SERVICES FOR THE PREVENTION AND TREATMENT OF DEPENDENCE ON ALCOHOL AND OTHER DRUGS

Fourteenth Report of the WHO Expert Committee on Mental Health
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Geneva, 4-10 October 1966

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SERVICES FOR THE PREVENTION
AND TREATMENT OF DEPENDENCE
ON ALCOHOL AND OTHER DRUGS

Fourteenth Report
of the WHO Expert Committee on Mental Health

The WHO Expert Committee on Mental Health met in Geneva from 4 to 10 October 1966 to consider the establishment of services for the prevention and treatment of dependence on alcohol and other drugs. The meeting was opened by Dr P. Dorolle, Deputy Director-General. Dr K. Evang was elected Chairman and Dr M. Kato Vice-Chairman; Dr D. C. Cameron was appointed Rapporteur.

INTRODUCTION

Over the last 15 years considerable international discussion has been devoted to problems of dependence on alcohol and problems of dependence on other drugs, with a gradually developing trend towards a combined approach.

In its first report, the WHO Expert Committee on Mental Health noted "the decision of the First World Health Assembly that the problems of prevention and treatment of drug addiction, including alcoholism (as opposed to the pharmacological aspect of these problems) should be included in the terms of reference of the Expert Committee on Mental Health ". Yet a few lines further on, the Committee stated its belief that "although there are many aspects common to the problems of both alcoholism and other forms of drug addiction, there are also significant differences ", and it therefore recommended the setting up of two separate subcommittees—one on alcoholism and one on drug addiction.

1 The principal types of dependence-producing drugs are: morphine type (e.g., opium, morphine, heroin and other morphine derivatives; synthetic substances with morphine-like effects, such as pethidine, methadone, dextromoramide); barbiturate type (e.g., pentobarbital, secobarbital, meprobamate, chlordiazepoxide, glutethimide); alcohol type (there is substantial cross tolerance with the barbiturate type); cocaine type; cannabis (marihuana) type; amphetamine type (e.g., amphetamine, metamphetamine, phennmetrazine, diethylpropion); khat type; hallucinogen type (e.g., LSD, psilocybin, mescaline).

Two reports of the Alcoholism Subcommittee of the Expert Committee on Mental Health have been published.\(^1\) Drug addiction was dealt with separately by the WHO Expert Committee on Addiction-Producing Drugs\(^2\) except for a joint meeting on treatment and care of drug addicts.\(^3\)

In 1953, a WHO Expert Committee on Alcohol,\(^4\) having agreed that alcohol could not be classified as an addiction-producing drug, considered that it should be placed in a category of its own, intermediate between the addiction-producing and habit-forming drugs.

The following year, WHO convened an Expert Committee on Alcohol and Alcoholism,\(^5\) which provided a possibility for exchange of experience among pharmacologists, physiologists and psychiatrists. Their report stated that "though many of the events observed in alcoholism are parallel to many of the phenomena observed in opiate addiction, many important differences exist". It was felt, however, in the light of the evidence then available, that the resemblance between the responses to the withdrawal of alcohol and those to the withdrawal of opiates was greater than had previously been realized.

In the past, the WHO Expert Committee on Addiction-Producing Drugs dealt mainly with drugs other than alcohol, and mainly from the point of view of international narcotics control. Recently, however, meetings have given increasing attention to abuse of central nervous system depressants and stimulants. A recommendation\(^6\) made in 1963 that the term "drug dependence" (with a modifying phrase to distinguish the type) should be substituted for the terms "drug addiction" and "drug habituation" has met with a generally favourable reaction.

A WHO Scientific Group on the Evaluation of Dependence-Producing Drugs\(^7\) defined drug dependence as "a state arising from repeated administration of a drug on a periodic or continuous basis. Its characteristics will vary with the agent involved but it is a general term selected for its applicability to all types of drug abuse and carries no connotation in regard to degree of risk to public health or need for a particular type of control". The report goes on the state that "Individuals may become dependent upon a wide variety of chemical substances covering the whole range of pharmacodynamic effects from stimulation to depression. All these drugs have at least one effect in common. They are capable of creating a state


of mind in certain individuals which is termed psychic dependence. This is a psychic drive which requires periodic or chronic administration of the drug for pleasure or to avoid discomfort... Some drugs also induce physical dependence, an adaptive state characterized by intense physical disturbances when administration of the drug is suspended or its action is counteracted by a specific antagonist.” It is pointed out that “The characteristics of drug dependence show wide variations from one generic type to another, which makes it mandatory to establish clearly the pattern for each type”. Alcohol is included among the generic types for which “the consistency of the pattern of pharmacodynamic actions is sufficiently uniform to permit at this time accurate delineation”.

In view of the complications attendant on the introduction of new terminology, it was clearly pointed out in 1965¹ that: “the recommendation for the use of the terms drug abuse and drug dependence of this or that type must not be regarded as a re-definition; rather, these terms are intended as descriptive expressions for clarification in scientific reference, interdisciplinary discussions, and national and international procedures”.

Further clarification of the significance and characteristics of drug dependence is given in an article by Eddy et al.²

The validity of a combined approach applied to the new concept of “dependence” has thus gradually become apparent. It has been accepted both by research workers and by organizers of preventive and treatment services (see section 2.3).

When it was proposed to convene an Expert Committee for further consideration of the very urgent problems now being posed by dependence on alcohol, it became necessary to decide whether the agenda should include attention to other drugs. The documentation referred to above was carefully re-examined, together with other pertinent data, and the advice of representatives of some of the interested national and international bodies, as well as of others cognizant of the problems involved, was sought.³

It then became evident that attempts should be made to induce authorities to consider the problems of alcohol and alcoholism and of the use and abuse of drugs together, for the following reasons:

³ The Committee wishes to acknowledge the invaluable assistance provided in this respect by the following: Dr C. L. Anderson, USA; Mr H. D. Archibald, Canada; Dr E. A. Babajan, USSR; Dr J. H. Fox, USA; Mr M. M. Glatt, United Kingdom; Dr V. Hudolin, Yugoslavia; Dr J. Horwitz, Chile; Dr T. Kjolstad, Norway; Mr H. J. Krauweel, Netherlands; Dr P. Paunelle, France; Dr H. Solms, Switzerland; Mr A. Tongue, Switzerland; Dr J. Fort and Mr E. Galway, United Nations, Geneva.
(1) There are many similarities in the causation and treatment of the problems involved and the concepts underlying the educational programmes required (although there are divergences in legal provisions).

(2) Drugs are often used in combination; for example, barbiturates together with heroin or with alcohol. Also, transfer from one drug of abuse to another frequently occurs.

(3) Many studies have been carried out on alcoholism that might be applicable to drug abuse, of which much less is known.

(4) Although public and official attitudes to alcoholism have veered towards the therapeutic and away from the condemnatory, this has not yet happened to the same extent with regard to drug abuse.

The above points were taken into consideration in drafting the agenda and formed a basis for the Committee's discussions on services for the prevention and treatment of dependence on alcohol and other drugs.

1. APPROACH TO PROBLEMS OF DEPENDENCE ON ALCOHOL AND OTHER DRUGS

1.1 Combined approach

1.1.1 Similarities and differences in causation and treatment

The Committee agreed that, despite existing differences between dependence on alcohol and dependence on other drugs, there are many significant similarities in the causation and treatment of these conditions. While the extent and nature of the problem, i.e., type of drug dependence and patterns of use and abuse, vary widely from country to country, the relatively frequent transfer from one drug of dependence to another, the not infrequent abuse of drugs in combination, the complex and changing patterns of abuse, and the rapid development of new drugs with potentialities for abuse, make it important that dependence on alcohol and other drugs be considered as facets of one problem, psychic dependence of various kinds being the common factor. To the degree that dependence-producing drugs interfere substantially with the normal functioning of the abuser and/or become a problem for other persons or society, they give rise to health problems that are susceptible of medical identification, classification and treatment. This does not imply that the problems under discussion

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1 In some countries, particularly those in which the regular drinking of wine is a very prominent social pattern, some persons are reported to abuse alcohol to the point of developing physical dependence and complications without developing obvious significant psychic dependence.
come exclusively within the field of health. Social, cultural, legal, economic and other factors also play a role in causation, treatment, prevention and control. It is imperative that dependence on alcohol and other drugs be recognized as creating major health problems, which have to be considered not only in terms of the agents involved but also from the point of view of the host and the environment.

A combined approach to problems of alcoholism and drug dependence does not apply equally to all aspects of the problems. Differences in local conditions, such as social structure, personal and cultural attitudes, and the incidence and prevalence of dependence on various agents have to be taken into account. In general, a combined approach will apply most usefully to research and will be less applicable to control measures, with treatment and education falling in between. In certain geographical areas, differences in dealing with problems of alcohol dependence as compared with those of dependence on other drugs may be quite significant, for example, in relation to the structuring of treatment services and of control mechanisms. In the past few years, the approach to alcoholism as an illness and to the alcoholic as a sick man has become rather widely accepted. On the other hand, those treating persons dependent on alcohol are often forced to take some interest in problems of dependence on other drugs, since a proportion of their patients abuse other drugs as well. This occurs mainly in spirit-drinking countries, where the prevalent type of alcoholic is the so-called “psychogenic alcoholic”,¹ but the substantial presence in mainly wine-drinking countries of “sociogenic alcoholics”² was noted. It seems that, for psychologically vulnerable persons and groups, alcohol and other drugs can often satisfy individual and collective needs. In such cases, environmental factors (for example, availability, local fashion, the law, religion, the attitude of the whole community) may determine what agent or agents the individual abuses.

Dependence on alcohol and dependence on barbiturates and certain other central nervous system depressants resemble each other so closely that they may be considered under the same heading.³ The manifestations of intoxication and of the abstinence syndrome associated with these agents are quite similar. Indeed, these agents are often used in combination.

The medical and other professions now take an active interest in the problems involved and organizations such as Alcoholics Anonymous (A.A.) have done much to improve the attitude of the public as well as that of the person dependent on alcohol himself. In many countries, similar improvements are needed in the approach to dependence on other types of agents,

¹ The etiology is to be found largely in pre-existing psychopathology.
² The etiology is to be found largely in social and cultural patterns.
including opium. This is one of the most important likely consequences of a combined approach to dependence on alcohol and on other drugs.

The combined approach may also widen perspectives as to the efficacy of legal control provisions, which heavily influence the relation between health services and dependent persons as well as the social situation of the latter group. As regards control of alcohol, considerable knowledge has been accumulated through the attempts to enforce prohibition laws as well as various other legal provisions designed to influence the level of consumption, the extent of illegal consumption, and the distribution of consumption as to types of beverages. The findings may have some bearing on control of other drugs. On the other hand, experience of controlling some of the other drugs through international agreements may be relevant to the development of control measures for alcohol. There seems to be no way of eliminating completely the non-medical use of all dependence-producing drugs. From the health point of view, it may be of considerable relevance to consider the relation between systems of control and prevailing orientations to drugs within a society.

