Guidelines for Investigating Alcohol Problems and Developing Appropriate Responses

By

IRVING ROOTMAN and JOY MOSER

Division of Mental Health,
World Health Organization,
Geneva, Switzerland

with the assistance of

DAVID HAWKS
Western Australia Alcohol and Drug Authority,
West Perth, Australia

MARGHERITA de ROUMANIE
University of Edinburgh,
Edinburgh, Scotland

and other collaborators in the
WHO Project on Community Response to Alcohol-Related Problems

WORLD HEALTH ORGANIZATION
GENEVA
1984
Publications of the World Health Organization enjoy copyright protection in accordance with the provisions of Protocol 2 of the Universal Copyright Convention. For rights of reproduction or translation of WHO publications, in part or in toto, application should be made to the Office of Publications, World Health Organization, Geneva, Switzerland. The World Health Organization welcomes such applications.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

Authors alone are responsible for the views expressed in this publication.
CONTENTS

ACKNOWLEDGEMENTS .................................................. 4
PREFACE .............................................................. 5

1. PRELIMINARY CONSIDERATIONS ..................................... 7
   1.1 Purpose of these Guidelines ................................... 7
   1.2 Characteristics of the Project .................................. 7
   1.3 Stages in Developing the Project ............................... 8

2. INITIAL STEPS .................................................... 10
   2.1 Identifying the Need for a Project ............................. 10
   2.2 Establishing Interest and Involvement in the Project ......... 10
   2.3 Forming an Alcohol Problems Team ............................. 10
   2.4 Seeking Resources for the Project ............................. 12

3. DETAILED PLANNING ............................................... 13
   3.1 Specifying the Objectives ..................................... 13
   3.2 Definition of Information Requirements: (Questions to be answered) ........... 13
   3.2.1 What is the extent and nature of alcohol-related problems? ................ 14
   3.2.2 What kinds of responses are being made to alcohol-related problems? .... 15
   3.2.3 What factors are related to these alcohol problems and the responses to them? ........... 17
   3.2.4 What measures can be taken to improve responses to alcohol problems? .... 17
   3.2.5 What happens when measures to improve responses to alcohol problems are introduced? ........... 17
   3.3 Selecting and Designing Approaches ........................... 18
   3.3.1 Collation of existing information .......................... 18
   3.3.2 Key informant studies .................................... 19
   3.3.3 Observational studies ..................................... 21
   3.3.4 General population surveys ................................ 22
   3.3.5 Special population studies ................................. 24
   3.3.6 Reporting systems ......................................... 25
   3.3.7 Combining approaches ..................................... 26

4. GATHERING INFORMATION ......................................... 30
   4.1 Testing ....................................................... 30
   4.2 Training ...................................................... 31
   4.3 Representativeness ............................................ 31
   4.4 Accessibility ................................................ 31
   4.5 Comparability ................................................. 32
   4.6 Data Analysis ................................................. 32
   4.7 Reliability and Validity ...................................... 32
   4.8 Ethics ......................................................... 33
   4.9 Integration .................................................... 33
   4.10 Presenting Findings ......................................... 34
   4.11 Cost .......................................................... 34

5. IMPROVING RESPONSES TO ALCOHOL PROBLEMS .................... 35
   5.1 Improving Responses at Local Levels .......................... 35
   5.1.1 Principles for action at local level ........................ 35
   5.1.2 Mechanisms for action at local level ....................... 36
   5.1.3 Options for action at local level .......................... 37
   5.1.4 Suggestions for developing action at local level ........... 39
   5.1.5 Relationship of research to action at local level .......... 40
PREFACE

These guidelines grew out of a World Health Organization project entitled "Community Response to Alcohol-Related Problems". This project was initiated in 1976 under the direction of the World Health Organization with the support of the United States National Institute on Alcohol Abuse and Alcoholism (NIAAA) and the Governments of Mexico, the United Kingdom of Great Britain and Northern Ireland, and Zambia. One of its objectives was to develop approaches for coordinated research and action concerning alcohol-related problems and responses to them in communities with different sociocultural settings. This objective was achieved during the course of the first phase of the project, which was completed in June 1981.

