. On the other hand, much of the advertising of these substances, by its general tone, is calculated to encourage reliance on chemicals to relieve discomfort of various kinds. **While a total prohibition of the advertising of such substances would not appear to be desirable, we recommend that the federal authorities be empowered and encouraged to exercise a closer control over the general tone of such**

advertising. It should be confined to a truthful, matter-of-fact description of the use of these substances, purely to advise people of their availability and not to encourage their use as such.

The Canadian Association of Broadcasters is to be commended for their decision to ban all advertising of drugs, including proprietary medicines, to children.[16]

The most significant advertising of drugs today is unquestionably that which is directed by pharmaceutical manufacturers and distributors at the medical profession. Until fairly recently, the Department of National Health and Welfare has not concerned itself particularly with such advertising, relying on the medical profession to monitor it for truthfulness. There has been no attempt to deal with the extent to which the volume and general tone of such advertising encourages prescribing by physicians and the total amount of drug consumption for medical purposes. There is evidence, however, that the Department is showing greater concern about this problem. The Department has noted that about 75 per cent of the drugs on the market were not available 15 years ago, and that about 50 per cent of the doctors practising today have graduated within this same period.[17] The conclusion that is being drawn is that doctors are receiving most of their education in the use of drugs from the representatives of pharmaceutical manufacturers. In consequence, the Department has begun to make a much closer study of the advertising literature and practices of these companies. **We recommend that effective controls be established over the nature and quantity of the advertising directed by pharmaceutical manufacturers and other distributors at the medical profession, including the use of samples. The Federal Government should take steps, in consultation with the pharmaceutical industry, to encourage a general reduction in this kind of promotion.**

Generally, self-regulation is to be preferred to government regulation because it can adjust more flexibly and realistically to operating necessities. Matters of taste and general tone and emphasis cannot be dealt with effectively by formal rules. They call for the continuous exercise of judgment within a context of general criteria or guidelines. Some consultative mechanism should be established, involving representatives of government and industry, with the objective of developing an advertising climate that will avoid as much as possible encouraging reliance on drugs, whether for medical or non-medical use.

The general jurisdiction to regulate the advertising of alcoholic beverages is provincial as an aspect of the power to regulate the sale of such substances. The provinces have adopted provisions concerning liquor advertising which vary considerably in their restrictiveness. In New Brunswick and Prince Edward Island all such advertising originating in the province is prohibited. The other provinces permit such advertising in varying degrees. For a short time the province of British Columbia sought to prohibit virtually all such advertising, but it has returned to the former state of the law, under which liquor may be advertised in newspapers or periodicals, subject to

prior approval of all such advertising by the Liquor Control Board. Outdoor advertising of liquor is forbidden, which is an example of the kind of provincial regulation designed to minimize the impact of such advertising on the young.

The Canadian Radio-Television Commission exercises control over the advertising of alcoholic beverages on radio and television. The regulations[18] prohibit the advertising of spiritous or "hard" liquor altogether. They permit advertising of beer, wine or cider in any province in which the advertising of such substances is permitted by provincial law. Their advertising on radio and television is subject, however, to the following conditions, among others: the advertising must not be designed to promote the general use of beer, wine or cider, but this condition is not construed so as to prevent "industry, institutional, public service or brand preference advertising"; the advertisement must not exceed sixty seconds in duration; and it must be approved by a representative of the Commission prior to broadcast.[19]

The advertising of spiritous or 'hard' liquor appears to be heavily concentrated in certain periodicals. Indeed, an examination of such magazines indicates that a very significant proportion of their advertising revenue must be derived from advertising by distillers, most of which is in the form of full-page colour ads. Such advertising is chiefly of the brand preference type, although some of it carries overtones of the association of drinking with distinction of various kinds. Occasionally, there is advertising of a public service nature, as for example, an advertisement on the need to seek medical help for problem drinking. In one issue which carried this advertisement, however, there were several straightforward liquor advertisements by the same company. A ban on such advertising would undoubtedly have a very severe impact on the advertising revenues of such publications. The question is whether such advertising causes sufficient harm to warrant such a ban. The assumption on which such a ban would be based is that the harm caused by the excessive use of alcoholic beverages is such that we are justified in attempting to prevent any encouragement of their use as much as possible.

It is, of course, impossible to assess the extent to which such advertising encourages the use of alcohol. One can only assume from the investment that is made in it that it is at least considered by the advertisers to encourage brand preference. What other message the advertising may carry is far from clear. Certainly, it is highly attractive and subtly suggests the association of certain products with distinction and social prestige. On the other hand, its exposure to the young is presumably less than that of advertising on the broadcast media and that of various forms of outdoor advertising.

To be feasible a prohibition of such advertising would have to be introduced at the federal level. Because the periodicals which carry such advertisements are either national in scope or originate outside of Canada it is not feasible for individual provinces to consider such a prohibition.

It would be preferable if there were a total prohibition of liquor advertising but if this were not considered feasible because of the substantial amounts of advertising revenue involved, we recommend that advertisers of alcoholic beverages be required by federal law to include in their advertisements a warning of the dangers of excessive use (e.g., "Danger to your health increases with amount consumed") similar to that which is included in cigarette advertising. The text in such advertisements should also be confined to truthful, matter-of-fact description of the contents of the product and its effects on the human body.

At the present time there is no federal regulation of the advertising of tobacco products, although there is some self-regulation by the industry. British Columbia is the only province that appears to have introduced any regulation of such advertising.

Bill C-248, for the enactment of a *Cigarette Products Act*, was introduced in the federal Parliament by the Minister of National Health and Welfare and given first reading in June 1971 but was later abandoned, presumably as a result of pressure from the cigarette manufacturers and their willingness to undertake a measure of self-regulation. Bill C-248 would have prohibited all advertising or "promotion" of cigarettes to the public except for identification of products at point of purchase. It would also have set limits on the amount of nicotine, tar, and other constituents which cigarette products could contain, and would have required that all cigarette packages carry a statement of the amount of such substances contained in the smoke of the cigarettes, as well as a warning in the following terms: WARNING: DANGER TO HEALTH INCREASES WITH AMOUNT SMOKED, AVOID INHALING. The Act would have come into force on January 1st, 1972.

The industry code for self-regulation, entitled "The Cigarette Advertising Code of the Canadian Tobacco Manufacturers' Council", took effect on this date. Unlike the Bill, it does not prohibit all cigarette advertising to the public, but only such advertising on radio and television. It requires that a warning in the following terms be clearly indicated on all cigarette packages: WARNING: THE DEPARTMENT OF NATIONAL HEALTH AND WELFARE ADVISES THAT THE DANGER TO HEALTH INCREASES WITH THE AMOUNT SMOKED. The Code does not appear to require that such warning be carried in advertising, but in fact all cigarette ads in periodicals appear to carry it.

This may result in part from the fact that the regulations made under the *Tobacco Products Act*[20] of British Columbia require that not only every cigarette package but every advertisement of cigarettes in the province must carry a warning in one of the following three forms:

WARNING: Cigarette smoking is harmful to you.

WARNING: The Department of National Health and Welfare advises that danger to health increases with amount smoked.

WARNING: The Surgeon General has determined that Cigarette Smoking is Dangerous to Your Health.[21]

The third alternative is for the convenience of American advertisers.

The media in which the advertising of tobacco is permitted in British Columbia, subject to the foregoing condition concerning cigarettes, are newspapers, books, periodicals, programs, circulars, price-lists or letters, vending machines, and the premises of sellers. Any other form of outdoor advertising (such as billboard advertising) and advertising in the broadcasting media would appear to be prohibited.

In summary then, the advertising of cigarettes on radio and television in Canada is effectively prohibited in Canada, as a result of industry regulation, and all cigarette advertising must carry a warning of the dangers of smoking. The warning does not, however, as was originally contemplated by Bill C-248, caution against inhaling. The industry code contains a number of rules designed to reduce the impact of cigarette advertising on young people, including the use in such advertising of athletes, entertainers or other personalities likely to have special appeal to children or adolescents. More generally, the Code stipulates that cigarette advertising should be of the brand preference type and should not state or imply that smoking "is essential to romance, prominence, success or personal advancement".

As with alcoholic beverages the issue is whether there should be a complete prohibition of such advertising. Once again, there would appear to be a significant reliance by periodicals (although not as great as in the case of liquor) on revenue from such advertising, and many of these periodicals originate outside the country. **A total prohibition of all cigarette advertising would be preferable but if it is not considered feasible, for jurisdictional or other reasons, we would recommend, as in the case of alcoholic beverages, that the text in such advertising be confined to straight, matter-of-fact description of the contents of the product and its effects on the human body. Although we recognize that some protection is involved in the warning that is now voluntarily carried in such advertising by the tobacco industry, we recommend that it clearly convey the fact that the regular smoking of cigarettes, because of the dependence that develops, almost inevitably leads to the level of use that is dangerous. We further recommend that such warning be required as a matter of law by appropriate federal provision.**

The advertising of certain hazardous products which may be used for purposes of intoxication, in particular volatile substances, is regulated by a federal statute, the *Hazardous Products Act*.[22] The regulations made under the Act provide that certain volatile solvents shall not be advertised or sold unless the label on their container carries the required warning of the dangers involved in use. These warnings indicate that the vapour is harmful and that one should not breathe the fumes from the substance. There is little danger that such substances will be advertised or promoted for purposes of intoxication. The intervention of government is to require that labelling carry a suitable caution of the hazards incurred when they are used improperly.

At the same time, if the warnings were too explicit they could encourage such use by what the U.S. Consumers Union report *Licit and Illicit Drugs* has called the "lure of the warning".[23]

It is necessary now to consider the general effect of the media on non-medical drug use, and in particular, the extent to which the media may have encouraged illicit drug use. It is impossible to be certain but it is reasonable to assume that the publicity given to certain aspects of illicit drug use has aroused an unhealthy interest in it. Certain of the media appear to have been involved in favourable references to illicit drug use and even overt encouragement of it. The media that have been particularly guilty of this have been FM "rock" music radio stations and the "underground" press.

Drug-oriented music may take one or both of two forms. Its lyrics may contain passages or expressions which can be taken as references to drug use, although this is at times a matter of interpretation. It may not reflect the original intent of the author of the song. The second form is not projected through the lyrics but through the music itself, which, it is claimed, often functions to enhance the effects of some forms of non-medical drug use.

The modern era of drug-oriented music began about 1963 with the appearance of two songs "Puff the Magic Dragon" and "Walk Right In", which, it is said, were running allegories about marijuana intoxication. The most notable proliferation of this form of music began, however, in 1965, with the advent of "folk rock". Bob Dylan is generally regarded as the most significant pioneer of this form, with his song in that year "Mr. Tambourine Man", a song full of strange, new images which told the story of a drug user trying to buy drugs from a Greenwich Village trafficker.

As the use of psychedelic drugs increased both in North America and England over the following two years, more explicitly drug-oriented "rock" songs appeared. In "Rainy Day Woman", Dylan himself decreed unambiguously that "everybody must get stoned". The Rolling Stones portrayed one kind of drug experience in "Get Off of My Cloud", and publicized the "housewife syndrome" in a later song that dubbed the "little yellow (amphetamine) pill", "Mother's Little Helper". The Mothers of Invention satirized the growing use of drugs in middle-class America in their album *Freakout*. The English singer Donovan wrote "Mellow Yellow", the product of a rumour in circulation at the time that the insides of banana skins, properly prepared, would induce a drug-like 'high'.

The interrelationship of rock music with drug use was not confined to lyrics and *double entendre* references. A basic quality of the drug experience —distortion of time and spatial perception—was being captured in new styles of a ranging instrumentation. Increasing electronic sophistication made it possible, for example, to "twist and bend" the sounds from an electronically amplified guitar out of all recognition.

In 1966 rock music groups who produced while under the influence of psychedelic drugs became prominent. The first track of a production by

Country Joe and the Fish was "Flying High", a description of the musicians' adventures during an LSD experience. On the West Coast of the United States, such groups as The Grateful Dead, who admitted to consuming large quantities of LSD before performances, The Jefferson Airplane and Big Brother and the Holding Company produced drug-oriented music, which became known to its devotees as "acid rock". The Beatles, perhaps the most popular and widely known musical group of the 1960s, produced an album entitled *Sgt. Pepper's Lonely Hearts Club Band,* about the same time in which there were numerous allusions to drug use and drug-oriented images.

Throughout the period until 1969, some rock music groups proselytized for drug use, some were indifferent, and some like Steppenwolf, portrayed the 'pusher' in terms of severe condemnation, while allowing for the relative harmlessness of "pills and smoke". Throughout 1970 drug themes in rock music began to lose their prominence, and a change became evident by late 1970 after Janis Joplin and Jimi Hendrix, two of the most prominent artists of the 1960s, died suddenly. Shortly after their deaths there began to appear a number of rock productions warning the young of the dangers of non-medical drug use. Some productions painted frightening images of the addict and his needle. Others expressed a disillusionment with the creative value of hallucinogenic drugs—for example, the following lines by John Lennon of the Beatles:

> I seen through junkies I been through it all,
> I seen religion from Jesus to Paul,
> Don't let them fool you with dope and cocaine,
> Can't do you no harm to feel your own pain
> I found out!