The development of programmes is therefore the responsibility of national and local authorities. This is a process in which WHO has already provided leadership, but the Committee believes that its efforts in this direction might be increased.

1.1.2 Transfer between drugs of dependence: use in combination

A practical point, making it imperative for persons interested in dependence on alcohol or other drugs to be conversant with all types of dependence, is the fact that abusers rather frequently shift from one agent to another or use them in combination. Transfer between dependence on alcohol and that of morphine type, though not now apparently very common, has been described. Simultaneous abuse of, or transfer between, alcohol and drugs such as barbiturates and amphetamines seems to be quite common, at least among the "psychogenic" type of alcoholic. Such a transfer occurs much more rarely among "sociogenic" alcoholics, as seen, for example, in France.

Three patterns of transfer and combined abuse may be identified: (1) the shift from one drug to another within a group producing a particular type of dependence, for example, from opium to morphine to heroin (e.g., in Hong Kong) or between LSD and psilocybin; (2) the shift from a drug producing one type of dependence to another producing a closely related type, as for example, between barbiturates and alcohol; (3) the shift from a drug of one dependence type to another of a substantially different type, for example, between barbiturates and amphetamines. Many abusers, including many persons dependent on alcohol, use sedatives and stimulants at the same time; when, for example, they become too
drowsy from taking barbiturates, they resort to amphetamines to wake themselves up and then need further sedation. Another phenomenon has been observed recently in the USA, namely, the use in sequence of quite different drugs, for example, the use by a group of adolescents first of barbiturates for a limited period, then alcohol for a few days, followed by heroin, amphetamines, marihuana, LSD, and so on. Transfer of drugs occurs not only in individuals but also occasionally among groups. The influence of control measures may be very important in the change in popularity of drugs within a community. One example is the recent transfer in Japan from the abuse of hypnotics to abuse of analgesics among adolescents after hypnotics were put under rather strict control. There are numerous examples of this type of occurrence.

1.1.3 Complex and changing patterns among adolescents

Recent experiences in Japan also offer illustrations of the increased number of problem drinkers and drug abusers among adolescents and, as already mentioned, of the abuse of hypnotics and more recently of analgesic drugs among “pleasure-loving youth”. Another example can be found in the United Kingdom where an increase in heavy drinking was noted for a time among adolescents; this seems now to have come to a stop and to have been replaced in some areas by a tendency to abuse other drugs. A typical development, seen in London, is to start with amphetamines or marihuana; a small minority then proceed to heroin and cocaine. The abuse of the latter drugs by adolescents constitutes a new and disturbing phenomenon in the United Kingdom and elsewhere, even though heroin abuse has been widespread in other areas for some time. Another example of a new local fashion of drug abuse by adolescents is the intravenous administration of phenmetrazine¹ in Sweden. The epidemic-like spread of such abuse seems a particular risk to certain adolescent groups.

1.1.4 Emerging problems of dependence on central nervous system depressants and stimulants and on hallucinogens

References to “drug addiction” in the past automatically suggested opiates. In recent years, however, in many parts of the world the abuse of central nervous system (CNS) depressants and stimulants, certain tranquillizers (mainly meprobamate), hallucinogens (such as LSD), and (in a few parts of Europe and in Japan) also analgesics has greatly increased. This problem now often vastly overshadows the abuse of narcotics, and not only because of the numbers of persons affected. Reference has been made to the unwillingness of modern man to tolerate anxiety and frustra-

¹ 3-Methyl-2-phenylmorpholine.
tion without having recourse to chemicals; certain adolescents and psychologically vulnerable persons may look for easy and quick thrills in the same way. The development, production and abuse of chemicals producing such effects is likely to continue.

1.2 Multidisciplinary approach

Since the causes, prevention and control of dependence on alcohol and other drugs and the treatment of drug-dependent persons involve multiple problems that exceed the scope of any one skilled profession or group, and since knowledge of these problems is so imperfect, it is imperative that a multidisciplinary approach be made to their solution. The multidisciplinary approach is fairly widely established within clinical facilities and should be further implemented. The inter-relatedness of the disciplines, as well as the potential contributions of specific disciplines, must also be recognized in research.

The professions involved in a treatment programme include: general physicians, psychiatrists, internists (internal medicine), social workers, sociologists, clinical psychologists, nurses and occupational therapists. The practice adopted in some areas of including in the therapeutic team patients who have recovered from dependence on alcohol and other drugs is to be commended.

The difficulties in co-ordinating representatives of all of these groups into an effective therapeutic team are well recognized. Special efforts are therefore needed to ensure the creation of an atmosphere of mutual concern for patients, disciplined criticism of techniques and good clinical demonstration. The requirements include:

(a) A clear understanding on the part of all members of the team of the contributions made by each discipline to the therapeutic process.

(b) A clear delineation of the roles of each member of the team in relation to a particular patient.

(c) A conscious attempt to minimize the barrier of professional jargon.

(d) Provision of leadership, without reference to professional discipline, by those with organizational ability, human understanding, and the ability to stimulate initiative.

The various skills outlined above represent a great strength in any treatment unit if they are well co-ordinated to the benefit of the patient. If they are not co-ordinated, the patient’s needs are often not satisfied, despite a flurry of activity.

The prevention of dependence on alcohol and other drugs additionally involves the talents and experience of persons as diverse as sociologists,
cultural anthropologists, epidemiologists, economists, educators, industrial and other managers, labour leaders, criminologists, attorneys, legislators, jurists, law-enforcement officers, clergymen and historians.

Research involves still further disciplines, such as pharmacology, toxicology, biochemistry and physiology.

It is recognized that only some kinds of research endeavours are suited to a multidisciplinary approach. The bulk of basic research (such as a study of metabolic pathways) has generally to be carried out within the framework of a single discipline. However, a multidisciplinary approach is almost always needed when general research strategy is to be determined and when the implications of the results of research are considered. The need for an interdisciplinary approach is particularly evident in applied research. Here, most scientists benefit from close co-operation with representatives of scientific disciplines other than their own, including those who have the responsibility for applying the results.

For all professions and other groups co-operating in treatment and research programmes, flexibility of operation and a keen awareness of local legal, cultural and other factors are important desiderata.

1.3 Role of public health services

The Committee emphasized that, since dependence on alcohol and other drugs creates, or contributes to, major public health problems, it should be of concern to all public health organizations and administrations.

In any given country, the involvement of the public health services in these problems will depend on the prevalence of drug dependence and on the types of agents abused (including varieties of alcoholic beverages). The tasks involved will also be affected by the age-distribution and occupations of the abusers and by their patterns of consumption of alcohol and other drugs. Complicating factors arise in areas producing these agents. Traditional attitudes towards alcohol consumption and drug abuse will have to be taken into account.

An important responsibility of the public health services is to promote investigation and evaluation of the above factors and their health implications. By this statement, the Committee does not wish to imply that large-scale epidemiological studies are necessarily a prerequisite for the establishment of services. Many areas where the need is striking are entirely lacking in facilities for treatment and care of persons dependent on alcohol and other drugs, so that the provision of any such facilities would appear to be beneficial. Public health experience indicates, however, that understanding of the local conditions and requirements has to be applied to the gradual development of a small-scale pilot service before any ambitious schemes are undertaken. As services extend, more careful assessment of the need will be required, as outlined in section 2.1.
In view of the conditions outlined in section 1.1 regarding changing patterns of drug abuse and emerging problems of dependence on newer drugs, public health administrators will need to remain alert to possible changes in the extent and types of drug-dependence problems to be faced in their areas.

Some areas with relatively well-developed health services are facing the need to establish a comprehensive public programme to cope with alcohol and drug dependence. The main components of such a programme are: education and training programmes, other preventive services, case-finding and recognition, treatment and rehabilitation services, legal control measures, and research.

In many of these activities the health services will play a major role. Recognition is increasingly being given to the need for the medical and public health experts to be involved in the framing of relevant legislation and legal control measures (see section 1.4). Medical advice is required in the planning and carrying out of educational programmes for schools, for the general public, and for special groups. The health service may itself have to be responsible for organizing some of the training programmes for personnel in treatment centres or may take such responsibility jointly with voluntary organizations, medical and other scientific societies and universities. Training programmes for the non-medical professions engaged in work with alcohol and other drugs may also be established through public health endeavour. These topics are more fully dealt with under section 3.

In general, the health services will have chief responsibility for the development of case-finding, treatment and rehabilitation services, as outlined in section 2. The Committee emphasized that, wherever possible, services for persons dependent on alcohol and other drugs should be part of the existing health services.

Because of the multifactorial nature of the causes of dependence on alcohol and other drugs, public health workers will need to draw up preventive measures in collaboration with those in other disciplines, as outlined in section 1.2.

Preventive measures include, of course, economic and legislative control of the production and distribution of the "agents" of dependence and, in some cases, the financial interests involved. Apart from co-operation with judicial, legislative and other authorities in carrying out control measures, a public health service may be in a position to influence the final distribution of dependence-producing medicaments through the checking of prescriptions.

In a number of countries—especially economically and technically advanced countries—the bulk of dependence-producing drugs passes through legal channels, i.e., prescriptions by physicians and sometimes by dentists and veterinarians as well. Considerable amounts of dependence-producing
drugs may subsequently pass into illicit channels. When a pattern of prescriptions from an individual physician takes an undesirable course, it may be possible for the health administration or a special body (e.g., a medical society or a medico-legal council) to correct the situation without recourse to court procedure.

In some countries, physicians are required to have a special licence to prescribe certain registered drugs. In at least one country, the health service has the power to deny to an individual physician the right to prescribe any specific drug while permitting him to continue the practice of medicine.

Public health services should contribute to the establishment of suitable professional mechanisms for the prevention and control of inappropriate medical practices that may lead to iatrogenic drug dependence and for the definition of ethical medical practice in relation to the use of dependence-producing drugs. Close working relationships between the medical profession and law-enforcement agencies in regard to the former are to be commended.

The Committee referred to a possible limitation on the production of drugs. The examination and evaluation by a special board of the need for and efficacy of drugs would permit reduction in the number of drugs made available, thus helping to avoid the difficulty of the physician faced with a multiplicity of new pharmaceuticals. Moreover, such a board could assist in judging when an obsolete drug should be replaced by a newer and more effective preparation. Such procedures are already in use in the USSR and the Scandinavian countries, for example. On an international scale, an important role is performed by WHO, which makes decisions and recommendations as to which drugs should be controlled under the relevant international conventions and how this should be done. This has led to the proscription of the use of certain drugs for therapeutic purposes.