As the project progressed, the collaborators became aware of the potential usefulness of the approaches for other countries. It was suggested that it would be desirable to review these approaches in the light of the collaborators' experience with them and to make this information more widely available. Additional funds for this purpose were provided by NIAAA. A contract was negotiated between WHO and NIAAA, the main objective being to develop general guidelines and procedures for the application in other countries of the methodologies for community analysis and planning that were developed in the Community Response project. The present document presents the results of efforts to achieve that objective.

In addition to the experience of the collaborators in the Community Response project, other relevant material is incorporated in these guidelines. In particular, experience obtained in other similar WHO projects is drawn upon.

The project collaborators agreed on certain additional principles, for instance, that the document should be aimed primarily towards developing countries, and that it should emphasize the process of carrying out a Community Response project, using the materials developed during the first phase of that project illustratively. It was considered that the document should be practical, well referenced and simple to use, and that it should give some idea of the time, effort and skills needed to carry out work of the sort covered here. Moreover, it should be seen as evolving, rather than completed, since it would be desirable to incorporate in further drafts the experience of future investigators.

An attempt has been made to adhere to these principles. It is hoped that those who use these guidelines will keep WHO informed about their work and will comment on the value and defects of the document so as to facilitate its use by others. It would in fact be desirable for those wishing to embark on such a project to contact their WHO Regional Office or WHO Headquarters for advice and assistance.

---

1 Referred to hereafter as the Community Response project. This collaborative project was not intended to provide data that are representative of the countries concerned but only of the communities studied. It is hoped on the basis of the several studies to develop, in cooperation with the appropriate national authorities and the communities themselves, a more adequate response to the problems associated with alcohol use in these communities. Whether such responses will have relevance to other communities within the countries concerned, or to other countries, will be for others to discern.
ACKNOWLEDGEMENTS

Since these guidelines are based in large part on the experience derived from the first phase of the WHO project entitled "Community Response to Alcohol-Related Problems", all the individuals and institutions whose contributions were acknowledged in the final report on that phase should be thanked here as well. Some, however, deserve special mention.

In particular, the support of the Governments of Mexico, the United Kingdom of Great Britain and Northern Ireland, and Zambia should be noted. The agreement by these Governments to act as hosts for meetings involving representatives from neighbouring countries was an essential step in the development of the guidelines. The participants in these meetings also assisted in the critical review of an earlier draft of the guidelines and these contributions are gratefully acknowledged. The advice of Dr Reginald Smart and Dr Juan Carlos Negrete at the Mexican meeting was especially appreciated.

Helpful comments on earlier drafts were made by external reviewers and the suggestions of Mr Katele Kalumba and Dr Dwight Heath stand out in this regard. The advice and support of the WHO Mental Health Advisers for the Regions of Europe, the Americas, and Africa were most valuable.

Finally, the support of the United States National Institute on Alcohol Abuse and Alcoholism (NIAAA) must be acknowledged. The sound advice and continuing cooperation of Mr Leland H. Towle, the NIAAA project officer, deserves special mention.

Financial support from NIAAA was provided under Contract Nos. ADM 281-76-0028 and ADM 281-79-0018 with the National Institute on Alcohol Abuse and Alcoholism; Alcohol, Drug Abuse and Mental Health Administration; Department of Health and Human Services.
1. PRELIMINARY CONSIDERATIONS

1.1 Purpose of these Guidelines

The main purpose of this document is to help countries develop a project that will lead to more appropriate responses to alcohol-related problems. It is recognized that each country and community will be confronted by a unique set of alcohol problems and may, therefore, require unique information to develop responses. Thus, the methods presented here are intended as guidelines and not as detailed blueprints. Investigators should feel free to adapt them to their own circumstances.

A subsidiary purpose of the document is to enhance comparability in cross-national studies of drinking practices. As the final international report on the original study demonstrates, much was learned about the nature of drinking problems and their relationship to cultural circumstances through the use of comparable instruments by collaborators. This knowledge helped the collaborators in the three countries to see the local alcohol problems and responses to them in a larger context as well as to see innovative ways of dealing with these problems. It is therefore hoped that investigators using these guidelines will make every effort to ensure cross-national comparability. Obtaining relevant information for planning and policy making should not, however, be subordinated to this goal.