The Canadian Radio-Television Commission does not specifically provide for the control of music associated with drug use. Nor are there indications that the broadcast industry itself would welcome such an intervention. A number of FM rock radio program directors that were interviewed said they drew the line at outright endorsement of drug use from any quarter and said they would be prepared to change their attitudes if it could be proven to them that drug-oriented music did in fact lead young people to drug use.[24]

The "underground" or "alternate" press now publishes in a number of cities across Canada. Editorially speaking, most "underground" papers are positively oriented to the recreational use of drugs. There has always been a basic consensus in the "underground" press that certain drugs have valuable properties and that the existence and enforcement of federal laws concerning drug use are unethical and unacceptable. References to the drug experience find their way, without apology, into reporting, features and entertainment of every kind appearing in these publications. The degree to which this editorial policy may influence the non-medical use of drugs by the readership of the "underground" press is difficult to ascertain. No readership surveys have been

carried out in Canada but in the late 1960s such a survey was carried out by the *East Village Other,* a major "underground" publication in the United States. This survey showed that 98 per cent of the readership of this publication had tried marijuana at least once and 77 per cent had tried LSD. Interpretation of these findings is difficult, since it cannot be ascertained whether this drug use was encouraged by the editorial posture of the publication, or whether the publication had a special appeal for readers who had already used these drugs. Although the editors of these publications assert that their readership expects to find in the "underground" press the ultimate confirmation of ideas to which they already cling, it must be recognized that as early as 1968 in Canada the "underground" press was proselytizing indiscriminately on behalf of hallucinogenic drug use. The early history of these publications in North America is marked by a high degree of defiance of the present drug laws, and of curiosity and uncritical acceptance in relation to many types of drug use.

By the spring of 1971 the preoccupation with non-medical drug use appeared to have diminished. Analysis of successive issues of American "underground" publications showed a progressive diminution in the space being devoted to this subject. There also appeared to have been a qualitative change. Stories on the morality of drug use were giving way in Canadian "underground" publications to advice and discussion intended to provide practical information to young drug-using readers. One widely syndicated column, written by a California physician, provided information about the side effects and dangers of well-known and more obscure drugs. More space was being devoted to the dangers of heroin and amphetamine use, and wide discussion was given to those rock artists who had recently expressed their disillusionment with the value of LSD. In Canada, one West Coast "underground" publication ran a highly revealing feature by Black Panther Eldridge Cleaver during 1970. In the article, Cleaver delivered a scathing denunciation of LSD and of Dr. Timothy Leary, the so-called high priest of psychedelics, for being what he described as death-inspired and counter-revolutionary. The trend of "underground" publications in Canada in 1971 was described by one Commission researcher as follows:

> Drugs have not ceased to provide an orientation or a rallying point, but the realization has developed that an alternative social order cannot be founded on their use alone.[25]

The question arises as to whether the law should specifically prohibit acts which encourage illicit drug use or exploit it as a dominant theme. French law makes it a criminal offence to incite a person to commit drug offences or to portray them in a favourable light.[26] Counselling or aiding and abetting a criminal offence, such as trafficking or simple possession, is presently covered by the *Criminal Code* of Canada. (See Appendix F.4 *Applicable Provisions of the Criminal Code.*) There is no necessity to create a special offence applicable to drug use to cover such conduct. The question

arises as to whether there should be an offence, similar to that of obscenity, consisting in the undue exploitation of illicit drug use. Our experience with the law of obscenity, which has given rise to critical re-examination, suggests that it would be unwise to create a new offence of this character. Direct, overt encouragement of conduct which is presently an offence under the drug laws is the matter of principal concern in this general area and is adequately covered by the offence of counselling.[27]

NOTES

1. C. M. Lanphier & S. B. Phillips, "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," and "University Students and Non-Medical Drug Use: A National Survey," Unpublished Commission Research Projects, 1971.

2. Studies conducted for the Addiction Research Foundation of Ontario support our own findings that users and non-users differ in the sources of information about drugs that are regarded by them as most important. The media were an important source of information for both groups, but whereas it was the most important for non-users, it was outranked, in the case of users, by reliance on friends and their own experience. See R. G. Smart & D. Fejer, "Most Influential Source of Drug Information and Extent of Drug Use," Unpublished manuscript, Project H-130, Substudy 44–7–71, Addiction Research Foundation, Toronto, 1971; R. G. Smart, "Age and Sex Differences in the Most Influential Source of Drug Information," Unpublished manuscript, Project H-217, Substudy 43–7–71, Addiction Research Foundation, Toronto, 1971; and R. G. Smart & D. Fejer, "Credibility of Sources of Drug Information for High School Students," Unpublished manuscript, Project H-130, Substudy 7–7 & Jo-71, Addiction Research Foundation, Toronto, 1971.

3. D. L. Kanter, "Pharmaceutical Advertising and Youth," Coronado, California: Coronado Unified School District, 1970.

4. Elliott Research Corporation Limited, "National Expenditures," in *Marketing*, March 22, 1971, p. 41 and "Radio T.V. Expenditure," in *Marketing*, March 1, 1971, p. 12.

5. *Ibid.*

6. *Benson and Hedges (Canada) et al v. Attorney General of British Columbia.* [1972] 5 W.W.R. 3 (B.C. Sup. Ct. Hinkson J.), which upheld the validity of a provision in the *Government Liquor Act* of British Columbia prohibiting certain forms of liquor advertising and the *Tobacco Advertising Restraint Act* of British Columbia, which prohibited certain forms of tobacco advertising in the province. Both of these legislative provisions have since been replaced by less restrictive measures, and the decision of the Supreme Court was not appealed, but it contains a useful review of the issues and the authorities.

7. *Narcotic Control Regulations*, section 50.

8. *Food and Drug Regulations*, G.01.007.

9. *Food and Drug Regulations*, C.01.044. Such a drug may be advertised to the general public if it is in a form not suitable for human consumption and is clearly indicated as such.

10. Section 3.

11. Section 9.

12. Section 25.
13. R.S.C. 1970, c. P-25.
14. Section 8.
15. Section 11 of the AM Radio, FM Radio and Television Broadcasting Regulations of the Canadian Radio-Television Commission. The Canada Gazette P II, Vol. 98, pp. 163, 649 and Vol. 93, p. 1198.
16. In May 1973 the Broadcast Code for Advertising to Children, which is an industry code for self-regulation, was amended to include the following provision: "Drugs, proprietary medicines, and vitamins in liquid, powdered or tablet form must not be advertised to children." This Code, which supplements the Canadian Code of Advertising Standards, also developed by the Association for self-regulation, applies to "commercial messages broadcast specifically to children under 13, whether on children's or adult programmes".
17. Dr. A. B. Morrison, Assistant Deputy Minister, Department of National Health and Welfare, Health Protection Branch, Personal communication to the Commission, May 2, 1973.
18. Section 10 of the AM Radio, FM Radio and Television Broadcasting Regulations of the Canadian Radio-Television Commission. The Canada Gazette P II, Vol. 98, pp. 162 and 648; Vol. 93, p. 1198 as amended by S.O.R. 71–558, 24 September 1971.
19. Pre-broadcast approval is given by a Committee of three (called "The Beer and Wine Committee"), composed of one representative from the Canadian Radio-Television Commission (CRTC), one from the Ontario Liquor Control Board and one from the Quebec Liquor Permit Control Commission. The Committee decides in accordance with published guidelines established by the CRTC. These guidelines provide in part as follows:
    1. The main criterion in the approval of scripts is adherence to standards of good taste.
    2. Advertising shall not
        (*a*) encourage the general consumption of the product, nor should it attempt to influence non-drinkers to drink;
        (*b*) be associated with youth or youth symbols;
        (*c*) attempt to establish a certain product as a status symbol, a necessity for the enjoyment of life, or an escape from life's problems;
        (*d*) show persons engaged in any activity in which the consumption of alcohol is prohibited.
20. Stat. B.C. 1972 (2nd Session), c. 13.
21. *Tobacco Products Regulations*, adopted November 2, 1972. Order in Council No. 3941 dated 2 Nov. 1972.
22. R.S.C. 1970, c. H-3.
23. E. M. Brecher & the Editors of Consumer Reports, *Licit and Illicit Drugs: The Consumers Union Report on Narcotics, Stimulants, Depressants, Inhalants, Hallucinogens and Marijuana—Including Caffeine, Nicotine and Alcohol*, (Boston: Little, Brown, 1972), p. 323.
24. J. David, "The Role of Rock Music and the Underground Press in Relation to the Non-Medical Use of Drugs," Unpublished Commission research paper, 1971.

25. *Ibid.*
26. Loi n° 70–1320 du 31 décembre 1970, art. 630.
27. See *R. v. McLeod and Georgia Straight Publishing Ltd.*, 12 C.R.N.S. 193 (B.C.C.A.) in which the offence of counselling was applied against an "underground" paper for encouraging the cultivation of marijuana.

Section XV

Innovative Services

Since the publication of our *Interim Report,* the Federal Government has demonstrated its support for the innovative services in a number of ways. The Non-Medical Use of Drugs Directorate (NMUD) was established by the Department of National Health and Welfare with a section specifically responsible for monitoring and evaluating these services. Regional offices were created to provide liason between local services and the Directorate. The Department of National Health and Welfare has allocated an increasingly substantial number of grants for the creation and operation of these services. In addition, funds have been available through Opportunities for Youth and the Local Initiatives Program.

In 1970, the Commission strongly expressed its support for these services, recommending that they be encouraged both morally and financially. Satisfactory progress has been made in this regard.

In Appendix M of this report we have updated and expanded upon our previous observations and have expressed some reservations about innovative services. In following their operation and development we have seen that some innovative services are subject to many of the same pitfalls as the more traditional agencies. Some have become rigidly bureaucratic and remote from their clientele and original purpose; others have slipped into laxity and perfunctory routine, losing sight of their clients' real needs and failing to evolve with the changing non-medical drug use scene.

On the other hand, the innovative services have diversified greatly since the publication of the *Interim Report.* Many of them, realizing the decreasing urgency of their original purposes (providing emergency drug-crisis intervention, for example) have turned their attention to other fundamental problems. A great number have thus become less narrowly focussed on particular deviant populations and more broadly community-oriented, attempting to deal with the sources of social alienation which can promote the non-medical use of drugs. This broader outlook and community focus should be encouraged.

As explained in Appendix M, we feel that the time has come for the innovative services to elaborate their own criteria of success, and to sys-

tematically undertake self-evaluation on that basis. The Commission also believes that better evaluative criteria must be developed by funding sources. Among the most appropriate would be the relevance of each group's *raison d'être;* for example, the difficulty the clientele may have in obtaining the services offered from traditional agencies, or the extent of the clientele's reluctance to turn to those agencies. Another criterion would be the degree of genuine client participation in decision-making and the endogenous leadership development encouraged by the service.

The Commission feels that the Federal Government could terminate its financial support of innovative services less abruptly than is now the practice. While the provinces must have the final decision regarding continued support of a service after two or three years of federal funding, federal grants could be gradually tapered off to ease this transition. In order to obtain the maximum benefit from federal investment in the innovative services and the experience acquired by service leaders, there must be close cooperation between the Department of National Health and Welfare and the various provincial health departments. Priorities, criteria for evaluation and modes of financing should be discussed jointly.

A more detailed description of the character and evolution of innovative services, a discussion of some of the problems inherent in these services and their funding sources, as well as the Commission's recommendations, may be found in Appendix M *Innovative Services.*

Section XVI

The Family and Spiritual Influences

The Family

We made some reference to the influence of the family in Section III *Causes of Non-Medical Drug Use*, and in particular to the study by Richard Blum and Associates entitled *Horatio Alger's Children*. Response to our *Interim Report* suggested that too little attention had been paid to the role of the family, and while the significance of the family was necessarily implied in many of our observations concerning the causes of non-medical drug use, this comment was probably justified. Certainly, we have become increasingly impressed in the course of our inquiry by the importance of the family in relation to the whole phenomenon of drug use, medical and non-medical, legal and illegal. Indeed, the family would appear to be the most important of the formative influences. A propensity to harmful drug use may often originate in the early years when the child is most susceptible to family influences. The example set by parents is critical, both in their own use of drugs and in the importance which they appear to attach generally to reliance on the use of drugs to relieve discomfort. The capacity to accept our emotional cycle, tolerate frustration and to cope with stress all owe a great deal to family influence. Parents also have an important role to play in the development of attitudes toward the law.