In many countries, the public health services could do much to stimulate and foster multidisciplinary research on the problems under discussion. This matter is considered more fully under section 4. The Committee pointed out that public health services might well give particular attention to evaluation of the efficacy of treatment methods and functioning of medical services.

1.4 Medico-legal aspects

Juridical decisions concerning persons dependent on alcohol and other drugs are gradually influenced by the progress of scientific knowledge. There is inevitably a certain time-lag, dictated in part by reasons of prudence, between the progress of the medical and legal disciplines in this respect. In legislation drawn up concerning persons dependent on alcohol and other drugs, it should be recognized and stated that these are sick persons,
and the legislation should provide for the working together of the control
and judicial authorities and the therapeutic agencies.

Many countries, while recognizing that dependence on alcohol and
dependence on drugs are illnesses, still have legal systems that prescribe
punishment for persons exhibiting manifestations of such illnesses. Encour-
aging trends were noted in the increasingly widespread acceptance of drug
dependence, particularly alcohol dependence, as an illness. Legal decisions
have been reached, for instance, that a "chronic alcoholic" may not be
convicted for being intoxicated in public. The inconsistency noted above
should be resolved, in so far as possible, by changes in the systems of
punishment. Such changes present very complex problems in the deline-
atation of unlawful behaviour and the limits to the responsibility of the mis-
behaving person when he has voluntarily exposed himself to conditions
that produced his illness.

Close co-operation between treatment and rehabilitation services on the
one hand, and the police and courts on the other, is therefore imperative.
In some countries of Eastern Europe, the health services provide special
centres to which police may take persons found intoxicated in the streets.
In one Canadian provincial programme, an arrangement has been made
with the police whereby, as facilities allow, persons found intoxicated in
public, and who have not committed any other offence or misdemeanour,
may be taken by the police direct to the treatment services. In one area,
young persons using marihuana, after being charged in the courts, are,
by special arrangement, placed on probation and, as a condition of proba-
tion, ordered to attend at the treatment facilities. In some areas, intoxicated
persons brought before the courts and pleading as "chronic alcoholics"
are referred to treatment facilities. Where a person dependent on alcohol
or other drugs is sentenced to prison for crime, therapeutic action should
proceed during his detention. Despite the heavy burden involved, such
collaboration between the police, courts and medical services in the ther-
apeutic process is to be encouraged, even though it highlights the need for
additional health services.

There has been considerable discussion about the merits of voluntary
treatment as compared with compulsory treatment. Although the former
is generally to be preferred, recognition should be given to the fact that,
in most societies utilizing voluntary treatment, considerable pressure
influences the willingness to "volunteer". Despite some widely stated
views to the contrary, compulsory treatment of persons dependent on
alcohol and other drugs is often successful. When civil commitment of
drug-dependent persons to medical authorities is used (and this procedure
is to be recommended in appropriate cases), a clear legal delineation is
needed of the circumstances entailing such commitment. For compulsory
treatment to be of value the following conditions must be met: the basic
legislation should be preventive and therapeutic in its aim; public opinion
must be in accord with this aim; and ample services must be available. Furthermore, those persons invested with legal responsibility for case-finding should not, ordinarily, also be required to operate the therapeutic programme. However, physicians who detect such patients in the course of their practice would be expected, whenever possible, to treat them. The need for compulsory treatment appears to bear an inverse relation to the degree of public understanding, lack of stigma, and the availability of adequate treatment services for voluntary patients.

Close liaison between police and treatment services in the event of accidents involving drivers or pedestrians under the influence of alcohol or other drugs can be an important aid to case-finding and often permits detection of patients in an early stage of drug dependence.

Medico-legal measures are essential in the prevention and control of dependence on alcohol and other drugs, but it should be kept in mind that reasonably successful control of one agent often, in fact usually, leads to the emergence of another agent as a substitute.

The control of alcohol as a dependence-producing agent presents particularly complex problems since, unlike other dependence-producing substances, it is used legally as a beverage in most countries.

It is important that legislation should envisage close co-operation between public health authorities and the authorities concerned with the production, importation, retailing and taxation of alcoholic beverages so that these activities harmonize, as far as possible, with the best interests of public health.

Health personnel should be active participants in all bodies established to develop co-ordinated governmental policies with regard to dependence on alcohol and other drugs, including the elaboration of legislation on these subjects.

1.5 Interorganizational approach

A multiplicity of agencies is involved in dealing with problems concerning dependence on alcohol and other drugs. In some cases, this has led to duplication of activities, and at times work has been carried out at cross-purposes. However, there is an increasing tendency for bodies concerned with these problems of dependence to co-ordinate their work in areas of common interest.

As far work on the international level, reference has already been made in the introductory section to the activities of WHO. Increasing co-operation with the international narcotics control organs—the Commission on Narcotic Drugs of the United Nations and the Permanent Central Narcotics Board—should lead to the desirable co-ordination of medical activities with efforts in the socioeconomic and law-enforcement spheres. Representation of other international bodies in all meetings convened by WHO and the United Nations
on the topics of the present meeting should also assist co-ordination of effort.

At the national level, there are many departments or functions of government that are inevitably involved in some way in the problems of alcohol and drugs, either in terms of control, law enforcement, or health and welfare services. These include departments concerned with such matters as health services; social welfare; rehabilitation services; education; road, sea and air transport authorities; employment services; law-enforcement and probation authorities; customs and excise; correction services; housing authorities; alcoholic beverage control systems; and drug-control systems.

Increasingly, governments are giving attention to the development of specific instruments of co-ordination as, for example, the establishment of an intergovernmental committee by the state Government of California to develop and co-ordinate a comprehensive programme concerned with alcohol dependence. Senior officials from all of the above-mentioned departments are represented on this committee and have been given a clear mandate to effect a "total co-ordinated governmental programme". Other examples of interorganizational instruments are an interministerial committee in Chile, the High Commission for the Study of and Information on Alcoholism in France, the Institutions of Health Education in the USSR, the co-ordinating committee representing health, education and other relevant facilities in Hungary, the Federation of Institutions caring for Alcoholics and other Addicts in the Netherlands, and the Alcoholism and Drug Addiction Research Foundation in Toronto, Canada.

At the community level, there is also a multiplicity of agencies concerned in some way with the care, treatment and control of dependence on alcohol and other drugs. Unless specific steps are taken to ensure co-ordination and co-operation of the services provided, patients will frequently be moved from agency to agency without any decisive intervention of a therapeutic nature.

At all levels of government, and between governmental and non-governmental agencies at all levels, there is need for specific study and definition of the extent to which interorganizational co-operation is necessary and feasible. Areas of common concern between organizations need to be identified, channels of communication clarified, and methods of co-operation specified.

2. SERVICES

2.1 Assessments of needs

As mentioned in section 1.3, a thorough epidemiological investigation is not an essential prerequisite for the setting up of services for the treatment and care of persons dependent on alcohol or other drugs. However, if
authorities are to provide support for development of services commensurate
with needs, some indication of the types and extent of the problems involved
is required.

In view of the relative crudeness of the available data, it is not possible
to provide accurate figures for the prevalence of dependence on alcohol
and other drugs. Clearly, the most prevalent type of drug dependence
will vary from one country to another. Thus, in Singapore, opium smoking
and morphine taking are common and there is little abuse of alcohol,
whereas in Chile and in France, alcohol dependence is common and there
is relatively little abuse of narcotics. However, it seems reasonable to
assume that at least several million persons are dependent on alcohol
and other drugs throughout the world and, indirectly, this problem also
affects the families of which they are members, as well as the societies of
which they are a part.

In some countries (e.g., Canada and the USA) there are provisional
data to suggest that the prevalence of dependence on alcohol may be
100 times that of dependence on narcotics. The prevalence of dependence
on other drugs falls somewhere in between, possibly towards the lower
end of the scale. (See Annex 1 for some comparative data on this question.)

The abuse of, as well as dependence on, one or more of these drugs
represents a massive problem in many countries with very different cul-
tures, political systems, races and religions. Although the pattern of
expression varies from country to country and society to society, the
effects of illness resulting from alcohol and drug dependence and the
associated crime, accidents, family disruption, suicide, premature death,
loss of productivity, as well as associated hospital, prison and welfare
costs, are everywhere apparent, though not fully delineated. Often, the
use and abuse of these substances, particularly alcohol, is so widespread
and pervasive that problems of dependence are not perceived as such.

In developing areas, although there is a dearth of information about
many of the above problems, there are important indications of significant
dependence on alcohol. Sporadic tribal or village ceremonial drinking
has, in many instances, been replaced by more regular drinking in bars.
Importation and production of beverage alcohol has increased up to
tenfold in some countries of Africa and Asia. These problems seem related
to increasing urbanization, widespread industrialization, difficult living
and working conditions, and weakening of tribal and family ties.

There is widespread abuse of narcotic and other drugs in certain develop-
ing areas. In India, opium and cannabis are rather extensively used,
though their consumption is now declining. In Hong Kong, Thailand
and Iran, heroin is now tending to supersede opium and morphine as the
chief drug of dependence. In Singapore, however, the drugs of dependence
are still opium and morphine. Dependence on opium and hashish is
widespread in Egypt. Khat is used in the countries on the east and west
coasts of the Red Sea. Cannabis is used in most countries of the African continent. Coca-leaf and cocaine are used extensively in Peru and Bolivia and cannabis in Brazil.

In the USA, many drugs, including alcohol, are taken to excess, and the smuggling of narcotics, particularly of heroin, creates a very serious problem. In Europe, the number of heroin users is relatively small, but in some areas abuse of this drug is an increasing problem. The abuse of central nervous system depressants and stimulants, as well as analgesics, is also reported to be increasing in these and other areas.

As services begin to develop in any given area, data will be required on: the amount and place of consumption of alcohol and other dependence-producing drugs; the number and characteristics (pathological and social) of dependent persons, by drug of dependence; and the attitudes and mores of the community to be served. Some suggested means by which these data can be obtained are the following:

(a) The amount and place of drug consumption:
   (i) survey of production, imports and exports;
   (ii) survey of medical prescriptions;
   (iii) studies of physicians’ prescribing patterns and attitudes;
   (iv) field studies of populations of users and abusers;
   (v) comparison of these data for countries of comparable standards of living.

(b) The number and characteristics (pathological and social) of dependent persons, by agent of dependence:
   (i) confidential reporting to medical authorities of such persons coming to the attention of physicians (this is strongly recommended);
   (ii) police reports of offences associated with drug dependence;
   (iii) Jellinek’s method of estimating the extent of alcohol dependence;
   (iv) items (ii), (iii) and (iv) under a above.