It is expected also that these guidelines will be of assistance to countries in collaborating on a regional basis to resolve common problems that inevitably arise in doing such work. This was, in fact, one of the main benefits of the Community Response project for the collaborators and participating countries.

1.2 Characteristics of the Project

Throughout these guidelines, the explicit connection between research and its application is emphasized.

The type of project described here is not confined to research on alcohol problems, but comprises a range of investigations carried out in order to achieve a programme objective, namely the improvement of responses to such problems.

Another important feature of this type of project is that it does not rely solely on a single approach to obtain the required information. The collaborators in the original WHO Community Response project recognized early that no single approach was likely to yield the range of information required for planning more adequate responses to alcohol-related problems, because such problems are complex, and often hidden. Thus, the project is characterized by multiple and convergent research methodologies.

A project of this type also attempts to involve community members at all stages. This is done in a variety of ways, including inviting community residents to be members of the project team, feeding back information to community groups on an ongoing basis and participation of project members in community planning groups.

One of the distinguishing features of such a project is that it focuses on one or more communities. Although the definition of a community is by no means commonly agreed upon, in this context it means a geographically delimited area that is administratively linked in some way.

These, then, are some of the characteristics describing what might be called a project on community response to alcohol problems. Given this description, why carry out such a project? There are a number of possible reasons.

---

One is that it is an excellent way of focusing public attention and effort on a problem area of concern. Another is that such a project has the potential of developing solutions to such problems that are uniquely appropriate to the communities involved. A third is that the experiences and actions of communities may have important implications for national action. A fourth reason is that such a project provides the opportunity of training people in carrying out action research; such experience can be applied to other problem areas as well.

1.3 Stages in Developing the Project

Given the objectives and characteristics mentioned above, how does one go about developing a project on responses to alcohol-related problems? The answer to that question constitutes the rest of this document. In order to assist the reader to fit the pieces together, however, it may be useful to present an overview of the process of developing such a project.

As can be seen in Fig. 1, there are six relatively discrete stages in developing a project:

I. Initiation
II. Detailed planning
III. Gathering information
IV. Improving responses
V. Monitoring and assessment
VI. Adjusting responses

One of the first steps in initiating such a project is identifying the need for one. There is no point in entering into a project of this kind if it is not necessary—that is, if alcohol problems are insignificant or if there is no political will to try to reduce them. Thus, at the outset, preliminary investigations are required to determine whether or not there is a need for a project of this nature and to establish the interest and involvement of members of the local community and national bodies. It would also be desirable at this point to consider the formation of a project team and to investigate the possibility of obtaining resources for a project. These matters are discussed in detail in section 2.

The second stage involves the detailed planning for the project which includes specifying the objectives of the project and defining what information is necessary to improve responses to alcohol-related problems as well as selecting and designing approaches to obtain this information. Considerations involved in carrying out these steps are discussed in section 3.

The next stage involves implementing the approaches that have been chosen to gather the required information. Considerations common to the six main approaches that might be selected (i.e. collation of background information, key informant studies, observational studies, general population surveys, special population studies, and reporting systems) are presented in section 4 and each of the approaches is described and discussed in detail in Annexes 1-6.

As the information is collected, analysed and made available, it is possible to begin to develop and implement improved responses to alcohol-related problems at the local level. Building on this experience and also drawing on the information obtained particularly through the collation of background information, it is then possible to improve responses at national level. Considerations involved in doing so are discussed in section 5 and Annex 7.

Developing and implementing improved responses to alcohol problems at local and national levels are not sufficient however. It is necessary to follow up these responses by monitoring and assessing them (Stage V) and adjusting them (Stage VI) accordingly. These matters are discussed in the final section of the guidelines and in Annex 8.

As illustrated in Fig. 1, the six stages, although reasonably discrete, are interconnected. In fact, several stages may occur at one time. The important point to stress is
that at all stages of a project on responses to alcohol problems there should be an integral relationship between research and action - neither proceeding in the absence of the other. It is the attempt to ensure this interaction that constitutes the challenge of carrying out such a project. Hopefully, these guidelines will assist the reader in meeting this challenge successfully, thereby reducing the burden of alcohol-related problems on communities and countries.