A good deal of helpful instruction about drugs can be given in the family if parents take the trouble to inform themselves accurately on essential matters of fact, but the most important thing to be conveyed is general attitude. This has to do with the importance which drugs are to assume in one's life. An example is set by the self-administration of drugs which are intended for medical purposes. Parents will certainly influence the drug use of their children by the extent to which they make use of analgesics, tranquilizers, barbiturates, and stimulants to cope with the aches, stresses and fatigues of daily living. If they rely very heavily on the use of drugs for such purposes they may encourage a similar reliance in their children. Then, of course, their use of tobacco and alcohol can also have a critical influence, particularly if they are seen to be essential props to their poise and equilibrium.

Some take the view that most, if not all of these substances, can be taken in moderation with beneficial effect, and that the best influence that parents can have on their children's attitude towards drugs is not to try to inculcate an unreal goal of abstinence but rather a healthy respect for drugs and an ability to use them wisely. This comes back to the question of what should be our general social objective with respect to non-medical drug use. We reaffirm our own view that it should be to encourage people to reduce their overall use as much as possible, but to the extent that they must engage in drug use, to assist them to make a wise use of drugs that will avoid harm as much as possible. The family is probably the most important and effective influence for laying the foundations for such an approach.

This healthy respect for drugs—that they are potent substances with a potential for good and a potential for harm, and as such should be used with great discrimination—should be developed in the very early years. Essentially, it is a position that drugs are only to be used when necessary. The mother can have a very profound influence by the restraint which she exercises, for example, in the use of aspirin and other over-the-counter drugs for self-medication. At the same time, one must be careful not to develop an unreasoning distrust of drugs and a refusal to make use of the assistance that modern medicine can offer for a variety of conditions which seriously impair the capacity to function and to relate effectively to other human beings. Because an over-emphasis on the reliance on drugs has led to a general increase in the use of drugs for all purposes is no reason to go to the other extreme and to reject the benefits of a discriminating use of drugs altogether.

There are certain factors having a bearing on non-medical drug use which it is more difficult for the family to cope with or influence. These are factors arising out of the general nature of modern life: the rapid rate of change with its frightening challenge to the power of adaptation; the bombardment of the nervous system by stimuli of all kinds; depression about some of the gigantic and seemingly insoluble problems that face humanity—overpopulation, pollution, depletion of resources, racial tension, continuous resort to war—and the resulting uncertainty about the future.

The family, like other institutions, is influenced by a greater emphasis in the general atmosphere on pleasure, self-indulgence and enjoyment of the present. This is fostered by the impression that everything is changing, that nothing is certain, that it is useless to plan or to sacrifice the present for a future that may never come. There is concern about spending too much time in work and not getting enough fun out of life. There is not the same feeling as there used to be that there will be time for everything before life is over. There is not the same readiness to put things off. All of this stimulates a general desire for experience and sensation of all kinds. It is in this general atmosphere of emphasis on present pleasure, in the family as elsewhere, that drug use exerts its attraction.

It is difficult for parents today to assist their children to meet the challenge of change. Whereas previous generations could plan and prepare for a fairly specific future, having reason to believe that the things they were learning from parents and teachers would be relevant and useful in the future, modern youth does not have this assurance. It feels that very little of what the older generation has to convey will be of much use to it in the future. Take, for example, the older generation's experience with the family—the most important formative influence and source of human satisfaction; this ought to be among the most important lessons which it has to transmit. Yet the family is under severe challenge and appears to be going through a profound change. This change is being brought about by (among other things) the revolution in the attitude towards the role of woman and the place of authority in the modern world. The nuclear family may continue to try to impart a certain sense of security and assurance but children instinctively know that they are moving into a new world. They perceive the essential outline of its new relationships and new values but they are uncertain as to how successful they will be in adapting to it. Parents and children must meet the challenge of adaptation together, although the children have farther to go. Parents can help by showing their awareness of the great uncertainty and anxiety of this adventure and by trying to reinforce confidence in the future. They can also show that they understand why their children must experiment and otherwise develop their capacity to cope with change. This, of course, does not exclude the presentation by parents of their own values, attitudes and expectations, as in the case of Blum's "low-risk" families, to which reference is made in Section III *Causes of Non-Medical Drug Use.*

There is every reason to hope and believe that the sense of self-acceptance, personal security and responsibility that can be fostered by good family relations will continue to be serviceable in the new world into which the younger generation is moving. Understanding, openness and trust have been constantly stressed in the course of our inquiry as qualities that permit parents and children to communicate effectively. Such communication is one of the means by which family life as an important social structure can exert its constructive influence.

Many of the problems involved in non-medical drug use result from the manner in which we react to it. The reaction of parents on discovering that their children have been engaged in non-medical drug use is of crucial importance. The first step is to try to maintain a sense of proportion about the relative danger and seriousness of the conduct. This, of course, depends on the nature of the particular drug use, and the degree of involvement. The second step is to try to discuss it rationally in order to bring out all the relevant factors and an understanding of what should be done about it. The third step is to avoid withdrawing personal support. We cannot think of any situation that can be improved by parental rejection or the denial of the

existence of facts and realities. There can be disapproval of specific conduct without rejection of the child.

It must be acknowledged, however, that the influence of the family has been increasingly undermined by the difficulty which parents experience in being sufficiently informed in many areas in which their children have more sophisticated knowledge. It is for this reason that parents require drug education as much as their children.

Spiritual Influences

Although there were some notable exceptions, such as the United Church of Canada, the organized churches as such did not play a very prominent part in the Commission's public hearings. Invitations to make submissions were sent to all the official church organizations, but only a few of them responded. We did, however, hear from many ministers of religion and laymen on what they felt to be the relation of religious faith and practice to the challenge presented by non-medical drug use. Subsequently, the Commission conducted a survey of opinion among the administrative heads of various religious denominations. A general theme that emerged from the opinion expressed to us by ministers of religion and others involved in the work of the churches was an over-riding concern with what they perceived to be a decline in spiritual values and a corresponding adherence to materialistic or hedonistic goals and values. A characteristic expression of this view was the following statement by the Board of Evangelism and Social Service of the United Church of Canada: "We have accepted too easily the hedonism of our North American culture, with each person interested in 'doing his own thing'."

According to our survey, the churches and other religious organizations like the Salvation Army have been involved in a variety of activities aimed at helping people with problems related to non-medical drug use. These include personal counselling, cooperation with and referral to community services of various kinds, informational and educational programs, the provision of shelter, and special facilities and activities for youth. Some of the churches have been actively involved in the sponsorship of innovative services of various kinds.

Religious faith obviously has an important role to play in relation to non-medical drug use. This faith, and the strength that derives from it, can assist the individual in his struggle to avoid or overcome dependence on drugs. Its force has been demonstrated in the work of Alcoholics Anonymous. Involvement in groups or movements of a mystical, altruistic or religious tendency has apparently permitted many persons to renounce the excessive use of certain drugs. For example, a small proportion of drug users have found in certain eastern religious disciplines the inspiration which has helped them to abstain from drug use or at least to use drugs with more moderation.

There is another important principle involved in the work of Alcoholics Anonymous that should also flow inevitably from religious conviction, and that is involvement in helping others. It is a cardinal principle of Alcoholics Anonymous that alcoholics become involved in helping others as part of their own rehabilitation. Excessive drug use often reflects an excessive preoccupation with self—with one's moods, state of mind, sensations, discomforts and pleasures—and an insufficient involvement with others. Involvement in being of service to others can act as a prevention and a remedy.

There are many manifestations of spiritual concern among young people today. The whole re-examination of our values, in which young people have played a catalyzing role, has a certain spiritual aspect. It is concerned with rediscovering the essential nature of our humanity and our duty to our fellow man. From some source of inspiration has come a strong desire in many young people to be of service. Perhaps they do not constitute a majority but they are certainly a significant minority. They increasingly seek a role that will help them to express their individuality but at the same time will give meaning and value to their lives. More and more of them are seeking this value in trying to be of help to others.

There is a great potential in this spirit for constructive alternatives to drug use. There is much work to be done in the community to be of help to others: with youth, with the aged, with immigrants, with native peoples, and with the handicapped, the poor and the underprivileged generally. There has been support for many such enterprises from both government and private agencies. There is great scope for such service in the field of drug use itself. As we said in Section XI *Social Rehabilitation* above, we require many more people—a whole new lay ministry—with the dedication, the patience and the practical skills to work in a one-to-one relationship on the rehabilitation and social reintegration of persons trying to escape from the misery and defeat of drug dependence.

Part Five

Additional Conclusions and Recommendations

Additional Conclusions and Recommendations

of

Marie-Andrée Bertrand

INTRODUCTION

I hasten to stress that I am entirely in agreement with my colleagues' objectives of limitation, control and maximum possible reduction of hard drug use in Canada. I share their concern for restricting the use of opiate narcotics and strong hallucinogens, and for preventing the spread of such use to hitherto unaffected strata of the population. Not only do I share their objectives in this, but I propose even greater stringency than they with respect to the manufacture and illegal trafficking of hard drugs. My recommendations will include even more severe penalties and other measures that seem to me likely to be more effective in combatting illegal importation and trafficking than those proposed by the majority.

Reducing hard drug use in Canada, then, is our common goal. I cannot, however, concur with the measures proposed by my colleagues in pursuit of that goal. I do not believe that the best way to restrict or discourage hard drug use is by retaining the present laws making possession of opiate narcotics and strong hallucinogens a criminal offence. Nor do I agree with the recommendation that users of opiates be subjected to compulsory treatment.

In short, my position with regard to the handling of hard drug users differs from that of my colleagues on two points:

1) retention of simple possession of opiates and strong hallucinogens as a criminal offence (under the *Narcotic Control Act* and Part IV of the *Food and Drugs Act*); and

2) commitment of opiate-dependent persons for compulsory treatment; subjecting an individual against his will to measures intended to change his habits and life style.

I shall first explain my opposition to retention of the criminal offence of simple drug possession, even for hard drugs. I shall then give my reasons for rejecting the use of criminal process as a point of departure in the treatment of opiate-dependent persons.

Having discussed these two points, I shall put forward measures for dealing with drug users that seem to me more appropriate than recourse to criminal law. In particular, I shall describe certain educational and treatment programs which in my opinion should be substituted for criminal law sanctions. I shall also suggest controls that might be imposed and other action that might be taken with respect to traffickers and importers of drugs of all kinds.

THE FUTILITY OF THE OFFENCE OF SIMPLE POSSESSION AS A DETERRENT TO DRUG USE

There are objections of both principle and practicality to the invocation of criminal law against the authors of crimes without victim; a classic example of such crime is the possession of drugs for one's own use.

Using the criminal law for controlling behaviour which amounts only to an individual's personal life style, custom or private conduct is overreaching the intent of the criminal law, inasmuch as it overreaches the intended effect. Such application of the criminal law is in fact an abuse of a powerful instrument of control, with inescapable practical and moral consequences. Where there is no victim of a crime, and therefore no complainant, apprehension and prosecution take on a most singular character, requiring exceptional procedures and methods that amount to infringement of the civil liberties of individuals. Search, arrest and prosecution in cases of simple possession of drugs are precisely of this nature. In such cases it has been the State's will to set aside the normal presumption of innocence and the inviolable right to immunity from arrest and search of person and premises in the absence of a warrant; the State appears to regard the possession of opiate narcotics in itself as a grave danger, and persons suspected of it must at all costs be apprehended. Legal action against users of strong hallucinogens likewise involves exceptional procedures of arrest.

The degree of *deterrence* and *control* expected in justification of these special measures has simply not been realized. The number of convictions for heroin possession has risen from 243 in 1964 to 630 in 1972. Convictions for possession of strong hallucinogens have far from diminished (1,014 in 1970, 1,210 in 1972 for LSD and MDA). It is almost redundant to recall that convictions for cannabis possession have risen astronomically, from 25 in 1964 to 10,695 in 1972.

Furthermore, conviction or even apprehension statistics provide at best only a vague indication of the extent of use. Police reports alone record an increase in the number of *known opiate addicts* from 2,947 in 1964 to 8,958 in 1972, and these totals do not include professionals who are addicts (largely medicine-related) or persons who are drug dependent as a consequence of medical treatment. As the majority report observes, law enforcement agents have endeavoured to "contain" the phenomenon by keeping it in sight. Until

recent years, the police knew or thought they knew most addicts and could identify newcomers among them. Events, however, have shown their control tactics to be ineffective to say the least. Nor have the penalties provided by law, even as severe as they are, prevented a million Canadians from smoking marijuana and hashish during the past year. Many people tend to think that cannabis users are no longer jailed, and that is one reason for the increased use of the drug, but in 1972 there were over 560 prison sentences meted out for simple possession of cannabis.

The evidence has to be believed. Criminal law prohibition of simple possession, despite the high cost of its application to opiates and cannabis, has not prevented convictions for simple possession from tripling in the case of opiates between 1964 and 1972, and from multiplying over 425 times in the case of cannabis. Furthermore, we would probably have to multiply the number of convictions by 100 to have an idea of the number of drug *users* there are at any given time. Both hard and soft drugs are now being used by new segments of the population, and these segments are so heterogeneous and scattered that the old police practices have become quite ineffective, as the majority report observes.