(c) The attitudes and mores of the persons to be served and the cultures of which they are part:
   (i) clinical impressions;
   (ii) field studies involving the use of skills of psychologists, sociologists and cultural anthropologists.

2.2 Preventive, treatment and rehabilitation measures

2.2.1 Prevention

The extent of the problems arising from dependence on alcohol and other drugs is so vast that the task of prophylaxis assumes great importance.
2.2.1.1 Health education

A valuable tool in preventing the development of dependence on alcohol and other drugs (primary prevention) is a well-organized programme of education directed to the general public and to specific groups and professions. This aspect of prevention is more fully considered in section 3.

2.2.1.2 Medical control of drugs

Restriction of availability of drugs through control and limitation of production (e.g., after evaluation of safety and efficacy) and of distribution are useful preventive measures that can be applied by public health and other medical bodies (as described in section 1.3) and will supplement legislative measures of national and international control.

2.2.1.3 Legislative measures

Restriction of availability and punitive measures against abusers were for many years the main prophylactic approaches to dependence on alcohol and other drugs. Restrictive legislation in the United Kingdom after 1915, which included increase in the tax on alcoholic beverages and shortening of hours of sale, was followed by a sharp fall in convictions for drunkenness. Prohibition in the USA, Finland and Norway, while doubtless reducing total consumption, did not eliminate use and abuse of alcohol and led to undesirable consequences. Reference has already been made to the importance of controlling the availability of other dependence-producing drugs. Increase in taxation or other price regulation as a control measure may result in changes in type of alcoholic beverage used and may be followed, at least for a period, by reduced consumption. However, it does not necessarily act as an effective deterrent to the consumer who has become dependent, because he almost always continues to seek and abuse other agents. Punishment of the drunken offender does not prevent the person dependent on alcohol from repeating over and over again his self-destructive, almost suicidal behaviour, which often seems designed to invite punishment. The fining and imprisonment of these and other drug-dependent persons does not prevent recidivism if other measures are not taken as well. Despite the enumerated limitations, restrictive legislative measures as a whole do, however, play an important role in primary prevention.

2.2.1.4 Influencing social attitudes

Social and cultural attitudes towards the consumption of alcohol and other drugs appear to have a bearing on the development of dependence, as exemplified by differences in prevalence among different cultural groups:
for example, the low rate of dependence on alcohol among Jews and its high rate in France and Chile. Attitudes towards heavy consumption may also affect symptomatology: condemnation by society may arouse guilt feelings in the user, drive him to even greater dependence on drugs, and prevent him from seeking treatment. This is not to say that abuse of alcohol and other drugs should therefore be condoned.

It was noted in section 1.1 that the medical profession and the general public in many countries are now coming to accept alcohol dependence as an illness, but that in too few countries has similar progress been made with regard to persons dependent on other drugs. The Committee reiterates here that greater acceptance of the concept that dependence, whether on alcohol or on other drugs, is an illness could help the persons affected to a more hopeful attitude towards themselves and their disability.

2.2.1.5 Mental health measures and improvement in socio-economic conditions

Psychological, socio-economic and cultural factors appear to play important roles in the development of dependence on alcohol and other drugs. Measures such as application of mental health principles in childhood, improvement of social conditions and the alteration of certain cultural attitudes and patterns should decrease the likelihood of people becoming dependent on alcohol or other drugs.

2.2.1.6 Research

Increased knowledge of the causative factors of drug dependence is required for development of preventive measures (see section 4).

2.2.1.7 Early diagnosis and treatment

Important elements of secondary prevention are early diagnosis and treatment, which can be furthered by widespread and adequate public and professional education and training (see section 3). Persons dependent on alcohol or other drugs can be recognized by health workers such as physicians, public health nurses and social workers, provided they have adequate knowledge of drug dependence. Case-finding and guidance of patients to treatment channels may also be accomplished by law-enforcement authorities, following arrest for certain unlawful activities, such as stealing to obtain money to buy drugs or driving while intoxicated. The police and magistrates should be taught to identify those persons who should be examined medically to determine their need for treatment. In North America, about half the persons dependent on alcohol are believed to be still fully employed. Industry, therefore, is potentially well situated for detection of incipient alcohol dependence and the prevention of later and more serious consequences.
There are general similarities between the progressive social, physical and psychological decline of persons dependent on alcohol and of those dependent on other drugs. Social and cultural factors, as well as the nature of the agent and the extent of its abuse, affect this decline. Where adequate treatment is available, early diagnosis and treatment can help to prevent further progress of the illness, such as the development of physical complications in the case of alcohol and certain other central nervous system depressants.

In most countries, it is particularly important to carry out case-finding activities in the following three groups:

(1) Persons employed in occupations where they have supervision of their activities. Dependent persons in such a situation may be fairly readily identified and encouraged to seek treatment. Generally, the treatment of persons in this group has relatively good prospects as compared with treatment of those who are not employed.

(2) Unemployed or self-employed persons are less accessible to case-finding. On the average, the prospects for successful treatment of persons in this group who are dependent on alcohol or other drugs lie somewhere between those for the first group and those for the third.

(3) The much smaller group of socially, and often psychologically and physically, deteriorated persons typified by the “derelicts” found in nearly all societies contains many persons dependent on alcohol and other drugs. The chances of improvement in members of this group are the poorest. While they are not particularly difficult to identify, their motivation for treatment is usually quite low and often difficult to modify.

It may be noted that one of the early steps that a government could take in providing leadership in this field is to establish a definite policy and programme for all governmental employees. For example, the following are the policies relative to alcohol dependence that have been adopted by one governmental unit:

(a) Medical services will be available to employees at their own request or if referred by their supervisors, and the Public Health Service will provide facilities for diagnosis and arrange treatment.

(b) Assistance will be given to the employee in rehabilitating himself in order to return to efficient job performance; however, the employee will be required to accept certain conditions related to the programme of rehabilitation which is determined for him.

(c) Where the employee is identified as being ill, he is entitled to use his sick leave and may be granted other assistance as required during the course of treatment.

(d) Supervisors will be trained to identify the early signs of problem drinking, to understand the attitudes and requirements of the problem
drinker, and to refer the employee for rehabilitation in accordance with government policy.

(e) Every reasonable means will be utilized to restore the employee to normal work performance and productivity. In this connexion, the employee is required to accept referral for assessment and identification of his problem.

(f) If it is established that medical treatment or other measures have failed, or if the employee refuses to co-operate, then removal from employment must be considered.

(g) In a number of occupational categories, existing rules in respect to drinking during working hours will continue to be enforced as a condition of employment.

2.2.2 Treatment and rehabilitation

The treatment of persons dependent on alcohol, with the best methods available, has produced encouraging results. Marked improvement or social recovery has been reported in up to 50-70% of cases, depending mainly on the underlying personality of the person treated. The proportion of therapeutic failures is generally higher among abusers of other drugs, but social and cultural factors and the extent of dependence on a particular drug within the population also affect the treatment results.

There are many principles that are equally valid in the treatment of persons dependent on alcohol and those dependent on other drugs. An important fact, often overlooked, is that detoxification of the dependent person is only one aspect of the total treatment process. Indeed, this measure is less time-consuming and difficult than the other essential therapeutic steps. Intensive treatment of psychological dependence and of drug-induced and other physical disorders, social and vocational rehabilitation, and long-continued follow-up through supportive and consultative services are all needed in the majority of cases if the dependent person is to have an optimum chance of living his life free of drugs as a productive citizen. Nor must non-relapse into dependence on alcohol or other drugs be considered as the sole criterion of effectiveness of the therapeutic regime. Improved interpersonal relations, working patterns and satisfactions in living must also be used as criteria in judging therapeutic results.

Another common principle is the need for team-work. The therapy of dependence on alcohol and other drugs requires very close collaboration between many professional disciplines and voluntary and official agencies, as discussed in sections 1.2 and 1.5. The medical practitioner, social worker, clinical psychologist, nurse, clergyman, probation officer, local authorities, the patient's family, and organizations such as Alcoholics Anonymous or Narcotics Anonymous all have their parts to play and
consequently all need to be well informed on the subjects of alcoholism and drug dependence.

However, the treatment of persons dependent on alcohol and other drugs is, or should be, to a large extent a medical problem. The physician—general practitioner, psychiatrist or other medical specialist—must assume ultimate responsibility for the medical treatment of the patient. Nevertheless, the other groups mentioned above have important contributions to make. Indeed, during certain phases of treatment, members of the therapeutic team other than physicians may appropriately carry the major therapeutic role. Nonmedical personnel may well bear the ultimate responsibility for the rehabilitation phase (which overlaps with treatment).

Many forms of treatment of alcohol dependence have achieved success in the hands of therapists representing various disciplines and philosophies. However, the therapist's basic attitude to the problem and to the dependent patient is probably more important than particular treatment techniques, especially following detoxification. It is essential, in treating persons with all forms of dependence on alcohol and other drugs, that the therapist should accept the patient, emotionally as well as intellectually, as a sick person and avoid a moralistic and condemnatory attitude. While he must help the patient to face reality and accept responsibility for his own actions, the therapist must avoid attitudes of rejection, which only serve to reinforce the dependent person's own feelings of guilt, isolation and hopelessness and drive him even further towards his pathological adaptation to life and his tendency to abuse of alcohol or other drugs.

On the basis of present knowledge, treatment should usually start with withdrawal of the drug. This should be abrupt and complete in the case of drugs such as the central nervous system stimulants, cannabis, hallucinogens and alcohol, but gradual (measured in days or weeks rather than months) in the case of drugs such as the opiates and the barbiturates. After withdrawal of the drug and a diagnostic evaluation of the factors that are of importance in a given case, the patient should be treated with a combination of the available psychological, physical (including pharmaceutical) and social methods best suited to his individual needs. This process may well have to be continued for months or even years. It overlaps with the rehabilitation phase, which in turn overlaps with follow-up services, during which the patient is assisted in the process of learning to live contentedly and usefully without relying on alcohol or other drugs. Long-range plans for treatment, rehabilitation and long-continued support are absolutely essential.

Individual and group psychotherapy have both been employed in the treatment of persons dependent on alcohol and other drugs. Group therapy has found increasing application in such treatment for a number of reasons,

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3 See also discussion on leadership of team, in section 1.2.
such as the need that these patients have for resocialization, their feeling of isolation, their need to identify and to achieve a feeling of belonging among people with the same affliction and with similar underlying problems, and the opportunity that group therapy provides for support by group members in times of crisis.

Following the example of Alcoholics Anonymous (A.A.), similar bodies have been formed with the aim of helping persons dependent on other drugs, such as "Narcotics Anonymous", "Syanon" and many others. Many persons dependent on alcohol and some persons dependent on other drugs have been helped by these organizations without any medical assistance, others with medical collaboration. Where hospital or outpatient treatment is available, the main value of these organizations is in the case-finding and rehabilitation phases.