**FIG. 1.**

MODEL OF THE PROCESS OF DEVELOPING A PROJECT ON COMMUNITY AND NATIONAL RESPONSES TO ALCOHOL PROBLEMS

- Stage I: Identification
- Stage II: Detailed planning
- Stage III: Gathering information
- Stage IV: Improving responses
- Stage V: Monitoring and assessment
- Stage VI: Adjusting responses
2. INITIAL STEPS

As indicated in section 1, a number of steps are involved in initiating a project on responses to alcohol problems. Among the more important are: identifying need, establishing interest and involvement, forming a project team, and seeking resources. Each will be discussed in turn in this section.

2.1 Identifying the Need for a Project

The first step in initiating any project of the type described here is to ascertain that it is needed. The need could become apparent in a variety of ways. Members of a community might become aware of the negative effects of drinking by observing an apparent increase of drunkenness or violent behaviour associated with drinking or instances of children being neglected or abused. They might hear or read about instances of people being killed or maimed as a result of traffic accidents involving alcohol. Alternatively, police, social workers or other officials might become aware of an apparent increase in alcohol-related incidents and their inability to deal effectively with such incidents using traditional means. Research workers might notice changes in statistical information bearing on alcohol consumption and problems. National officials might observe increasing amounts of ineffective work performance among their employees and colleagues or receive reports from various sources, including the media, about alcohol problems in the country.

Whatever the source of concern, there is a need for a realization, among some people at least, that alcohol problems in a community or country may be of significant proportions and that ways of dealing with the problems may be absent or ineffective. Such a realization may be sufficient to stimulate consideration of whether or not a project on responses to alcohol problems is necessary or desirable.

Entering into such a project is a decision that should not be taken lightly, as it will inevitably require investment of time, energy and resources. Attempts should be made to estimate such costs as accurately as possible. The costs should be weighed against the potential benefits noted in section 1. It should be stressed that it may be possible to keep the costs low by the appropriate choice of approaches, as discussed in section 3.

2.2 Establishing Interest and Involvement in the Project

One of the mistakes in carrying out action research projects of the kind envisaged has sometimes been to study the community and its requirements from the outside, with the result that proposals for action may not be taken up. If the community is to participate in planning and applying more adequate responses to alcohol problems, it will need to be involved from the outset in studying the nature and extent of these problems and the existing means of responding to them.

As a preliminary step, however, it may be necessary to raise the level of awareness in the community of the possible harmful consequences of alcohol consumption by providing relevant information and education. This process too should involve members of the community, who can adapt the educational material and the means of disseminating it to the local requirements. Voluntary, religious and other groups as well as local mass media personnel might also collaborate.

At the same time, it may be desirable to ensure interest and involvement at the national level, through national leaders and government departments as well as other national bodies such as universities and research institutes.

2.3 Forming an Alcohol Problems Team

An early step in securing community action might be the formation of a group of locally based persons to assume responsibility for the work. Such a group might take on a special designation, for example, "Alcohol Problems Team".
In some areas, a group of this kind may already exist, but may profit from additional support from local and national administrative levels and from the experience in other areas. This was the case in the Region of Lothian, Scotland, where a Committee on Alcohol-Related Problems (CARP), comprising members of the local Health Board, the Regional Council and local voluntary organizations, had been established prior to the Community Response project. Other examples come from accounts in the literature. Among some North American Indians, for example, tribal councils have dealt with alcohol problems and some communities have voted themselves dry (Jilek-Aall, 1974).

On the other hand, in many countries where the importance of alcohol problems has been recognized at national level, there may be little awareness locally of their significance. In such cases, initial action may have to be taken at higher level to identify and motivate a local team.

A group may deal with alcohol problems as the sole focus of its work or as one of several areas of interest. A suitable nucleus for an alcohol problems team may be found within existing structures. Many countries now have community development structures that might be considered ideal settings for action concerning alcohol problems in the total framework of health and development.