The use of the criminal law where possession and use of drugs is involved may strictly speaking be justified by the pedagogical intent of the law, as the majority report observes. The legislator, however, does not appear ever to have fully appreciated that aspect of the law. To be effective, the pedagogical intent should be clearly stated and tailored to the circumstances. In particular, prohibitions and penalties would need to be proportioned to the relative potential for harm attributable to each injurious substance. This is far from the case. The laws regarding possession are inconsistent and unrelated to the gravity of the consequences entailed in the use of the various drugs, for the user himself and for others. Alcohol, which is by far the most potentially harmful and most criminogenic psychotropic substance, is distributed under government control and enjoys great popularity. Tobacco, whose potential for harm is well established, is sold freely under the law except to minors. The amphetamines, which are not far behind alcohol in harmful and criminogenic potential, are not subject to criminal law prohibition of possession, and it is not recommended in the majority report that they should be made so, in recognition of the certain ineffectiveness and extreme awkwardness of such a measure—of the futility, in short, of any extention of the offence of simple possession. The barbiturates, which head the list in causes of death by suicide, are subject to no prohibition of possession and their controlled distribution does not work as intended. Prescription control is no deterrent for anyone who really wants them; recent polls carried out in Toronto show that young people obtain them with great ease. The minor tranquilizers are very accessible, prescription control being once again ineffective. Cannabis, whose real potential for harm is not established, is still classified as a narcotic. Though many courts tend to give relatively light sentences for possession of marijuana and hashish, under the law the possession of these drugs remains

a punishable offence, and during 1972 there were still well over 500 incarcerations for simple possession. Volatile solvents, which have a high potential for harm, are subject to no legal prohibition whatever, and, desirable though it might be, control of their distribution and use would be quite impossible due to their wide normal use for household and other purposes. The strong hallucinogens, whose abuse can be extremely harmful but which are not apparently criminogenic and do not cause dependence, are subject to a prohibition of possession, but only under the *Food and Drugs Act*, whose "moral" impact certainly appears less onerous that that of the *Narcotic Control Act*. This impression is reinforced by the large number of witnesses appearing before the Commission who have recommended that cannabis be reclassified under the *Food and Drugs Act* rather than left under the *Narcotic Control Act*, on the ground that cannabis is not pharmacologically an opiate narcotic and does not warrant inclusion in the more "incriminating" statute.

As can be seen, the contradictions and inconsistencies in the legal classification of drugs are considerable, weakening the pedagogical value of the classification. Any lesson that might be drawn by Canadians from the inclusion of a substance in a strictly controlled category of drugs or medications is therefore lost. The ordinary citizen, seeing the assertions implied by the law frequently belied by pharmacological fact or the effects that he himself experiences in the use of drugs, has long since ceased to look for a relationship between the harmfulness of a substance and its classification under criminal law. In this domain, it must be said that the criminal law is thoroughly outdated and outworn.

It seems particularly illogical, ineffective and inhumane to use the criminal law against opiate dependents. If there is anything which ordinary citizens and scientists unanimously recognize, it is the high dependence-creating potential of the opiate narcotics. And yet in flagrant self-contradiction, on the one hand we define heroin and other opiate addicts as vulnerable and dependent individuals with a compulsive physiological or psychological drug need (or perhaps both), and on the other, we react to their dependence with police searches, apprehension, detention in police cells, criminal trials, fines and incarceration. We make criminals out of people whom we consider to be suffering physical and psychological disorders; we impose punishments which further alienate people who are already alienated enough, and often suffer quite sufficiently from that alone. What the opiate-dependent person needs is not harassment but compassion, not imprisonment but education and medical and psychiatric treatment.

Not only is criminal law prohibition proving ineffective in curbing the rising use of opiate narcotics and strong hallucinogens, but it creates illicit markets in which the cost of these drugs is exceedingly high and fluctuating and the supply uncertain. Since an opiate dependent's need for his drug is compulsive, most street addicts commit crimes against property and even crimes of violence when they no longer have the drugs they crave or the

money to obtain them. And in this atmosphere of clandestinity and illegality, the black market, we can be sure, takes full advantage of the demand.

The State's expenditure of public funds in detecting, apprehending and convicting users of opiates and strong hallucinogens is not justified, in final analysis, by the results obtained. Until recent months, the police have claimed to know most heroin addicts, and have made a policy of arresting them from time to time. But many drug-dependent persons learn to live with this police harassment, which in any event does nothing to relieve them of their dependence. The inconvenience and risk of apprehension seem to be amply outweighed by the pleasurable effects and satisfaction to be had from continued use of opiate drugs. We have seen, furthermore, that today there is a whole new population of addicts who are unknown to the police. The same applies with slight variations in the case of strong hallucinogens.

COMPULSORY TREATMENT: AN ILLUSION

With the criminal law process as justification and point of departure for intervention, my colleagues propose that persons apprehended for simple possession of opiates and proven to be drug-dependent be subjected to a controlled course of treatment. The measures they suggest are certainly an improvement over the present situation; their inspiration is indeed a more humane philosophy than that underlying simple apprehension and incarceration, or methadone maintenance without alternative.

Nevertheless, in my opinion the process of catchment they propose, and its underlying principles, are *irreconcilable with the intended goals.*

What my colleagues envisage is that the dependent opiate user will be compelled to give up his dependence or transfer it to something else. It must be remembered, however, that drug dependence factors are of two kinds, physical and psychological.

It would seem that there are only two ways of overcoming the physical factors. The first is through a medication or substance which blocks the effects of the opiate, particularly heroin; this, called an antagonist, would be one additional weapon in the chemo-therapeutic armamentarium. The second is a substitution program, generally using methadone. Strictly speaking, substitution of one drug for another is not treatment.

The psychological factors of drug dependence are no less problematical. They are many and, depending on the individual, greatly varied.

It is illusory, in my opinion, to expect to overcome all these factors without the complete cooperation of the patient. Therapists attached to penal institutions are well acquainted with the dilemma. The best individual and group programs of compulsory therapy have failed so far because of the necessarily authoritarian framework and lack of free choice for patients. The compulsory confinement for education and possible treatment of the

dependent person recommended by my colleagues is predicated on prior arrest, with imprisonment to follow, of course, if the patient will not accept any of the modes of treatment offered him during the period of his or her confinement. But apprehension and threat of imprisonment are generally regarded as a form of arm-twisting by opiate dependents, which is hardly conducive to any real change of attitude, and it is essentially change of attitude that my colleagues hope to achieve in order to bring about a change in habits and relief from the physical and psychological craving for drugs.

Compulsory treatment therefore seems to me to be a contradiction in terms. Furthermore, results obtained by the most highly regarded programs in the field are unimpressive. For example, the latest evaluation of Corona (California Rehabilitation Centre) shows that barely 20% of patients transferred from confinement to supervised outpatient status remain drug-free for as long as three years. There is reason to wonder whether a success rate of this order justifies our launching such a complex program, or the coercion to which thousands of patients would have to be subjected in order to achieve it, to say nothing of the social, moral and financial costs involved.

In inducing abstinence, the therapeutic communities appear to have the best record, but their capacity is very limited and they attract only a small percentage of chronic drug users, particularly since most impose total abstinence from the moment of admission; many of them, moreover, *require that their clientele be strictly voluntary.*

Methadone maintenance treatment ("treatment" being a misnomer here, since methadone is an opiate with equal or even greater dependence-producing potential than heroin) may be effective in preventing a patient from escalating his use of other drugs, given adequate supervision. Some parolees and probationers on methadone maintenance apparently work and lead relatively normal lives. Nevertheless, it must be admitted that methadone is simply the State's drug (the one tolerated and even offered by the State), whose major advantage over heroin is that it seems to enable some patients to function and hold more or less regular jobs. This raises the question of whether the State has the right to force substitution of one dependence-producing drug for another, particularly when it is known that there is illicit marketing and use of the substitute.

We should take a hard, unbiased look at the objectives of therapeutic intervention in the case of chronic opiate users. What are we treating them for, what are we aiming for, and why? Do we want dependent persons to become total abstainers, transfer their dependence from one substance to another, or to something quite different? What right has the State to dictate the substitution of one dependence for another? In short, what do we mean by "treatment"?

Take compulsory treatment; its very principle is highly questionable. There are serious ethical and socio-political implications in the State's in-

trusion on the private lives of Canadians on the pretext that their health is endangered. Surely there should be limits to the State's responsibility in the private lives of citizens. Otherwise we risk having the State stoop to a legalistic moralism as unwholesome and invidious as that exercised by churches and commercial interests at certain periods of history.

CONTROL AND LIMITATION OF HARD DRUG USE WITHOUT RECOURSE TO CRIMINAL LAW

I believe in the necessity of controlling and limiting hard drug use, but, contrary to my colleagues, I do not believe that this will best be achieved through recourse to criminal law with respect to *users*. I do not think that branding drug users with criminal records will induce them to break their habit or persuade others not to begin. It seems to me that the time has come for a more humane, more realistic, and in fact probably more practical attitude toward those who use hard drugs, particularly opiates. Criminal law prohibitions and other such measures should be supplanted by controls of other kinds reflecting a less punitive approach.

First of all, simple possession of opiates and strong hallucinogens should cease to be considered criminal acts. There should be no offence of possession or use for any of the drugs. This does not of course mean that hard drugs should be decontrolled completely; what we need is to replace the present system with a new set of more effective and more humane controls.

If there were no offence of possession, in what other ways could the State control the use of hard drugs? As I see it, there are five:

1. *Limits on the importation, manufacture and marketing of drugs* for medical purposes, *whose abuse has created a climate that encourages the use of psychotropic substances in general.*

2. *Effective controls over the importation, manufacture and distribution of opiates and strong hallucinogens and safeguards against the diversion of legally manufactured drugs to illicit markets.*

I shall return to these first two points later.

3. *Confiscation of opiates and strong hallucinogens found in the possession of persons apprehended for reasons other than drug possession, and of large quantities of medical drugs for which no justification can be produced (a medical prescription, for example).* This would involve no search, arrest without warrant or prosecution of drug users as such. However, just as a motor vehicle driver for a variety of reasons may be called upon to show his vehicle registration and driving permit, and possibly to demonstrate his fitness to drive, so persons found to be in possession of substantial quantities of injurious substances should have to show a medical prescription or other proof of recognized and

legitimate need for them. Unauthorized possession, that is to say, the fact that they could only have been obtained illegally, would justify confiscation.

4. *Information and education, the best of all methods for promoting desirable habits and attitudes.* Well run, realistic and convincing publicity campaigns would help Canadians to make informed and sensible judgments about drug use. The slogan "speed kills", spread by the drug culture itself in Canada and the United States, has diverted many a speed user or potential user from this type of drug use (amphetamines taken intravenously). In Sweden, the dangers of speed have been very effectively publicized through graphic roadside billboards. The abuse of barbiturates and certain tranquilizers would justify such tactics. The torment of opiate dependence and the unenviable future in view for the heroin addict could be depicted in this way too.

5. *Controlled, legalized sale of opiates.* In view of the high relative dependence-producing potential of opiate narcotics, these drugs cannot continue to be prohibited as rigidly as they are at present. *Provincial or regional clinics should be established for dispensing opium, heroin, demerol, methadone and other synthetic opiate derivatives to authorized purchasers at very moderate prices.* A drug-dependent person who agrees to have his dependence determined and recognized, and to submit to monitoring (urinalysis or examination of needle traces on the skin), would be authorized to obtain the drug on which he is recognized to be dependent, or another, possibly less harmful one. If the chances of his being freed of his dependence were real, the clinic staff would try to convince him of it; they would propose gradual withdrawal through controlled reduction of dosage, or a substitute, which in turn he would try to give up progressively, or else various forms of individual or group therapy. Or it might be suggested that he swap his preferred drug for another, providing the substitution would be of real benefit both socially and for the user himself. The clinic should have no coercive power, however.

   The patient would be required to take his drug at the clinic, for the first three or four months at least, to prevent the drugs dispensed from being trafficked; but the clinic would not insist that he take it orally instead of intravenously, since, if he did not feel capable of making the change, such a requirement might drive him back to the illicit market.

   Clinic personnel, besides psychiatrists and other members of the medical profession, should include young people, former opiate dependents, psychologists and social workers who would research the patients' dependence histories. On the basis of the research, the psychiatrists and psychologists, assisted by the ex-addict staff, would propose forms of therapy likely to reach the true roots of each patient's dependence.

   When I stress that drugs dispensed by these clinics should be very moderately priced, it is not to make them more easily obtainable, but to

eliminate discrimination against the socio-ecnomically disadvantaged and to minimize the temptation to resort to illicit markets.