The attitude of the family is of great importance in the after-care period. Relatives' groups, guided by the physician, social worker, clinical psychologist, nurse, clergyman or other trained worker, can be of great benefit.

Not all drug-dependent persons—and certainly not all those dependent on alcohol—require hospital care. The rest may be treated either at home by the family doctor, or at out-patient clinics. However, a drug-free environment is often essential in the early phase of treatment. Alcohol-dependent persons requiring hospitalization have been found to benefit greatly from a therapeutic community unit run on permissive lines and operated to a large extent by the patients themselves, who thus learn responsible living. This approach may also prove useful to other drug-dependent persons, although sometimes a less permissive arrangement may be required.

Dependence on alcohol and other drugs is essentially a relapsing illness but, as stated earlier, relapse is not to be considered as indicating therapeutic failure. When relapse does occur, it should be seen as a challenge to try again. The majority of persons who have recovered from dependence on alcohol or other drugs have succeeded only after a number of relapses. The therapist frequently has to be satisfied with achieving a limited goal.

2.3 Existing types of services

Before making recommendations on the establishment of services for treatment and care of persons dependent on alcohol and other drugs, the Committee reviewed some types of service at present available.

Most of the developed countries have official and/or unofficial national, departmental and/or local programmes for dealing with certain aspects of the prevention of dependence on alcohol and other drugs and for the treatment and rehabilitation of persons dependent on these agents. Unfortunately, control programmes for central nervous system depressants and stimulants and for hallucinogens are much less well developed than for
drugs of the morphine type, although no less necessary. Also, control programmes for these drugs show great disparity in the degree to which they are enforced. Alcohol control measures also vary widely in extent and in degree of enforcement. Moreover, other preventive services, particularly of an educative and case-finding nature, are sporadic indeed, as is research in the field of prevention.

The so-called narcotic drugs, unlike the other substances under discussion, are subject to an elaborate international control programme as laid down in a number of international conventions. These treaties cover not only opium, opiates and synthetic substances with morphine-like effects, but also cannabis and cocaine, as well as coca leaf. The international narcotics control organs (Commission on Narcotic Drugs of the United Nations Economic and Social Council; Permanent Central Narcotics Board) are predominantly concerned with the drug control measures and their enforcement, some attention also being given to rehabilitation of abusers, to research, and to finding alternative means of livelihood for persons in some districts now producing opium or coca leaves. The major national approach to "narcotics" abuse has been one of criminal penalties, which have steadily been increased, often without differentiating between "traffickers" and "addicts" or between heroin and cannabis.

The treatment and rehabilitation services also vary widely in the degree to which they have been planned and implemented. Some countries with large problems have very small programmes for dealing with them (this applies, for example, to nearly all Latin American countries in relation to alcoholism). A more common pattern, however, is an extremely fragmented programme operated by a wide variety of official and voluntary agencies with very little or no co-ordination between them. For the most part, these programmes have been established in specialized hospital and prison facilities as far as the treatment of persons dependent on narcotics is concerned. In general, such programmes suffer from the lack of long-term follow-up.

Programme facilities for the treatment of alcohol-dependent persons have, more often than not, developed within existing health services. However, there is a trend in some countries towards the development of specialized services for such patients, but very often within the general framework of other health services, as far as such services are provided by health agencies. Non-medical agencies, on the other hand, tend to develop their programmes as separate and discrete entities. Many types of facilities have been developed, including specialized half-way houses, rehabilitation workshops, and the like. A regrettable fact is that, even where services exist, they fall far short of meeting the actual needs.

In the past, treatment services provided for alcohol-dependent persons by most hospitals were limited to withdrawal or "drying-out", without the needed subsequent treatment and rehabilitation. Such services are
scarcely of more lasting value to the patient than detention in prison. Fortunately, this fact is gaining more general recognition and further development of treatment programmes is taking place.

The existing treatment and rehabilitation resources for those suffering from dependence on central nervous system depressants and stimulants and on hallucinogens are almost entirely limited to general and psychiatric medical facilities, in many of which the problems of these patients are poorly understood. Increasingly, however, persons with such dependence are being treated in programmes designed for alcohol-dependent persons, particularly where the patient uses both alcohol and other drugs in combination or sequence.

Some examples of various types of treatment programmes are given below, no attempt being made, however, to provide an exhaustive survey. Section 2.4.2 gives an outline of the various types of facilities and services involved in these programmes. As will be seen from the table on page 34, a wide variety of resources has been developed in different parts of the world for case-finding, detoxification, active treatment of dependence, rehabilitation and long-term follow-up.

2.3.1 Combined services for persons dependent on alcohol and other drugs

In a number of programmes, attention is now being given to both alcohol dependence and dependence on other drugs. One of the leading examples of this trend is the Alcoholism and Drug Addiction Research Foundation in Toronto, Canada. Between 1949 and 1963, this foundation, acting under legislative enactment, developed a comprehensive programme relative to alcohol dependence, comprising research (basic and applied), public education and university-based training programmes for various professional disciplines, plus a wide range of treatment and rehabilitation services. In 1963, the legislation governing the activities of the foundation was amended to extend all facets of the programme to include dependence on drugs other than alcohol. In addition to providing services within the area served by the foundation, this programme, through its research and the resulting publications and documentation, has made an important contribution internationally to further understanding of problems of alcohol and drug dependence.

Some of the units set up in the United Kingdom under the Ministry of Health are officially designated as catering for both alcohol-dependent and drug-dependent persons. An example is the Regional Alcoholism and Drug Addiction Unit of the North West Metropolitan Regional Hospital Board.

2.3.2 Services concerning alcohol dependence

Programmes have been established in many parts of the world at governmental level to provide for treatment of alcohol dependence and to
organize education and research. In the Scandinavian countries and Finland, programmes include full or partial monopoly of alcohol beverage production and distribution, with state organization of local prevention and treatment agencies throughout the country. In Finland, nearly every municipality appoints a board concerned with alcohol and alcoholism questions in its area and, to guide these boards, the Ministry of Social Affairs employs district advisers. In 1950, the Finnish Foundation for Alcohol Studies was established, on the Board of which the Ministries concerned with health and education as well as the State Alcohol Monopoly are represented. It has engaged in extensive research in many phases of alcohol problems, including treatment in experimental clinics. In some European countries, mixed systems exist, as in Switzerland, where public and private bodies concerned with education and treatment of dependence on alcohol are represented on a Federal Commission and receive Federal and cantonal subsidies. In the Netherlands, programmes are carried out mainly through medico-social consultation bureaux (outpatient clinics). These are administered by private bodies but receive government subsidies and are under government inspection.

Another type of service has its treatment programme integrated in the Ministry of Public Health, with independent official and private bodies being responsible for prevention and education, as in France, for example. In 1955 it was decided that mental health dispensaries throughout France should be made responsible for the treatment of alcohol dependence. These bodies were charged with case-finding, outpatient treatment and after-care of those treated in hospital. The State was made responsible for 83% of the maintenance cost of this service in order to facilitate its development, the remaining expenses to be borne by the local administration. A Government High Commission for the Study of and Information on Alcoholism, established in 1954, advises public authorities on measures to deal with alcohol problems and initiates a variety of research projects in this field.

Several countries of Eastern Europe have evolved national programmes to deal with alcohol problems and alcohol dependence in the last few years. In Poland, a National Committee against Alcoholism was set up, subsidized by the Ministry of Health and operating through regional committees, to inform the public about alcoholism and to organize treatment facilities throughout the country. This was followed later by an interministerial committee representing nine Ministries concerned in some way with alcohol problems. In Czechoslovakia, a Central Committee was established in 1957 in the Ministry of Health, as a consultative, initiating, co-ordinating and control organ. In Hungary, in 1962, a National Commission on Alcoholism representative of Ministries, national organizations, and professions was created by the Ministry of Health and the Red Cross. In 1954, in the USSR, a directive was sent out by the Ministry of
Health requiring psychiatrists and other physicians to undertake educative action on the subject of alcoholism. This programme has been developed into a nation-wide programme by the Ministry through the Central Institute of Scientific Research and Health Education.

Other programmes that have developed since 1960 include the consultation and treatment centres in Spain; the extensive programme comprising eleven treatment centres of different types, both out-patient and in-patient, operated by the Administration of the Province of Milan in Italy; and the alcoholism treatment units in Great Britain set up under the Ministry of Health and directed by regional hospital boards.

Practically every state in the USA has some kind of programme on alcohol dependence in operation. These programmes are either operated by an independent commission or integrated into the health or hospital services. There has been a tendency in recent years, particularly in the USA, to move away from the concept of the independent commission towards integration in the state health departments. On the Federal level, the Public Health Service, through its Bureau of State Services and the National Institute of Mental Health, provides assistance to the state programmes by means of grants and technical and consultative assistance. The National Institute of Mental Health has a major responsibility for research and the preventive aspects of alcohol dependence. In Canada, there are two major developments of interest; namely, the responsibility delegated to the Ontario Alcoholism and Drug Addiction Research Foundation to develop a “total” programme, including research (see section 2.3.1) and the development of a comprehensive treatment and rehabilitation programme within the Ministry of Health of Quebec.

In Latin America, various types of programme have been put into operation. In Argentina, municipal programmes have been established, and in Brazil, the government alcoholism sub-committee has carried out investigations in the various districts of the country prior to developing service facilities. In Chile, there is a movement in favour of treating mental disorders in general in community mental health units, in which curative and rehabilitation activities are to be integrated. Integration of its activities with those of other public health services is the essential principle on which this new system is based. In these units, an important place will be given to the control of alcohol dependence, in view of its prevalence and its negative repercussions on the other health programmes. The “Patronato” in Guatemala, to combat alcohol dependence, has developed a comprehensive programme of prevention and treatment. In Costa Rica, there is a Commission on Alcoholism, depending in part on the State and in part on voluntary support.

In Australia, each state has developed its own individual programme. The programmes include, for example, a co-ordinating committee of health and education authorities in Queensland, and foundations for research
and treatment of alcoholism in New South Wales and Victoria, all of which have a wide multidisciplinary approach to the question.

2.3.3 Services for persons dependent on other drugs

In Singapore, a treatment centre was established on St. John’s Island in 1955 for persons dependent on opium, both volunteers and convicts, with a programme of withdrawal, rehabilitation, and a limited follow-up.

Hong Kong, Iran, and Thailand also have centres for treatment of persons dependent on drugs of the morphology type, among which heroin is coming to be increasingly abused.

In Norway, a specialized treatment centre for drug-dependent persons was established in 1961 as a pilot project under the administration of the health services and is now under extension.

In these and other similar treatment centres, the withdrawal phase is generally carried out, the rehabilitation phase partially so; facilities for follow-up evaluation, epidemiological studies and research are less well provided for.

However, considerable empirical knowledge has been gained by workers in these centres, and this should be made available to those in other countries wishing to start similar centres. Some of the experience gained from work on drugs like opium, morphine, heroin, and cannabis may be applied to the treatment of alcohol dependence.

A comparison of experience in the treatment of alcoholics in a permissive English mental hospital with that gained in the treatment of compulsorially detained opium-dependent persons in an institution in Singapore has shown many striking similarities, despite the differences in the type of drug being abused and in socio-cultural and other factors.

Attention is also invited to the special programme for the treatment of persons dependent on morphine-type drugs that has been developed in Lexington, Kentucky, in the USA. This hospital-based programme operates in association with an extensive “addiction research centre”, where many of the basic findings in this field have been produced. The programme suffers seriously from the lack of follow-up services, in part occasioned by the long distances that the patients have to travel to the hospital. It serves voluntary patients as well as those admitted through criminal-court procedures. In recent years, California and New York have also developed substantial programmes for such persons, and some of them have well-developed mechanisms for follow-up, including periodic testing for the presence of drugs. Puerto Rico is also reported to have established a rather comprehensive programme for drug-dependent persons.
As noted at the beginning of this section, there are practically no
categorized facilities for the management of persons dependent on central
nervous system depressants and stimulants or on hallucinogens. Such
treatment and research as has been done in this field has been carried out
largely in pre-existing general and mental hospitals and universities. It is
noted, however, that dependence on these substances is also being studied
in the Alcoholism and Drug Addiction Research Foundation in Toronto,
Canada.

As noted in section 2.3.1, treatment programmes initially designed for
the management of alcohol-dependent persons are now showing consider-
able interest in these emergent problems of dependence on other drugs,
particularly in the United Kingdom.

The most important conclusion to be drawn concerning the present
treatment and rehabilitation programmes is that, even in the areas where
services are located, they reach only a very small percentage of drug-
dependent persons. This emphasizes the importance of the development
of additional services, fully co-ordinated and associated with intensive
preventive programmes and public health activities.

2.4 Establishment of services

2.4.1 Pilot services

In many areas of the world, the establishment of services for persons
dependent on alcohol and other drugs has been initiated through the
pioneer efforts of one or a few persons. In many cases, such efforts have
so far received little recognition, even locally. For the guidance of interested
countries and localities, the Committee therefore recommends that attempts
be made, internationally, to collect extensive information on such activities.

In some countries, where the use and abuse of a certain agent, par-
ticularly alcohol or cannabis, is widespread, it is nevertheless necessary to
bring to the attention of appropriate authorities the need for services to
deal with these problems. One means is to involve them in the process
of collecting and recording relevant data. One of the best methods to
begin finding out about local problems is to establish a pilot centre, which
will become a focus of interest, study and experience. The Committee
strongly urges the extensive utilization of this technique.

Also, it is again noted that the nature of the services must be consonant
with the needs as understood locally, taking account of local cultural,
social and other attitudes and the availability of existing services that
might be helpful in the provision of case-finding, treatment and rehabilita-
tion services. The Committee noted that WHO is in a unique position
to offer consultation services to countries in connexion with the estab-
ishment of needed services.
2.4.2 Comprehensive programmes

2.4.2.1 Principles

Throughout the report, reference has been made to the need for the development of comprehensive programmes to meet the problems connected with dependence on alcohol and other drugs. It is recognized that these conditions give rise to a variety of problems—physical, psychological, social, economic and others—which call for a wide range of services and skills in the personnel involved in prevention, treatment and rehabilitation. In this connexion, the Committee again stressed the need for interdisciplinary and interorganizational co-operation (see sections 1.2-1.5).

The Committee considered that, ideally, treatment of high quality should be made available through an adequate variety of facilities to all who suffer from alcohol or drug dependence. These services should be closely linked with provisions for dealing with the repercussions of such illnesses on the family of the patient and on society in general. There should be close co-operation between the various facilities, the objective being to provide continuous care for the patient by maintaining the same therapist or the same therapeutic team throughout. Wherever feasible, such facilities should be integrated with other health and welfare services.

2.4.2.2 Facilities for treatment and rehabilitation

Of great importance for case-finding are law-enforcement and judicial services, industrial health services, centres for provision to the community of information on alcohol and other drugs, and sobriety boards, as found in Scandinavia. The health services, and often particularly the general practitioners, are important sources of referral.

Many persons dependent on alcohol or other drugs can be treated within the general health services, provided the personnel are adequately trained for the task. General hospitals, tuberculosis hospitals, prison hospitals, social agencies of various types, all deal with alcohol-related problems. Whether or not they segregate their alcohol-dependent persons in special units, it is still desirable that many of their professional staff have special knowledge and skills related to this field. To an increasing extent, the staff of such institutions will need knowledge and experience concerning dependence on other drugs, especially central nervous system depressants and stimulants (see section 3). The general practitioner can also be involved in treatment and rehabilitation.

An important part can be played by the network of facilities recommended for community mental health care. These include psychiatric outpatient clinics, either attached to general or mental hospitals or as part

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of a separate mental health centre; "half-way houses"; mental health departments in general hospitals; mental hospitals; psychiatric day hospitals; and sheltered workshops for mental patients.

In some areas, depending on the extent and nature of the problems, it may be found advisable to set up facilities specifically for the treatment and care of persons dependent on alcohol and other drugs. These would include the following: sobering-up stations, to which persons in a state of intoxication can be taken by the police to stay one night and to receive medical attention if necessary; special outpatient consultation centres to provide advice and treatment (including hangover clinics, as in Finland); prison treatment services and centres; and institutions for long-term care, including rehabilitation farms and work colonies.

The accompanying table shows existing facilities for the prevention and treatment of drug dependence. Most of the facilities listed carry out only some of the functions of a comprehensive service. This, of course, leads to fragmentation and discontinuity of treatment for most patients. The basic present problem is how to develop new programmes that will provide a full range of services while taking advantage of existing facilities and integrating their services with those of a comprehensive programme.

### EXISTING FACILITIES FOR PREVENTION AND TREATMENT OF DEPENDENCE ON ALCOHOL AND/OR OTHER DRUGS

<table>
<thead>
<tr>
<th>Facilities as part of other services</th>
</tr>
</thead>
<tbody>
<tr>
<td>General health services: general hospitals, out-patient departments, health centres, day-care centres, family physicians.</td>
</tr>
<tr>
<td>Mental health services: mental hospitals, institutions for long-term care, out-patient departments, community mental health centres, day hospitals, night hospitals, half-way houses, private psychiatrists.</td>
</tr>
<tr>
<td>Industrial health services: social and welfare services (including sheltered workshops); educational institutions; religious agencies; law-enforcement agencies.</td>
</tr>
</tbody>
</table>

### Special facilities

| Information centres (United Kingdom, USA) |
| Sobriety boards (Scandinavia) |
| Hangover clinics (Finland) |
| Sobering-up stations (Poland) |
| Medical consultation bureaux (Netherlands) |
| Special withdrawal facilities |
| Ex-patient organizations (e.g., Alcoholics Anonymous) |
| Half-way houses for ex-patients |
| Clubs for ex-patients |
| Rehabilitation farms and work colonies |

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* Each of the facilities listed carries out one or more of the following functions: case-finding, diagnosis, assessment, detoxification, withdrawal, active treatment, rehabilitation, after-care, follow-up, long-term care.

* Some of these facilities have special departments for persons dependent on alcohol and/or other drugs.
3. EDUCATION AND TRAINING PROGRAMMES

A comprehensive approach to the problems of dependence on alcohol and other drugs should include a strong, well-organized programme of education aimed at prevention.

3.1 Objectives and methods

Primary prevention is aimed at reaching all persons in the community, especially the potentially vulnerable persons and groups, and providing them with information and education designed to protect them against possible later disease. Such education attempts to help the public to understand both the motivations underlying abuse of drugs and alcohol and the socially accepted use of alcohol and certain other drugs. The public also needs information on the physiological and other effects of consumption of alcohol and other drugs, and on the recognition of abuse of such agents. An important objective of health education is to foster public recognition of dependence on alcohol and other drugs as illnesses requiring treatment. Information on the objectives of the preventive and treatment services and on the methods of gaining access to them should encourage public collaboration and assist in early case-finding and treatment. In some areas, it may be found necessary to create a climate of social disapproval of the excessive use of alcohol and other drugs and to advocate total abstinence from certain agents. Similarly, educational programmes may be required to counteract popular misconceptions about the value of alcohol and other drugs, for both dietetic and medical purposes.

As in all other educational programmes, it is important that half-truths and exaggerations be avoided. Since knowledge of a given subject can never be complete, factual information should be presented only as the best currently available, and with a willingness to modify the educational as well as other facets of the over-all programme as new knowledge is attained.

In developing a programme of education on problems of dependence on drugs, including alcohol, it is important to investigate the patterns of use and abuse, as well as the values and attitudes attached to abstinence, use and abuse in significant segments of the population. Such an investigation will include a study of the way persons of various ages and classes customarily learn the use of alcohol and drugs in the population under consideration. A realistic formulation of the goals of the educational programme should be related to the values and experiences of significant groups in the population. The most effective channels through which information reaches various segments of the population should be determined and utilized.
It is evident that any educational programme must give primary attention to local circumstances, with particular reference to the drugs (including alcohol) used predominantly in the country and the degree to which such drug-usage creates a problem, together with a consideration of the local customs, attitudes, predominant mores and institutional patterns.

The Committee was mindful of the long-continued discussions about the "merits" and "hazards" of providing information on drug dependence to relatively uninformed groups. Intelligent action is unlikely to be fostered by ignorance or misinformation; nevertheless, the Committee sees little need to mount intensive preventive educational programmes for the public and its numerous special groups in the absence of actual or potential problems. However, because of the rapidly changing patterns of dependence on alcohol and other drugs, health and welfare officials, and members of the medical profession in particular, must be well informed about the manifestations of all types of drug dependence, the prevention of such dependence, and the treatment and rehabilitation of drug-dependent persons.

3.2 Target groups

To be effective, educational programmes need to be directed to specific population groups. Educational material can then be developed in accordance with the interests, occupations, principal concerns and other special factors related to each group. In this way, the educational programme can be made realistic, and limited but attainable goals can be set.