There are four important arguments for controlled availability of all opiates:

(a) *The interrelation of two factors; the dependence-producing characteristic of these drugs, leading to compulsive efforts to obtain them, and the absence of legitimate supply. This is at the root of a great many crimes and other antisocial conduct on the part of users. The poor health suffered by many heroin addicts, besides, is more often attributable to the disordered life an addict must lead in order to satisfy his habit than to the drug effects themselves.*

Criminal activity related to the obtaining of drugs would be considerably diminished with the existence of legitimate sources of supply. I am not under the illusion that all drug-dependent persons would accept the conditions of using the legitimate clinics for their drug supply, but, according to responsible observers, over 60% of the opiate-dependent population would be attracted to such a plan and would respect its strictures, and the percentage could be higher.

(b) *The illicit markets would be deprived of two-thirds of their clientele, with obvious salutary consequences.*

(c) *The rather mystical qualities and overblown virtues of opiates (in the eyes of users) would assume more realistic proportions in a context of controlled legal distribution, and these drugs would thus lose much of their exotic appeal.*

(d) *If it is true, as some observers claim, that the early heroin user will often press his friends to try the drug, for both psychological and financial reasons (selling the drug to help finance his own supply, in particular), the incidence of such "contagion" could diminish greatly with the existence of legitimate sources of supply.*

These clinics should be kept under continual surveillance and evaluation during at least the first three years of their operation. For this purpose a special committee or board should be given a mandate to examine the following in particular:

(a) the number and characteristics of those who identify themselves as drug-dependent persons;

(b) the operating costs of these "opiate-dependence clinics", in comparison with the costs of surveillance, apprehension, prosecution and incarceration of addicts under a system in which they must lead a deviate and criminal existence;

(c) year-to-year changes occurring in the clinic clientele; and,

(d) the extent of continued contact with and recourse to illicit markets among clinic clientele.

MEASURES FOR COMBATTING ILLEGAL IMPORTATION, MANUFACTURE AND SALE OF HARD DRUGS

Better Use of Police Resources

It is cynical, or at best singularly inept, for the State to keep police forces busy detecting and apprehending cannabis users, even opiate and strong hallucinogen users, while large quantities of hashish, marijuana, amphetamines, hallucinogens and heroin are being smuggled into the country every day and every week, and large quantities of legally manufactured amphetamines are being stolen or diverted from their original destinations and sold on the black market. It defies comprehension how the police can believe it useful, as they claim, to concentrate on arresting heroin addicts, whom they know and who are not necessarily causing any serious harm, while large thefts of medical drugs are being perpetrated and illegal importation of opiates goes on apace, virtually unchecked. *The present manner in which police manpower and resources are being employed suggests that the State has no serious policy for the control of drug importation, manufacture and trafficking.*

The money and time spent on police surveillance and apprehension of drug users could be much more usefully employed:

1) *in larger police formations than the present narcotics squads, composed of more highly specialzed police personnel with reliable, up-to-date knowledge of the illegal drug transfer and distribution networks* (see Appendix B *Legal and Illegal Sources and Distribution of Drugs*);

2) *in surveillance of pharmaceutical manufacturers, including analysis of foreseeable surplus production and what is done with it; and,*

3) *in detection of illicit laboratories.*

Sporadic, spectacular (but all too infrequent) seizures of large quantities of heroin and cannabis can hardly obscure two facts:*

1) *there is no shortage of these drugs in Canada; and,*

2) *on the admission of Interpol itself, barely ten per cent of the traffic in opiates is suppressed by law enforcement.*

The demand for hallucinogens is apparently being met by imports and illicit laboratories.

As for amphetamines, used non-medically, we see from Appendix B that a significant proportion comes from legitimate Canadian and American manufacturers. *We therefore cannot escape the fact that large surpluses of stimulants are being knowingly produced by recognized firms.*

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* For 1972, the B.D.D. registers *2 convictions for importing heroin* and *33 for importing cannabis*; in the same year the courts handed out *11,431 convictions for simple possession* of the various drugs prohibited under the *Narcotic Control Act.*

We have seen that, in the United States, not only have law enforcement agencies been unable to stop the illegal importation, manufacture and trafficking of drugs, but certain of their agents have been party to these criminal activities, with large sums of money passing into their hands. The possibility of a similar situation in Canada should be given close scrutiny.

Additional Penalties for Illegal Importation, Manufacture and Distribution

Fines and penalties for tax evasion should apply as a matter of course to persons convicted of large-scale illegal importation, manufacture or distribution of drugs.

Criminal law penalties for illegal importation, manufacture and distribution of drugs should be reconsidered and proportioned:

1) **to the real relative potential for harm of the various drugs;**
2) **to the quantities illegally imported, manufactured or distributed; and,**
3) **in the case of traffickers, to the youth and vulnerabiliy of the population reached by the illegal distribution.**

The illegal manufacture of amphetamines or the shipment of legally manufactured amphetamines to fictitious customers or customers of uncertain identity should be punishable by from two to five years' imprisonment and heavy fines. Manufacturers who cannot account for thefts or disappearance of drug inventories should be liable to the same penalties as importers.

THE DANGERS OF IMMODERATE USE OF MOOD-CHANGING SUBSTANCES

The non-medical use of drugs in Canada is largely attributable to the very casual attitude throughout the country toward mood-changing substances in general.

1. The prescribing practices among physicians, spurred by the pharmaceutical industry and its salesmen, have encouraged a "pill-popping" mentality among Canadians.
2. Brewers and distillers have been wooing the populace with assurances that alcohol counteracts a great many evils.
3. Tobacco manufacturers have outdone themselves with their advertising, urging us to smoke for the same reason.
4. The Canadian and provincial governments, either directly with policy and legislation or through administrative decisions by senior officials, have on occasion helped to create and foster a climate in which the use of drugs, medicines and psychotropic substances of every description is

taken for granted; *what is worse, they quite commonly authorize penitentiary and prison wardens, and also medical and administrative authorities of hospitals, mental health services and homes for the aged to use or permit the use of tranquilizers, barbiturates and "sedatives" in all forms, gas, liquids, tablets, capsules and injections, daily and excessively, to a degree unjustifiable either medically or morally.* Some institutions no longer even feel it necessary to justify multiple drug use for controlling or calming their inmates or putting them to sleep.

5. Both the State and the medical profession seem more obsessed with keeping control over the use of mood-changing substances than concerned about their harmfulness or the health and well-being of the people. Availability and use are supposedly controlled by prescription, but prescribing practices are ill-founded to say the least; the young and the poor, for instance, are denied access to medical drugs that well-heeled adults can and do have prescribed for them when and how they want, with the result that the privileged often make unnecessary, excessive and careless use of them, while the rest look on, and naturally enough are tempted to use them too if the opportunity arises.

RECOMMENDATIONS

1. At the close of three and one-half years of study, inquiry and reflection, my most urgent recommendation is that a permanent COMMISSION FOR THE SUPERVISION OF THE MEDICAL USE OF DRUGS be established at the earliest possible moment, under the authority of the Governor-General-in-Council, to examine the prescribing practices current in the medical profession and rectify them. It is also urgent that it inquire into the use of medical drugs in prisons, penitentiaries, mental hospitals and institutions for the aged and for disturbed and hyperkinetic children. Thirdly, this commission should exercise close and continued surveillance over all aspects of the importation and manufacture of drugs for medical purposes, especially amphetamines, barbiturates and tranquilizers.

2. (a) Simple possession of opiate narcotics and strong hallucinogens should cease to be classed as a criminal offence under Canadian criminal law statutes.

(b) There should be no offence subject to criminal law sanctions for possession or use of any of the drugs.

(c) Opiate narcotics should be legally classified with the controlled drugs.

(d) Opiate narcotics and strong hallucinogens found during police investigation of a suspected crime or misdemeanour should be subject to confiscation, failing production of a medical prescription or other justification of possession.

3. **Provincial or regional clinics should be established in Canada with responsibility for the clinical and scientific determination of the true state of opiate dependence of any person who consents to submit to the tests necessary for the purpose.**
4. **These clinics, having determined a person to be a drug-dependent, should also be responsible for providing him with the substances necessary to him, at very moderate prices.**
5. **Special committees or boards should be appointed by federal and provincial health ministers to assure strict supervision of the operations 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 by the various levels of government, in cooperation with the medical profession, colleges of pharmacists and parent and teacher associations, to create in Canada a climate of moderation, restraint and control with regard to the use of drugs for medical purposes, tobacco, alcohol and other drugs.**

   The pharmaceutical, brewing, distilling and tobacco industries, having contributed to the current popularity and abuse of pharmaceutical products and psychotropic substances, should take steps to inform the public fully and effectively in future, with particular emphasis on the importance of moderation in the use of these harmful substances.

Educational campaigns, to be effective, must observe three conditions: the information must be strictly accurate; the authority of those communicating the information must be beyond question; information directed toward drug users must be couched in language current in their milieu, reflecting accurate and unpatronizing understanding of them.

Additional Conclusions and Recommendations of *Ian L. Campbell*

INTRODUCTION

The major point of difference between my colleagues and myself is the matter of the most appropriate response to the problem of the opiate narcotic user.

Before presenting my conclusions I have reviewed at some length problems concerning the control of the illicit production and distribution of the opiate narcotics and the role of the user of these drugs as a pernicious influence leading others to use them. These subjects are dealt with in Appendices B, C and D. I refer to them here not to suggest that my colleagues are any more optimistic than I about the prospects for control of production and distribution or that they treat less seriously than I the social dangers of the user. We are, I am sure, in full agreement on these matters. I raise them, in summary form, simply to set the context of my recommendations and to underline the factors which have been particularly important in leading me to my conclusions.

THE CONTEXT FOR SOCIAL POLICY

The Rapid Increase in the Use Of and Addiction to the Opiate Narcotics

Notwithstanding the real inadequacies in our statistics it is clear that there have been recent alarming increases in the non-medical use of the opiate narcotics, particularly heroin and methadone. Not only has the population of users and addicts increased, but it appears to be growing at an accelerating rate. For instance, the number of 'street addicts' reported by D.N.C. rose in 1968 by 123, in 1969 by 275, in 1970 by 918, in 1971 by 1,728 and in 1972 by 2,460. The actual number of new users was no doubt very much larger in each year. There seems little reason to believe, on the basis of either Canadian or American data and experience, that the problem

has peaked. Moreover, rather large populations at high risk of beginning opiate narcotic use are present in Canada.

It is evident that over an extended period of time increases in heroin use often come in waves. For example, in Chicago there was a marked increase in use immediately following the Second World War. This particular epidemic reached its peak in 1949. There was then a decline in the numbers beginning heroin use during the 1950s and an increase again in the later 1960s. This pattern has been observed in a number of other cities. The phenomenon is mentioned here because of the risk that any drop in the numbers of new users appearing in the statistics of a particular year might be too readily taken as an indication that the problems of opiate narcotic use are coming under control.

It must also be pointed out that a study of national or even provincial statistics can be misleading. For instance, an increase of five hundred users in British Columbia might mean that a steady increase in use had occurred in a localized part of Vancouver. However, it might also mean that heroin use had entered fifteen communities where it had not been present before and had spread explosively within these communities with a high probability of becoming endemic in them. The second possibility would perhaps be far more serious than the first because of the potential for a spread of use to neighbouring communities and because the endemic presence of opiate narcotic use provides a base for a rapid increase in use and dependency at a later date.

Principal Causes of the Increase of Opiate Narcotic Use

It is clear that we lack any full understanding of the causes of opiate narcotic use. Indeed what may be said accurately of the causal pattern in one area may not apply in another and causal patterns change through time. The same problem exists in generalizing about drug-using careers. Details of career descriptions may be wholly valid only for a particular locale at a particular time.

However, two important, obviously valid generalizations about the necessary conditions for a spread of opiate narcotic use are possible. Use only spreads when the drugs are available and when there is a population of users present as a pernicious influence. A third generalization can be made with only slightly less confidence; the new opiate narcotic user is more likely to influence non-users to experiment with these drugs than is the person with a long-standing pattern of use and addiction.

The Availability of Opiate Narcotics

In the nature of things the ability of the Government to control the entry of opiate narcotics into Canada will be very largely dependent on the ability of the American Government to control the general flow of these

drugs into North America and its ability to influence other governments to inhibit the growth of the opium poppy, the production of opium derivatives or the production of synthetic narcotics and the movement of drugs within and across their borders.

The Americans have achieved increasing success in a number of their policies. Their influence has reduced the production of opium in Turkey. At least partially as a result of American pressure, the Government of France is now taking effective steps to attack the manufacture of heroin. The United States appears to have gained an increased cooperation from some South American governments in making the shipment of drugs through South America more difficult and in breaking up some trafficking rings.

However, even the total elimination of poppy growing in Turkey will not now produce any significant shortage of raw opium. Some of the opium that has come out of Turkey in recent years has not been grown in that country. There are millions of acres of land available in other countries which are suitable for poppy cultivation, and much of that land is within the borders of states not clearly subject to American influence or indeed under the effective control of the national government concerned. In some regions, such as South East Asia, poppy acreage can presumably be expanded. In other regions, for example South America, there is little reason to think that poppy cultivation cannot be introduced. Consequently, I cannot be confident that in the foreseeable future the American posture of curtailing poppy cultivation will have much more than a disruptive influence on the production of raw opium.

The new enforcement activities of the French police in moving against the manufacture of heroin have had a disruptive effect on the flow of the drug from Europe to North America. However, it would be naive, on the basis of existing evidence, to think that this will be more than a relatively short run dislocation of production. It is not difficult to think of countries to which European manufacturing operations could be moved either in Europe or North Africa. There are a number of European states that do not have strong anti-drug police operations and there are a number which cannot be assumed to be sympathetic to the American case or receptive to American pressure. It is also noteworthy that the impact of the French moves was blunted by an increased flow of heroin to North America from other sources —notably South East Asia. In other words, the world supply of heroin seems more than adequate to compensate for even a major blow to production potential. I would expect that the lost French production will be replaced in Europe or North Africa very quickly indeed.

It must also be pointed out that the total eradication of the opium poppy would not eliminate the availability of narcotics in North America because of the substitutes for opium and its derivatives that are or could be made available. First, there are drugs such as methadone and pethidine (Demerol®) which are wholly synthetic. The processes by which they are manufactured are available in the chemistry and pharmacology journals. The raw materials

required for the production of these synthetics are readily available and not potentially subject to rigorous international or national control. While skilled chemists are needed to supervise or carry out production, there is no reason to think that the billion dollar narcotics industry would have difficulty in buying whatever skill are needed.

Unfortunately, natural or semi-synthetic narcotics can also be produced from poppies other than the opium poppy (*Papaver somniferum*). Thebaine is found in the opium poppy but also in many other forms of poppy that do not yield opium. As is pointed out elsewhere in this report, some thebaine derivatives have morphine-like effects and have a potency of up to more than 1,000 times that of morphine or heroin. Some of these derivatives are in commercial production. Leaks of these drugs from legitimate manufacturers are bound to occur in time. But far more important, there is a source of narcotics apart from the opium poppy that can be exploited.

For these reasons, and others, I think it would be less than prudent to assume any long-term decrease in the international availability of heroin or equivalent drugs. Indeed a persuasive case can be argued that we should assume an overall increase in production or productive potential.

The international heroin distribution system has grown rapidly. There has been a marked proliferation of routes and networks and of smuggling techniques. Consequently, the overall impact of arrests for trafficking is reduced. Profits are more than high enough to ensure that there will be no problems of recruitment. The world heroin supply system, while not monolithic, has demonstrated that it has the reserves and the flexibility to respond quickly and effectively to any injury that has so far been inflicted. There is no evidence at hand to suggest that this will not continue to be the case. International officials concerned with the enforcement of drug laws admit that only a very small proportion of narcotics in transit can be intercepted.

Reluctantly I am forced to the conclusion that our best efforts to control opiate narcotic production and international trafficking can do little more than be a costly nuisance to the international market. I do not conclude that these efforts should be reduced, but only that it could be dangerously naive to expect significant results in terms of reducing the long-term availability of illicit narcotics in North America.

At the national level there are further reasons to feel pessimism about our ability to control availability of opiate narcotics. One of the most important of these is the enormous growth in the number of drug distribution systems both for heroin and for other drugs. We already have evidence in Canada of individuals who have been multi-drug dealers now handling heroin. Similarly in the United States there seems to have been an increase in the number of dealers, at various distribution levels, who handle a variety of drugs including heroin. We also have illicit drug distribution operations in far more centres than ever before which are capable of making heroin available to almost any city, town or village in Canada.

It therefore seems virtually certain that one of the two necessary conditions for a continued increase in the use of opiate narcotics is and will continue to be present in a form that will facilitate increased use in all parts of the country.

Ordinarily there must be the presence of a supply of opiate narcotics and the presence of a population of users for there to be a significant increase in use. However, there are exceptions. The most important exceptions appear to be instances where either some dealer moves to 'push' the drug, that is to say, actively sell the drug to non-users, or where there is a population of non-users who are curious about heroin and anxious to experiment with it. Overall the 'pusher' appears to have played a less important role than the public has assumed. A major reason has been the danger of detection and arrest to which the 'pusher' is exposed in approaching anyone other than a known user. However, this danger is to some extent attenuated where there is a population of known illicit drug users and we have had reports of heroin being introduced to the illicit drug-using population by dealers. We have also had reports of an increasing curiosity about heroin that has acted to create a demand. This has been found, for instance, among some populations of promiscuous, multi-drug using teenagers. Consequently, the fact of a steady availability of heroin in an increasing number of centres will in itself assure some increase in heroin use and hence of addiction. It is, of course, difficult to estimate the extent of the increase which will result.

The Presence of Opiate Narcotic Users

The evidence available indicates clearly that the overwhelming majority of those who use heroin began their use subsequent to and very largely as a consequence of association with users. Whether we designate the users as being infectious or contagious or a pernicious influence is not of great importance in this context. The fact of the matter is that their presence contributes to the use of opiate narcotics by those who have not previously used these drugs.

The role of opiate narcotic users as a pernicious influence fostering the spread of use of these drugs is discussed in Appendices C and D. As we report there, research has been consistent in finding that almost invariably the new user is introduced to opiate narcotic use in a small group setting of friends. Often the new user's presence is fortuitous although, clearly, some curiosity about the drugs and a readiness to experiment must usually exist. It appears that the experienced user is often admired as a person or for his life style by the beginner. There are certainly instances when group pressure is applied by users, and particularly new users, to encourage non-users to experiment.

It seems that typically heroin use begins in a community or neighbourhood by the return of one or two individuals who have begun use elsewhere. These foster interest in the drug and introduce use to a few friends. These

friends in turn introduce others or at least play a role of maintaining interest by their own example and presence and often by facilitating local access to opiate narcotics. At first use seems to spread slowly, but as the number of users grows there is the risk of an explosive increase in use. Studies in the United Kingdom of the spread of heroin use that have now been replicated in the United States have found a pattern of heroin use initiation that is represented in Figure 1 below.

The evidence overwhelmingly supports the opinion that the use of heroin is spread through contact with those who actively use the drug. Indeed, the evidence is conclusive enough to probably warrant a generalization that the presence of opiate narcotic users is almost always a necessary condition for a significant increase in the use of these drugs.

Among users it is also clear that the new user is most apt to be the contagious or pernicious agent. The user who has not yet become addicted or who does not recognize the fact of his addiction seems more prone to counsel others that heroin can be used 'wisely' with little or no risk of addiction and to hold himself up as living proof of this fact. Again, there is much in the research literature to support this position. For example, Hughes and Crawford in their Chicago study report,

> ... the disorder tends to be most contagious during the early stages, i.e., it is spread by new users and the newly addicted. This suggests that new outbreaks must be identified early.

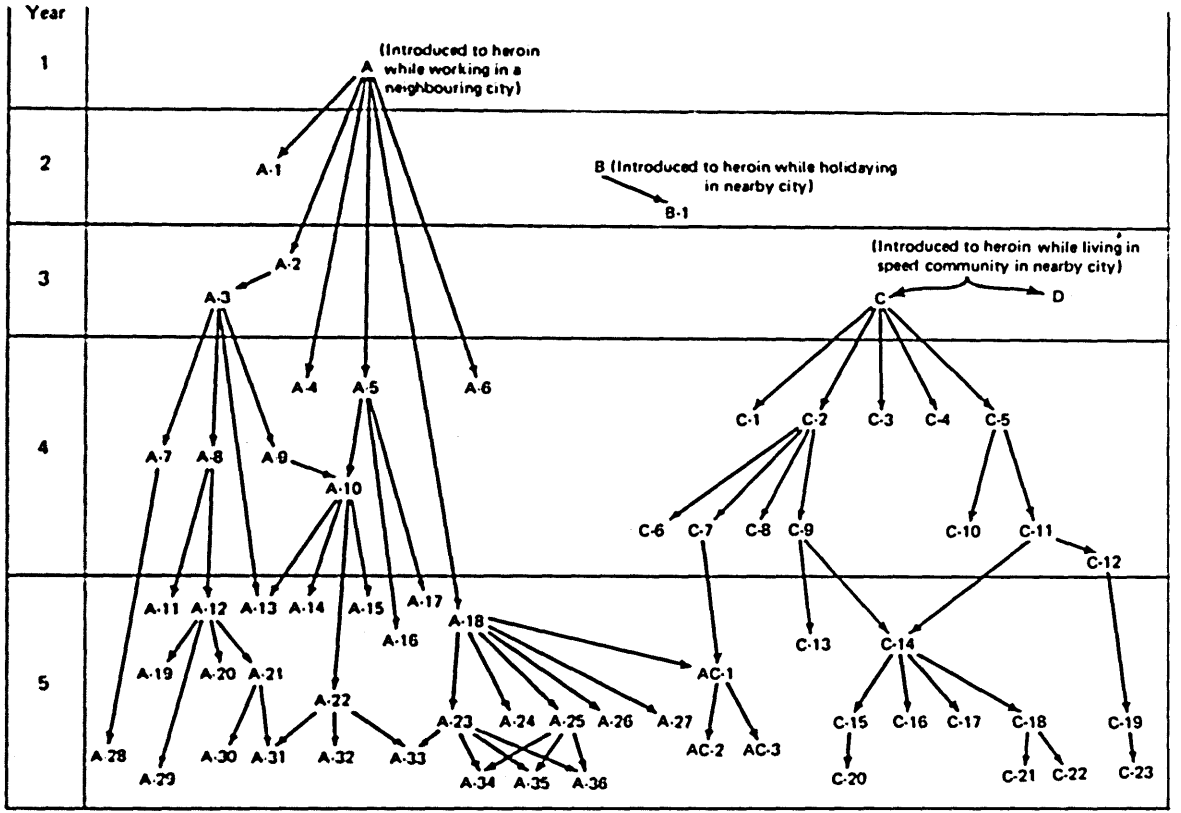
Increase in the Size of the Population at Risk to Opiate Narcotic Use

The sharp increase in the rates of opiate narcotic use and addiction are in themselves indicators of the increase in the size of the population that has been at risk to the use of these drugs. There is, however, no reason to think that their use will not continue to spread in Canada for some time to come. There is evidence appearing that the use of heroin is levelling off in the United States. But it is levelling at a point that involves a much higher proportion of the total population than has as yet become involved here. Even if we note that much of the heroin use in the United States has been in 'ghetto' populations and that comparable populations do not exist to any great extent in Canada, we are still well below the levels of American non-ghetto use. Given time, Canada's rates of drug use tend to move towards those reached in the U.S. Hence, it would not appear prudent to expect that the spread of heroin use is about to level in Canada.

There are certain populations that appear to be particularly at risk. Perhaps the most obvious are the regular, high-dose, intravenous amphetamine users — the 'speed freaks'. As noted elsewhere in this report, the 'speed freak' population has not decreased markedly although it has dispersed and become far less visible than it was in the summer of 1970. Much of this population is apparently replaced approximately every two years since that

FIGURE 1

The Spread of Heroin Use in a Hypothetical Community



seems to be the maximum period for amphetamine use for most individuals. It would appear that many of these persons have become involved in the use of heroin.

There have been a steady series of reports of curiosity about heroin among young, promiscuous multi-drug users. While there may be some tapering off of the size of this population, it remains significant and constantly draws new recruits. We know far too little about the epidemiology of non-medical drug use to predict with any degree of confidence that it will not blossom again or at least maintain roughly present levels. These young people, because of their naivety or lack of concern with the consequences of their drug use, are at high risk to heroin use and dependence.

During the past two years there have been reports of heroin use among populations that do not have a history of illicit non-medical drug use. In particular this has been noted among the children of Italian immigrants in Toronto. In the past such populations have been at risk to many forms of delinquent and deviant behaviour. There seems no reason to be sanguine about the possibility of wider opiate narcotic use among such people—and certainly their numbers have increased in Canada.

In summary then, there exists in Canada a number of populations that appear at particular risk to a further spread of heroin use.

The Nature of the Opiate Narcotics

The psychological effects of the opiate narcotics and the consequences and risks of their use are set out fully in Appendix A. In this context it is only necessary for me to note the particular qualities of these drugs that lead me to believe that their use should be treated in law rather more severely than that of other drugs in current non-medical use.