Health education of schoolchildren may be made the responsibility of schools, parents or other groups who can be appropriately instructed in how to pass on information to children. A programme for older schoolchildren and students might include information on customs connected with use and abuse of alcohol and other drugs among various communities and groups, variations in community attitudes towards consumption of such agents, and the hazards attached to certain patterns of consumption and to certain drugs in particular. Inevitably, a child acquires much of its health education through imitation of its parents, who may require to be specially alerted to the need to provide an appropriate example.

In the case of an educational programme directed towards employers (an industrial programme), emphasis should be placed on the need for the development of a definite policy that will recognize dependence on alcohol or other drugs as a health problem and also on the establishment of specific procedures that will enable the affected employee to be identified and to obtain treatment for his illness.

The impact on industrial and community health of problems of dependence on alcohol and other drugs warrants considerable emphasis on education about these problems in the course of undergraduate professional
training of many types. The majority of those taking such courses do not plan to work exclusively with such problems but will, in fact, have to deal with many persons dependent on alcohol and drugs in the course of a career devoted to other kinds of human problems. The specific groups to be reached during their professional training would include psychiatrists and other physicians, psychologists, sociologists, social workers, nurses (especially public health nurses), religious leaders, lawyers, attorneys and the police.

3.3 Professional training courses

Professional training courses, both didactic and clinical, should include preparation adequate to deal with the occasional person suffering from dependence on alcohol or other drugs, without complications, and for identifying the more difficult problems that require consultation with or referral to specialists.

Undergraduate medical education concerning dependence on alcohol and other drugs should cease to be the forgotten element in training which it has been for so long, and which it continues to be in many places. Often, only a brief mention of these problems is made when a teacher happens to be interested in and informed about a particular aspect of the problem. The official curriculum should provide for systematic teaching in this area (not necessarily, or even desirably, in separate courses).

The range of professional personnel required or desirable for a comprehensive clinical programme concerning dependence on alcohol and other drugs includes: physicians (psychiatrists, general practitioners, internists), social workers, clinical psychologists, nurses, occupational therapists, sociologists and religious counsellors.

Of basic importance to all those working in this field is the development of an attitude enabling them to perceive persons dependent on alcohol or other drugs as human beings worthy of the application of the therapist’s skills. Without this attitude, the skills of the most highly trained professional person will usually be inadequate to effect any therapeutic success. A good professional training is required in a chosen discipline, together with additional training concerning dependence on alcohol and other drugs.

Since dependence on alcohol and other drugs is an aspect of behaviour, training should prepare those concerned to deal with these problems within the broader framework of human behaviour and human pathology.

It is difficult to achieve co-ordination and co-operation between various professional groups within an organization for clinical investigation and treatment. Some groups, for example internists and general physicians, are likely to adopt a “pharmacological-physiological” approach and generally tend to see the clinical problem as involving only the control of intoxication or physical withdrawal. Having effected this control, such
physicians are sometimes little concerned with the problems of psychological and social rehabilitation. Psychiatrists, psychologists, sociologists and social workers tend to give major attention to the mechanisms that prompted the abnormal behaviour and the problems of reintegrating the patient into the society from which he has become alienated. At a time when dependence on alcohol or other drugs is looked on as an illness brought about by etiological factors operating at the physical, psychological and social levels of human adjustment, integration of the efforts of the various professional disciplines concerned becomes a fundamental necessity.

Integration does not just come about; attitudes and prejudices have to be modified and reshaped into a setting of mutual concern, disciplined criticism and clinical demonstration. The development of such attitudes is a function of training.

There are several aspects of training that should be considered:

(a) Students in clinical fields should be provided with a general orientation to the problems of dependence on alcohol and other drugs, and they should be given opportunities during their training for direct contact with persons suffering from such conditions.

(b) Psychologists and sociologists need at least some knowledge about the physiological and pharmacological effects of alcohol and other drugs on the body. These agents influence behaviour and must be seen as interacting with social and psychological influences.

(c) Those specializing in internal medicine should be provided with basic psychological and sociological information. Other medical specialists also need increased emphasis in their training on the entire field of dependence. One hindrance to the team process is the language barrier between those trained in psychology or sociology and those trained exclusively in internal medicine. A systematized interpretation of what other disciplines are trained to do and can do would improve understanding between the team members, but such training would not be designed to make all staff equally expert in all areas.

(d) For those who work almost entirely with persons dependent on alcohol and other drugs, a good deal of training must be accomplished at the tutorial level, either in small groups or individually. Their patients belong to a group that is stigmatized by the larger society. Therapists, no less than other members of society, are conditioned in the way they regard such persons. Supervision or consultation on the individual or small-group level allows a free sharing of reactions, feelings and attitudes.

For those professional and vocational groups that will not be working full-time in a special clinical facility for persons dependent on alcohol and other drugs, a concentrated week-end course or, where feasible, a two-week general course can give useful refresher training; this is particularly
necessary because of the continuous changes and developments in knowledge in this area.

Those preparing for full-time work in special-treatment services need a more formal postgraduate training. In addition to a general orientation on the nature and extent of the problem, there must be a period of “internship” in a special clinical service where the student participates in the therapeutic process and is confronted with the different types of drug dependence and all phases of this illness. The period of internship should last approximately three months.

Knowledge of dependence on alcohol and other drugs is evolving rapidly and continuously through experience and research. There is therefore a need for centres where the most up-to-date activities in all phases of treatment and research are concentrated. Such centres could provide the experience needed by the most advanced students of the problems. For this purpose, the Committee recommends the establishment of specialized research and teaching hospitals, units, or other resources, in association with universities, where faculty members from a wide range of healing arts are available.

4. RESEARCH

A combined approach to dependence on alcohol and other drugs would appear to be particularly helpful in the field of research.

Research is vital in order (1) to obtain needed new knowledge about causes, prevention, treatment, rehabilitation and control; and (2) to apply existing and newly gained knowledge more effectively than is now the case. The development of improved methods for the dissemination of knowledge and techniques is particularly important.

Ideally, no programme of prevention, education, treatment and rehabilitation should be considered complete without a built-in research operation. Such an operation should precede, accompany and follow all aspects and phases of the programme. It is particularly important that a method for assessing programme results and functioning be included. In turn, the theoretical research worker should regularly be confronted with clinical material.

Much research should be pragmatic and interdisciplinary, focusing on problem areas rather than on particular disciplines or isolated projects. Such interdisciplinary research often calls for and greatly benefits by inter-organizational and international collaboration. National boundaries can be bridged in part by the exchange of research workers—as has taken place, for example, between the Ontario Alcoholism and Drug Addiction Research Foundation in Canada and the Finnish Foundation for Alcohol Studies—and by the establishment of co-ordinated research operations as, for example, between Japan and the USA.
In order to lay the foundation for successful research, the following considerations are important:

(1) **Personnel.** Well-qualified scientists should be encouraged to participate in research on dependence on alcohol and other drugs by being made aware that this is an area worthy of their attention—in fact, one that requires large-scale, intensive research efforts.

There are several reasons why medical and other scientists have been slow in taking an interest in these problems. Among them may be such factors as the complexity of a multidisciplinary approach, the existence of widespread individual and group moral prejudice (conscious and unconscious) against persons dependent on alcohol and other drugs and lack of understanding of the complexity and seriousness of the problem. The latter may be due, in large part, to the paucity of education and training in this area among the professional groups that have much to contribute.

(2) **Tools.** There is an obvious need for improved methods for prompt publication, data storage and retrieval, evaluation of significant findings, and dissemination of information. Some of these tasks are now being carried out for alcohol dependence by such agencies as Rutgers University and the National Clearing House on Mental Health Information and Alcoholism in the USA and for other types of drug-dependence by the Drug Addiction Research Foundation, Toronto, in Canada.

(3) **Multidisciplinary research facilities.** Knowledge about dependence on alcohol and other drugs is constantly increasing as a consequence of clinical experience and research. There is a need, however, for the establishment of additional multidisciplinary research centres in various parts of the world where research on the different aspects of the problems may be undertaken. Of course, there is much important research still to be done involving only a single discipline, especially in certain basic fields (see also section 1.2).

(4) **A central international body.** Such a body, with multidisciplinary representation, possibly under WHO auspices, could provide leadership in the development of co-ordinated international and other co-operative research programmes, and in the international exchange of information.\(^1\)

International co-ordination of research and exchange of information has already been undertaken by certain national and international bodies through such activities as calling regular or occasional scientific meetings attended by workers from various countries (e.g., the Annual Institutes

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\(^1\) In view of the limited resources available the functions of such a body might be restricted to: cumulating, codifying and making available information on all aspects of alcohol and drug dependence; stimulating, co-ordinating and channelling certain research activities into areas and along lines that appear most fruitful; and preparing an international directory of institutions and persons engaged in research on dependence on alcohol and other drugs. (The last of these has already been undertaken, with regard to alcohol dependence, by the International Council on Alcohol and Alcoholism).
of the International Council on Alcohol and Alcoholism), by exchanges of research workers, by joint research activities (e.g., those of the Northern Committee for Alcohol Research), and by encouraging cross-cultural studies. Research has so far left largely untapped the experiences and knowledge, existing and potential, in the developing countries. There is an urgent need for evolving means of acquiring and disseminating such information.

International organizations, including WHO, could provide more direct leadership in the above activities by various means, including: convening meetings of experts encouraging the use of common statistical reporting methods, providing up-to-date reviews of specific aspects of research and organizing meetings of research workers from different countries (see Annex 2 for suggested topics for research).

5. RECOMMENDATIONS

1. Dependence on alcohol and dependence on other drugs create or contribute to major public health problems and should therefore be of concern to all public health organizations and administrations.

2. While recognizing that there are important differences between types of drug dependence, the Committee recommends that problems of dependence on alcohol and dependence on other drugs should be considered together, because of similarities of causation, interchangeability of agent in respect of maintenance of dependence and hence similarities in measures required for prevention and treatment (see section 1.1).

3. To give the concept of “drug dependence” its full value and practical significance, its implications for clinical work, research, and administrative and legal measures should be explored jointly by the professions and authorities concerned, both nationally and internationally.

4. Dependence on alcohol and other drugs must be considered, not only in terms of the agents involved, but from the point of view of the host and environment as well.

5. The etiology, prevention and control of dependence on alcohol and other drugs and the treatment of dependent persons involve multiple problems that extend beyond the competence of any single profession or group; it is therefore imperative that a multidisciplinary approach be used.

6. Services for prevention and treatment of dependence on alcohol and other drugs must take into account the circumstances, customs, attitudes and institutional patterns with particular reference to the types of drugs used predominantly and the degree to which use and abuse of these drugs create problems.
7. The extent to which approaches to different types of dependence should be combined and the rate at which this should be done will depend on local factors and should thus be decided by national and local authorities.

8. The services for the prevention and treatment of dependence on alcohol and other drugs should, as far as possible, be integrated with other health and welfare services.