Many attempts have been made to rank drugs in an order of relative potential for harm. If a single criterion of harm is accepted it is perhaps not difficult to construct such an order. For example, if we accept as the focus of our concern the probability of continuing general physiological deterioration as a direct result of the use of the drug, then alcohol and tobacco must be taken as among the most dangerous drugs in current non-medical use, and heroin and the other opiate narcotics as among the least dangerous. If we make the criterion the probability of continuing general physiological deterioration as an indirect consequence of dependent use of a drug, then alcohol and the opiate-narcotics would stand together as among our most dangerous drugs. If we take short-run physiological deterioration as a direct and indirect consequence of the use of a drug, then the amphetamines would probably stand as our most dangerous drug, the opiate narcotics and alcohol would occupy a much lower place and tobacco a lower place still. If we focus on probable use as a means of suicide then the barbiturates have

probably the greatest potential for harm and the opiate narcotics and alcohol are relatively safe. If we give a high priority in determining potential for harm to such criteria as the risk of accidental death associated with use or the risk of virtually incurable drug dependency developing quickly as a result of use for even a short period of time, then the opiate narcotics are certainly among the most dangerous, if not the most dangerous. If a high priority is given to a drug's capacity to produce socially undesirable behaviour such as theft or prostitution, then the opiate narcotics are among the most dangerous drugs in the present North American social context. The amphetamines and alcohol, on the other hand, are ordinarily far more prone to lead to crimes of violence. If we are concerned with the potential of drug use to profoundly alter personality and character, and with the consequences of such changes for the user and those close to him, then the opiate narcotics are among our most dangerous drugs. Overall, I doubt that a single, meaningful rank order of the potential for harm of drugs in current non-medical use can be created. It is probably wiser to point to particular dangers associated with the use of a drug or family of drugs.

In coming to my conclusions about appropriate social policy with respect to the opiate narcotics, I have given weight to the following facts.

The opiate narcotics are virtually unique in their capacity to produce a state of severe dependence quickly and insidiously. Once established, opiate narcotic dependency can be managed but for all practical purposes, at this time, is virtually incurable.

It is obviously true that dependency is not an inevitable consequence of the experimental or occasional use of opiate narcotics. There are some few individuals who have used these drugs for years and have not become dependent. Virtually all addicts believed, when they began use, that notwithstanding the dangers of addiction they could avoid this consequence. Virtually all believed that their use was still 'under control' when they in fact had become dependent. While data is not available from which it is possible to estimate the proportion of those who ever used these drugs non-medically who later became addicted, it can be said that the proportion is high. All who use these drugs non-medically must be considered to be at significant risk of becoming dependent.

Those who became dependent on the opiate narcotics have as a result become significantly diminished in their capacity to act as free men—more than is the case with virtually any other form of dependence. The greatest part of their loss of freedom comes from the simple necessity of devoting a large proportion of their time to acquiring (usually illegally) the money to buy drugs. Thus the range of choices open to them vocationally, intellectually, recreationally, socially and geographically is severely curtailed. This loss of freedom to determine the course of one's own life and the use of one's own potential is surely a loss that renders them effectively less human than they would otherwise be.

The nature of opiate narcotic dependence in the present social context, and in any social context which I care to contemplate, virtually ensures that the addict will maintain and increase the criminality that usually precedes his addiction or will develop criminal habits. Insofar as most addicts were criminals before they became addicted it is not proper to assert that the whole of their criminality is a consequence and a cost to be attributed to their drug use. But it is clear that the amount of their predatory crime increases subsequent to addiction. An important result is the further loss of freedom that follows from conviction for these crimes.

Moreover, their criminality, typically in the form of drug peddling, burglary, shoplifting and other forms of boosting, pickpocketing and panhandling and of prostitution in the case of females is a heavy cost to society. The fact that as much as half their illicit income may come from selling opiate narcotics presents a serious problem in facilitating use among others.

While it is true that the total cost of crime attributable to alcohol exceeds that attributable to the opiate narcotics, it is clear that the probability of an opiate narcotic-dependent person supporting himself by crime is far greater than in the case of dependency on any other drug, including alcohol.

The life style that is the virtually inevitable consequence of illicit opiate narcotic dependency has other costs. Most addicts suffer from malnutrition and are particularly subject to diseases associated with malnutrition and lack of hygiene. These consequences probably follow mainly from the life style of the addict but can certainly be attributed in part to the psychological effects of the drugs.

I am also concerned with the impact of the adoption of their life style on the relatives and friends of the addict. I find it hard to conceive of more dreadful information than the news that one's child has become addicted to these drugs. I suspect that perhaps unconsciously much of our fear of the opiate narcotics springs from the knowledge or well-founded suspicion that dependency on these drugs profoundly and irrevocably changes the person—they become different not only in life style but in personality and spirit, their reactions can no longer be predicted by those who have been close to them, their promise and whatever was hoped for them is gone, and their future is at best bleak.

Some of these undesirable consequences of addiction could no doubt be prevented if opiate narcotics were made readily and cheaply available to the user and the addict without stringent controls and monitoring. But in view of the marked increase in use and hence addiction that would certainly follow, the costs would clearly far outweigh any possible benefits.

More than other drugs used non-medically, the use of opiate narcotics is likely to produce accidental sudden death. While most deaths associated with drug use by addicts are clearly not due to a simple heroin overdose, as is generally believed, the fact is that a large number of heroin users die suddenly while injecting this drug.

THE OBJECTIVES OF SOCIAL POLICY

The Priorities of Social Policy

In my opinion the proper order of priorities in developing social policy with respect to the opiate narcotics user is:

1) The prevention, as much as is possible, of the further spread of opiate narcotic use and addiction.

2) The treatment of the user or addict to render him less socially dangerous.

3) The treatment of the user or addict for the purpose of improving his chances of being a useful member of the community and of improving the quality of his life.

Since, in virtually all cases, the presence of opiate narcotic users is a necessary condition for the spread of use, it follows that isolating users or otherwise reducing their capacity to influence perniciously and assist others to use these drugs is a necessary step and probably the most important single step that can be taken by a country such as Canada in the prevention of an increase in opiate narcotic use and addiction.

Clearly, short of placing all users in indefinite quarantine, there are no means of ensuring that they will not be a pernicious and contagious influence. However, if they could be officially identified and if their drug use could then be eliminated or controlled so that they could no longer stand as directly observable models of free opiate narcotic use, and incidentally a source of supply to the prospective user, the danger would be significantly lessened. If they could be prevented from presenting themselves as living examples of the fact that opiate narcotics can be used without serious consequences, the danger would also lessen.

It is obvious that these ends can only be achieved by making it highly probable that those who use the opiate narcotics can be brought to official attention in a way that renders them subject to control, and by having the means of monitoring and controlling their behaviour.

I believe that these ends can be achieved, that this can be done without recourse to police state methods, with adequate safeguards to the innocent and in a manner that serves the long-run best interests of the opiate narcotic user.

However, unless the steps that I propose are implemented in the near future I am not sure that they provide a practical solution to the problem. The present population of heroin and methadone users is of a size and geographic distribution that makes it conceivable to exert a close control over its members, albeit with a heavy expenditure of resources. However, if the numbers involved continue to increase at present rates, or even rather more slowly, and if we approach American rates of use or if the present

population or a larger one disperses geographically, then the outlook for effective action would be far more bleak and the price far higher.

The Efficacy of Existing Laws as a Device of Control

The existing laws relating to the possession of opiate narcotics seem to me to lack the potential to ensure early official detection of opiate narcotic use and to lack the potential to exert control over a significant proportion of users and addicts. The necessity of proving possession presents the police with a virtually insuperable problem in bringing most users before the courts. As has been pointed out elsewhere in this report, many users have the drug in their possession for a very short time indeed—often for only a few moments in the course of a day. Unless they are apprehended during those moments no evidence is available to the police. Moreover, when the drug is in the user's possession it is frequently carried in the mouth and is swallowed at the first sign of police intervention. This fact necessitates the rough action that the police take towards users in attempting to make arrests and adds greatly to the difficulty of securing evidence.

The arrest and conviction statistics presented in this report, if compared to the estimates of use, provide convincing testimony of the inadequacy of the present laws as a device for detecting and controlling the opiate narcotic user. It is likely that fewer than four per cent of the addicts in Canada are currently being convicted each year and that this number may be fewer than one per cent of all who are addicts and occasional and experimental users.

RECOMMENDATIONS WITH REFERENCE TO THE LAW RESPECTING THE OPIATE NARCOTIC USER

So long as the law only prohibits the unauthorized possession of opiate narcotics, I can see no way in which it can become an effective device to control the opiate narcotic user and hence a really effective device to curtail the further spread of the use of these drugs. This would remain true even if the police were granted very large reinforcements. Moreover, as use spreads, it seems to me that the relative effectiveness of the police is bound to decline.

Consequently, I recommend that the law be amended to make the unauthorized use as well as the unauthorized possession of opiate narcotics an offence. The unauthorized possession of opiate narcotics or the presence of an opiate narcotic in the urine, blood or other body fluid without lawful excuse should be taken as proof of opiate narcotic use. To enforce adequately such legislation, it would be necessary to authorize the police to require

those whom they believe, on reasonable and probable grounds, to be using these drugs to submit a sample of urine, blood or other body fluid for analysis.* Continuing association with known opiate narcotic users, the clear appearance of being under the influence of an opiate narcotic (on the nod) or the otherwise inexplicable presence of injection marks visible on the body would certainly be reasonable and probable grounds to presume the use of opiate narcotics.

Clearly a number of safeguards would be required in such legislation. **I would strongly recommend that at least the following be included:**

a) A part of any sample taken should be returned to the donor in a sealed container for use by the defence if a charge is laid and the result of the analysis is submitted as evidence.

b) Those required to give a sample should be given, on request and before the sample is taken, a written statement of the reasonable and probable grounds on which the police are acting.

c) The police should be required to submit the details of their use of such authority, including a statement of the grounds on which it was used, to a judicial body for a regular and public review.

Those whose urine, blood or other body fluid is found to contain an opiate narcotic should be charged with the unauthorized use of these drugs. Those arraigned on this charge should, *in all cases,* be remanded in custody for one week for the purpose of determining whether or not they are dependent on the opiate narcotics.

Those subsequently found guilty of the unauthorized use of opiate narcotics but who are not dependent on these drugs should on the first and second conviction receive a one- to three-year sentence with the possibility

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* It is clear that thin-layer chromotography (TLC) as presently generally used in Canada is not sufficiently accurate to provide grounds, by itself, for conviction because of the risk of a false positive result. However, this method remains the best technique for widespread use. I would recommend that until better methods are available it should ordinarily be used, but when an opiate narcotic is detected by this method further tests should be applied and a positive result on two tests should be required for conviction. Consequently, enough fluid should always be taken to allow two analyses to be performed.

There is good reason to believe that within a short time the radioimmunoassay, FRAT and related methods will be able to meet all reasonable demands for accuracy, discrimination, economy and speed. When this is the case a positive result by one of these methods alone should be taken as adequate grounds for conviction.

The extremely sensitive immunoassay methods have other advantages as well. Using such techniques, it may be possible to detect the presence of opiate narcotics in the system for several days after use. Urine, blood or, possibly, saliva and sweat samples may be employed. At the present these techniques do not efficiently distinguish codeine from morphine, but it is expected that this difficulty will be overcome shortly.

Since heroin is converted to morphine and other metabolites in the body, it is generally difficult to efficiently discriminate between the use of these two drugs. However, I find that this is no problem since I would regard the illicit use of morphine as being as serious as the illicit use of heroin, methadone or the other narcotics excepting the low-dose use of codeine.

of immediate release on parole at the discretion of the court, after appropriate consultation with the Parole Board, with the following conditions at least:*

1) That they refrain absolutely from the unauthorized use of opiate narcotics, cocaine and amphetamines.

2) That they submit urine, blood or other fluid samples for analysis as often as necessary to determine *any* opiate narcotic use for a period of six months and thereafter as required during the period of probation.†

3) That they refrain from association with opiate narcotic users and others as required.

4) That they accept counselling or other appropriate care as required.

Those who are unwilling to sign a statement accepting the terms of parole should not be released from custody.

Those responsible for the supervision of parole must be given reasonable authority to excuse occasional breaches of the terms. However, those brought before the Parole Board for parole violation should be liable to be imprisoned for the balance of the period of their sentences.

Conviction a third or subsequent time should render the offender liable to imprisonment for a period of two to five years. If the offender is subsequently released on parole, terms similar to the terms above should be applied.

Those found guilty of the unauthorized use of opiate narcotics and who are shown to be dependent‡ on these drugs should on the first and second conviction receive a three- to ten-year sentence with the possibility of immediate release on parole at the discretion of the court, following appropriate consultation with the Parole Board, with the following conditions, at least:§

1) That they refrain absolutely from the use of unauthorized opiate narcotics, cocaine and amphetamines.

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* A one- to three-year sentence with immediate parole is specified in this recommendation to ensure continuous supervision for a lengthy period of time. I have no objection in principle to providing this supervision by means of suspended sentence and probation but under existing law suspension of sentence and probation can be applied only when an offence carries no minimum sentence. While I am concerned with the lightness of sentences that have recently been imposed on many of those found guilty of opiate narcotic possession, I recognize real advantages in allowing the courts some measure of flexibility in dealing with these cases. However, available evidence strongly suggests that drug users require lengthy periods of close supervision if their rehabilitation is to be achieved.