9. Small pilot centres should be set up in developing areas to become foci of interest, study and experience in establishing the need for and means of dealing with problems of dependence on alcohol and other drugs, consonant with local conditions.

10. Comprehensive services to deal with problems of dependence on alcohol and other drugs should include well organized programmes of public education aimed at securing an understanding of these problems and a rational approach to them.

11. Undergraduate, graduate and postgraduate training curricula for the disciplines involved in the treatment and rehabilitation of persons dependent on alcohol and other drugs should provide for systematic teaching on the relevant aspects of dependence on and abuse of drugs.

12. Public health authorities and medical professional bodies should undertake to establish guide-lines for ethical medical practice in relation to the use of dependence-producing drugs.

13. Legislation concerning persons dependent on alcohol and/or other drugs should recognize that these are sick persons. Medical and public health experts should be involved in the framing of such legislation.

14. Adequate treatment and rehabilitation should, if necessary, be ensured by civil commitment of drug-dependent persons to medical authority, which would provide direction and supervision of their care, from initial diagnosis to rehabilitation.

15. Research is vital for obtaining the much-needed knowledge of the causes, prevention, and control of abuse of or dependence on alcohol and other drugs and the treatment and rehabilitation of drug-dependent persons. In many studies a combined approach to dependence on alcohol and on other drugs would be extremely helpful.

16. WHO should provide further leadership in the development of co-ordinated, multidisciplinary, international research programmes and the stimulation of international co-operation and exchange of information on the problems under consideration.

17. Hospitals, units or other facilities for advanced training and research on problems of dependence on alcohol and other drugs should be established, preferably in association with universities.
## Annex 1

### PREVALENCE OF ALCOHOLISM, PER 100 000 POPULATION AGED 20 YEARS OR MORE

<table>
<thead>
<tr>
<th>Place</th>
<th>Year</th>
<th>Jellinek method</th>
<th>Independent method</th>
<th>Difference (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>England and Wales</td>
<td>1948, 1990-63</td>
<td>1100</td>
<td>865</td>
<td>-21.4</td>
</tr>
<tr>
<td>Finland</td>
<td>1951-57</td>
<td>1120</td>
<td>1330</td>
<td>+18.8</td>
</tr>
<tr>
<td>Ontario, Canada</td>
<td>1951</td>
<td>1600</td>
<td>1600</td>
<td>0.0</td>
</tr>
<tr>
<td>Denmark</td>
<td>1948</td>
<td>1950</td>
<td>1750</td>
<td>-10.3</td>
</tr>
<tr>
<td>Switzerland</td>
<td>1953, 1947</td>
<td>2100</td>
<td>2700</td>
<td>+28.8</td>
</tr>
<tr>
<td>Kansas, USA</td>
<td>1953, 1954</td>
<td>2350</td>
<td>1580</td>
<td>-32.8</td>
</tr>
<tr>
<td>Ontario, Canada</td>
<td>1961</td>
<td>2460</td>
<td>2375</td>
<td>-3.5</td>
</tr>
<tr>
<td>Iowa, USA</td>
<td>1957, 1958</td>
<td>3260</td>
<td>3000</td>
<td>-8.0</td>
</tr>
<tr>
<td>New York (Monroe County) USA</td>
<td>1961</td>
<td>3580</td>
<td>3500</td>
<td>-2.2</td>
</tr>
<tr>
<td>Chile</td>
<td>1950, 1953</td>
<td>3610</td>
<td>4150</td>
<td>+15.0</td>
</tr>
<tr>
<td>Massachusetts, USA</td>
<td>1938-48</td>
<td>4060</td>
<td>7090</td>
<td>+74.6</td>
</tr>
<tr>
<td>New Jersey, USA</td>
<td>1945</td>
<td>4080</td>
<td>3945</td>
<td>-3.3</td>
</tr>
<tr>
<td>Florida, USA</td>
<td>1953, 1954</td>
<td>4310</td>
<td>4150</td>
<td>-3.7</td>
</tr>
<tr>
<td>Michigan, USA</td>
<td>1953, 1955</td>
<td>4490</td>
<td>4300</td>
<td>-4.2</td>
</tr>
<tr>
<td>France</td>
<td>1951</td>
<td>5200</td>
<td>7300</td>
<td>+40.4</td>
</tr>
<tr>
<td>Illinois, USA</td>
<td>1953</td>
<td>5250</td>
<td>5250</td>
<td>0.0</td>
</tr>
</tbody>
</table>

* a Estimated by both the Jellinek and independent methods. Data supplied by the Alcoholism and Drug Addiction Research Foundation, Toronto, Canada (Project No. 23).

* b The separation of two years by a dash indicates that the estimates of prevalence represent averages for the period. Where two years are separated by a comma, the first of these is the year to which the Jellinek estimate applies.
Annex 2

SUGGESTED TOPICS FOR RESEARCH

1. Epidemiological studies
   (a) Extent of drug abuse in circumscribed areas.
   (b) Variations in types of drug abuse, within and between circumscribed areas, cultures and subcultures.
   (c) Determination of high- and low-risk individuals and populations in regard to drug dependence and abuse, including comparative studies on causative factors.
   (d) Drug abuse among adolescents.
   (e) The role of drugs in the causation of accidents.
   (f) Relationship between the different types of drug dependence and delinquent behaviour.

2. Sociological studies
   (a) Antecedents of various beliefs about and attitudes towards drug usage and drug users. (For example, comparison of the attitudes towards alcohol, opium, and cannabis in American, Asian and European countries.)
   (b) Variations in social settings and their interaction with drug effects. (For example, comparison of the modes and purposes of use of opium and cannabis products among different social and occupational groups in American, Asian and European countries.)
   (c) Distinctions made between use and abuse of drugs in various cultures and subcultures.
   (d) Cross-cultural studies on attitudes to abuse and abuser. (That is, whether the problem is considered as one of disease or of delinquency.)
   (e) Characteristics of deviant, drug-using subcultures.
   (f) Comparison of legislative and other measures (for the control of drugs and the treatment of drug-dependent persons), including their enforcement and study of their possible effects on extent and pattern of drug abuse.

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1 In this list, the term "drug" is applicable to drugs, including alcohol, that can produce dependence.
3. Clinical studies

(a) Longitudinal studies of drug-dependent individuals, such as of the origin and development of dependence, replacement or addition of different drugs in the course of dependence or replacement of dependence by another mental disorder, relation between personality structure and choice of drugs, and response to treatment.

(b) Evaluation of different methods and programmes of treatment.

(c) Identification of types of drug-dependent personalities.

(d) Development of more precise diagnostic tools, e.g., simple field laboratory techniques for the detection of drugs in the urine.

(e) Evaluation of the dependence liability of new drugs.

4. Pharmacological studies

(a) Basic investigations of the mechanisms of action of dependence-producing drugs and of drug dependence, utilizing techniques from all pertinent fields, such as pharmacology, experimental psychology, biochemistry and neurophysiology.

(b) Development and calibration of methods for assessing dependence liability in animals.

5. Studies related to education and training

(a) Attitude surveys.

(b) Determination of groups at risk.

(c) Methods of developing social sanctions against drug abuse.

(d) Effects of training on the handling of patients.
<table>
<thead>
<tr>
<th>No.</th>
<th>Recent reports</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>310</td>
<td>(1965) Diabetes Mellitus</td>
<td>5/- 1.00 3.—</td>
</tr>
<tr>
<td></td>
<td>Report of a WHO Expert Committee (44 pages)</td>
<td></td>
</tr>
<tr>
<td>311</td>
<td>(1965) Special Courses for National Staff with Higher Administrative Responsibilities in the Health Services</td>
<td>3/6 0.60 2.—</td>
</tr>
<tr>
<td></td>
<td>Report of a WHO Study Group (31 pages)</td>
<td></td>
</tr>
<tr>
<td>312</td>
<td>(1965) WHO Expert Committee on Dependence-Producing Drugs</td>
<td>3/6 0.60 2.—</td>
</tr>
<tr>
<td></td>
<td>Fourteenth report (16 pages)</td>
<td></td>
</tr>
<tr>
<td>313</td>
<td>(1965) The Biochemistry and Microbiology of the Female and Male Genital Tracts</td>
<td>3/6 0.60 2.—</td>
</tr>
<tr>
<td></td>
<td>Report of a WHO Scientific Group (15 pages)</td>
<td></td>
</tr>
<tr>
<td>314</td>
<td>(1965) Nutrition and Infection</td>
<td>3/6 0.60 2.—</td>
</tr>
<tr>
<td></td>
<td>Report of a WHO Expert Committee (30 pages)</td>
<td></td>
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<tr>
<td>315</td>
<td>(1965) Immunology and Parasitic Diseases</td>
<td>5/- 1.00 3.—</td>
</tr>
<tr>
<td></td>
<td>Report of a WHO Expert Committee (64 pages)</td>
<td></td>
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<tr>
<td>316</td>
<td>(1966) The Technical Basis for Legislation on Irradiated Food</td>
<td>5/- 1.00 3.—</td>
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<tr>
<td></td>
<td>Report of a Joint FAO/IAEA/WHO Expert Committee (70 pages)</td>
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<tr>
<td>317</td>
<td>(1966) Chemotherapy of Bilharziasis</td>
<td>6/8 1.25 4.—</td>
</tr>
<tr>
<td></td>
<td>Report of a WHO Scientific Group (71 pages)</td>
<td></td>
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<tr>
<td>318</td>
<td>(1966) Water Pollution Control</td>
<td>3/6 0.60 2.—</td>
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<tr>
<td></td>
<td>Report of a WHO Expert Committee (32 pages)</td>
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<tr>
<td>319</td>
<td>(1966) WHO Expert Committee on Leprosy</td>
<td>3/6 0.60 2.—</td>
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<tr>
<td></td>
<td>Third report (31 pages)</td>
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<td>320</td>
<td>(1966) University Health Services</td>
<td>3/6 0.60 2.—</td>
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<td>Fourteenth report of the WHO Expert Committee on Professional and Technical Education of Medical and Auxiliary Personnel (21 pages)</td>
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<td>321</td>
<td>(1966) WHO Expert Committee on Rabies</td>
<td>5/- 1.00 3.—</td>
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<tr>
<td></td>
<td>Fifth report (38 pages)</td>
<td></td>
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<tr>
<td>322</td>
<td>(1966) Cancer Treatment</td>
<td>5/- 1.00 3.—</td>
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<td></td>
<td>Report of a WHO Expert Committee (55 pages)</td>
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<td>323</td>
<td>(1966) Requirements for Biological Substances – Revised 1965</td>
<td>6/8 1.25 4.—</td>
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<td>Report of a WHO Expert Group (71 pages)</td>
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<td>324</td>
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