† Until methods of analysis are improved, body fluid samples should be required daily or at least every second day. Hopefully methods will soon be available to accurately find opiate narcotics in the system several days after use. When this is the case, longer intervals between samples could be safely allowed.

‡ The determination of dependency must be based on clinical evidence. The decision as to whether dependency exists should rest with the court and should be based on evidence from physicians with special competence in the matter and others appropriately qualified.

§ All available evidence suggests that a lengthy period of supervision is imperative if there is to be any real hope of success in dealing with those dependent on the opiate narcotics (see Appendix K). The relatively low levels of success that have been achieved with addicts on probation and parole in Canada (see Appendices J and K) point to the need for lengthy periods of close control and supervision.

2) That they submit urine, blood or other body fluid samples for analysis as often as necessary to find *any* opiate narcotic use for a period of two years and thereafter as required during the period of their probation.*

3) That they accept counselling and treatment as required by those responsible for their probation.

4) That, if after other treatment approaches have been tried for a reasonable period and they are unable to remain drug-free, they accept high-dose methadone maintenance indefinitely.

It has frequently been found that continued association with opiate narcotic users is a major barrier to the successful rehabilitation of those who are opiate narcotic dependents. Consequently, the courts and parole officers should have the authority to require the offender to change his place of residence.

In the case of those with longstanding or severe addiction, the court should have authority to impose high-dose methadone maintenance as an initial condition of parole. Unwillingness to accept the terms of parole or violation of the terms of parole, when brought to the attention of the Parole Board, should render the offender liable to imprisonment for the balance of his sentence.

Those found guilty of unauthorized opiate narcotic use a third or subsequent time and who are found to be dependent on these drugs should receive a sentence to indefinite imprisonment with the possibility of parole on conditions similar to the conditions of parole noted above.

Wherever possible a separation should be made between the personnel responsible for parole supervision and those responsible for the treatment of persons under sentence, although there should be cooperation and consultation between them and *both should come under a single agency.* If treatment personnel are made responsible for the collection and analysis of urine or blood samples, the results of these tests, if they show the presence of a prohibited drug, should be automatically reported to the parole authorities. The supervision of opiate narcotic users requires specialized knowledge and experience. Therefore personnel should be specially selected and trained for this work.

Those imprisoned for the use or possession of opiate narcotics should, whenever possible, be confined apart from other prisoners, preferably in separate institutions, and should be further segregated according to the extent of their involvement in and commitment to the opiate narcotic-using culture. Clearly, a basic purpose of their incarceration should be quarantine.

* Until methods of analysis are improved, body fluid samples should be required daily or at least every second day. Hopefully methods will soon be available to accurately find opiate narcotics in the system several days after use. When this is the case, longer intervals between samples could be safely allowed.

Provision should be made in the case of those charged with the use of opiate narcotics to conduct the trial in camera at the request of the accused and at the discretion of the court. The purpose of this provision is to keep secret the identity of the accused and hence to facilitate rehabilitation, particularly in the case of those who appear to have been experimental users of the opiate narcotics.

Those convicted of unauthorized opiate narcotic use who remain absolutely drug-free while on parole or otherwise at large during a period equal to the length of their sentence should be authorized to withhold the fact of their arrest and conviction in such matters as employment applications. If at some time during the course of the sentence an opiate narcotic or other illicit drug is found in a urine or other body fluid sample, then an opportunity should be provided for them to continue submitting samples beyond the end of their sentence to establish a drug-free period equal to the length of the sentence and to thus qualify for the benefits of these provisions.

My recommendations require the enactment of special parole provisions for opiate narcotic offenders. At the present time the courts in Canada play no role in the decision to release a prisoner on parole. This decision, except in cases of murder, is exclusively under the jurisdiction of the National Parole Board. While the Board may release an offender at any time, it is extremely unusual for it to do so until a significant portion of the sentence has been served in prison. I see no reason to require the imprisonment of all found guilty of opiate narcotic use; however, I am convinced that all require a prolonged period of supervision and control. Consequently, my recommendation requires that the courts be granted authority to grant parole at the time of sentencing. An alternative approach would have been to recommend the use of suspended sentence and probation. I have rejected this alternative for a number of reasons. For instance, a suspension of sentencing can only be granted when an offence carries no minimum sentence, and I am strongly of the opinion that a minimum sentence is absolutely required in dealing with opiate narcotic users.

The efficacy of my proposals is clearly dependent upon the ability of the police to identify a significant proportion of opiate narcotic users and to secure convictions against them. The development of new techniques for the analysis of body fluids which will detect the presence of narcotics many hours after use, and potentially several days after use, gives reason for confidence on the latter point. The identification of users is a different matter. Six or seven years ago the police knew the identity of a very high proportion of heroin users. Since they were concentrated in distinct areas of a very few cities their task was relatively easy. Today this population has not only grown but has dispersed to many communities, principally in British Columbia, Alberta and Ontario. However, both Canadian and American evidence indicates that within a given community the opiate narcotic users tend to cluster in 'copping areas' which are not difficult to find. While this population may not be as visible as was that of the speed freaks

in 1970, it is very much more visible than most other illicit drug-using populations. In the case of addicts the necessity of regular and frequent purchases helps to maintain visibility. Occasional and experimental users, coming as they do largely from the ranks of the speed users or the promiscuous multi-drug users, also should not be very difficult to detect, granted adequate police personnel and special undercover operations.

It will no doubt be argued that these recommendations are extremely severe. This is obviously true. But I regard the opiate narcotic user as posing a potentially grave danger to society. His presence is often an essential condition for the spread of opiate narcotic use. New users pose a special threat because of the greater risk that they will proselytize and make statements minimizing the risk of opiate narcotic use. Their presence as opiate narcotic users clearly constitutes a real threat to the health, welfare and operative freedom of others. Unless a very high proportion of them are detected and brought under rigorous control, as regards their drug use, I see the real probability of a further significant spread in opiate narcotic use.

I believe that my recommendations provide the opportunity for those convicted of opiate narcotic use to limit drastically the impact of their sentence on their own freedom. So long as they are prepared to refrain from the unauthorized use of opiate narcotics, cocaine and the amphetamines they can be at liberty to lead perfectly normal lives. The limitation of freedom imposed by the requirement to submit urine, blood or other fluid samples is not in itself a severe penalty or hardship and is certainly in their best interests. To be an effective check on unauthorized drug use, it is necessary that the sample be always provided in the presence of a witness. But there should be no great difficulty in making arrangements for the sample to be taken close to the offender's residence or place of work at a hospital, pharmacy, physician's office or other appropriate site.

It may be argued that requiring urine, blood or other fluid samples from those suspected of unauthorized opiate narcotic use is a violation of proper civil liberty or forces an individual to provide evidence against himself. However, we have accepted a strikingly similar precedent with the compulsory use of breathalyzers for the detection of alcohol intoxication. In the case of a urine, blood or other fluid sample, it should be readily possible to provide the suspect with a part of the sample in a sealed container to prevent any risk of evidence being fabricated and to allow for independent analysis. This safeguard is not as yet possible when breath samples are taken.

It is clear that the implementation of my recommendations would be costly. Some large number of additional police will be required as well as specially trained parole and probation officers. However, great as these costs would be, I am convinced that they would, in the long run, be far less than the direct and indirect costs of a further significant increase in use.

I would further submit that the level of control of the opiate narcotic user that my recommendations could provide would strike a very severe blow at the illicit opiate narcotic distribution system by drastically reducing demand. The result would probably be a lessening of the availability of heroin. This, in itself, could contribute further to the prevention of a further spread of use.

It has been pointed out in this report and in our *Interim Report* that the existing laws compel the police to deal with those suspected of opiate narcotic possession in a rather rough manner that typically involves breaking down doors and 'throttling' suspects to prevent the loss of necessary evidence. While the necessity of such actions cannot be denied, it must be regretted. The change from a possession of narcotics to a use of narcotics emphasis would eliminate the need for virtually all such police acts since surprise would no longer be of the essence except in cases of suspected trafficking.

I believe that my recommendations would, if implemented, have an immediate deterrent effect of reducing the amount of opiate narcotic use among non-addicts. This reduction would in all probability be significant enough that it should be taken into account in a calculation of the costs of implementation or of feasibility. It is my opinion that my recommendations can be applied with a high probability of success to a population of users of opiate narcotics of the size which we estimate with its present pattern of distribution. I would be far less sanguine about their probable success if there is a marked increase in the size of that population and a more general geographic distribution of use. It is much more difficult to conceive of control measures that would be effective and acceptable in a free society if use were to reach the levels found in the United States.

My proposals rest on the assumption that, given adequate reinforcements, the police would be able to find new users and subject them to urine, blood or other testing. If the opiate narcotic-using population were much more widely dispersed, this would become extremely difficult.

THE TREATMENT OF OPIATE NARCOTIC USERS

I am in substantial agreement with the majority opinion on the matter of the treatment of the opiate narcotic user. While I share their view that in general the treatment of the user and the addict is a proper matter of provincial responsibility, I believe there are four roles that the Federal Government should play.

First, the use of opiate narcotics in treatment should be subject to continuing federal regulations. There are obvious advantages of uniformity. But my principal concern is to assure rigorous control over the use of these drugs. While the recent performance of the Federal Government is disappointing in the level of control that has been imposed on the prescribing of

methadone, I believe that there is a greater probability of adequate controls on these drugs being maintained by the Federal Government than by ten separate jurisdictions. The evidence is clear that the improper prescribing of these drugs by only a very few physicians can quickly produce an epidemic. Such was the case in the United Kingdom where fewer than one-half dozen physicians, who were either fools or knaves, contributed significantly to the increased use of heroin and amphetamines. The effects of a lessening of proper controls in any one province could not likely be contained within its borders and could have serious material consequences. For example, much of the recent opiate narcotic problem in Windsor occurred as a result of improper methadone prescribing and dispensing in Detroit. The national border with its checks on movement was not an effective barrier. Provincial borders would present no barrier at all.

Second, the Federal Government should be prepared to establish, at the request of a provincial government, a full range of treatment facilities for opiate narcotic users.

Third, in the absence of adequate provincial treatment facilities for the care of users on parole, such facilities should be provided by the Federal Government. Presumably this is constitutionally possible insofar as they would be, in the context of my recommendations, under a sentence the length of which would place them under the control of the Federal Government.

Fourth, the Federal Government should organize training programs to be made available for provincially employed personnel concerned with the care and treatment of opiate narcotic users.

The Government and the various colleges of physicians and surgeons appear to have failed in adequately policing the prescription of opiate narcotics by physicians. They tend perhaps to be somewhat more effective in curbing malpractice by knaves than by fools or by physicians who are uninformed about the opiate narcotic problem. **I recommend strongly that a greater vigilance be maintained over the prescribing of these drugs and that much more rigorous steps be taken to prevent unwise prescribing.** Canadian, British and American experience amply demonstrates that three or four physicians can, through their prescribing practices, produce an epidemic of opiate narcotic or amphetamine use. There is little reason to feel confidence that existing mechanisms to control and regulate medical practice are adequate.

ADDITIONAL RECOMMENDATIONS CONCERNING THE OPIATE NARCOTICS

THEBAINE

The Bentley Compounds, derivatives of thebaine, an opium alkaloid, have not as yet become significant among the opiate narcotics used non-medically. However, because their potency is as much as 1,000 times that

of morphine or heroin, they could become a serious problem. Consequently, **I recommend that the Government of Canada treat the potent thebaine derivatives as heroin is now treated and urge other governments to follow suit.**

Cocaine

In the course of inquiry we have heard many criticisms of existing law for its want of descriptive accuracy. In particular, the inclusion of cannabis in the *Narcotic Control Act* has been criticized, for clearly this drug is not a narcotic. This Act at present also deals with cocaine, which is no more a narcotic than cannabis. In fact the drug is much closer, in its effects, to the amphetamines than to the opiate narcotics.

At the present time cocaine is not in widespread use in Canada, although much more commonly used and far more readily available than was the case a few years ago. Curiosity about and interest in the drug have very markedly increased, and with them demand. Availability has also increased, and there is no reason to believe that it can be effectively curbed.

Unfortunately cocaine has become a status drug—the drug of the elite among the non-opiate-addicted, serious illicit drug users. Its use will almost certainly increase steadily.

I recommended that it be removed from the control of the *Narcotic Control Act* simply for reasons of accuracy, and that this be done before use has spread further.

In many ways it would be logical and consistent to classify it with the amphetamines. However, it would certainly not be wise to remove the possessional offence. Consequently, **I suggest that cocaine be placed in a separate and distinct classification schedule under the *Food and Drugs Act* with penalties identical to those at present available under the *Narcotic Control Act*.** If the use of this drug begins to reach alarming proportions, then consideration should be given to making use an offence enforceable by body fluid analysis.