For example, ward development committees might be considered ideal "focal points" for action in some settings. Elsewhere a local health team may serve as a focus for planning and action. Other structures that may serve as a basis for developing an alcohol problems team might be religious or voluntary welfare organizations, but it may be necessary to ensure that such bodies are relevant to the sociocultural setting and acceptable to the community.

In areas where none of these structures exist, action might start by discussion with key members of the community, for example a village headman, who may already have a group of advisers. It may be appropriate in some settings to foster the nomination by the community of a local person who can serve as the focus for action and select others to assist in the tasks, as has been done in some of the experiments in provision of primary health care (WHO/UNICEF, 1978).

However the idea of establishing an alcohol problems team is set in motion, for it to act effectively it will be important to ensure that it has an adequate relationship with the power structure of the community and that it comprises members concerned about the various aspects of alcohol problems and responses to them. The components of the team will, of course, depend on the local conditions. In one area it may include a headman, a village midwife, a primary school teacher, a community development worker and perhaps a political party representative. A team elsewhere may comprise a mayor, a local head of public health, a social welfare organizer, a psychiatrist, a community education specialist, an agricultural expert, and representatives of religious and other local bodies. In limited areas, a single person might have to take on multiple responsibilities.

The major role of such a team will be to plan and ensure the application of appropriate responses to alcohol problems in the local setting. For this purpose, the team needs to have or to acquire information and understanding about the nature and extent of such problems in general and in the local area; the structure of the community to be served; the nature of existing local responses to alcohol problems; and the range of possibilities for dealing with them.

In some settings, the group's development into a team with expertise in alcohol problems may best be pursued along with active involvement in a study of local drinking habits and consequences using some of the approaches discussed in these guidelines. A preliminary step may well be for each member of the team to present his or her own observations about the situation in the locality for discussion by the group. The need to seek further information on alcohol problems in general and their existence in the community may arise out of such a meeting, and at this point the need may be felt to call upon the help of organizers and experts from a national resource group. Where the development of the local team has been instigated at an administratively higher level, it may still be advisable to help the team to run its own initial discussions before offering more detailed general information. This should stimulate consideration of alcohol problems in the local sociocultural and economic context.
2.4 Seeking Resources for the Project

While attempts are being made to solicit interest and involvement, it is important to explore the feasibility of carrying out a project on responses to alcohol problems. It will be necessary to find out whether there are enough trained and interested researchers available who would be willing to contribute the energy and time required; whether sufficient financial resources are available; whether community agencies are willing to participate or cooperate; whether one or more institutions are willing to give a project team a base from which to work; and whether technical facilities (e.g. computers) are available.

Even if the resources are available, it may be necessary to solicit them formally. This may require the preparation of a proposal outlining what is to be done, why, how and how much it will cost. It should be stressed that a large budget is not essential if the less costly alternatives are selected. Such a proposal might go to local or national government bodies, charitable foundations, international aid agencies, companies or individuals. In some cases, funds might be obtained from several sources. It may be necessary to prepare a different proposal for each and to meet with appropriate persons to convince them that it is worth while supporting the project. These guidelines may provide useful material for drawing up the project outlines.

REFERENCES


3. DETAILED PLANNING

As was noted in section 1, an early step in the planning of a project on responses to alcohol problems is to specify its objectives. Connected with this step is an attempt to define what information is necessary to improve responses to alcohol-related problems. This can be done by setting out the questions to be answered by such information. Selecting and designing approaches to obtain the required information completes the planning stage. These steps are discussed in turn in this section.

3.1 Specifying the Objectives

It has been mentioned that the overall objective of the proposed project is to improve responses to alcohol problems in participating communities and countries. This objective must, however, be specified further if the project team is to undertake detailed planning of the work. More specific objectives that might be considered are:

i. to determine the extent and nature of alcohol use and alcohol-related problems;

ii. to determine responses to such problems;

iii. to determine factors associated with alcohol-related problems and responses to them;

iv. to assess the strengths and deficiencies of existing responses to alcohol problems and to make proposals for desirable changes and methods of achieving them;

v. to promote interest in the development and implementation of policies and programmes focused on the prevention and reduction of alcohol-related problems;

vi. to monitor and assess the impact of policies and programmes aimed at improving responses to alcohol-related problems in participating communities and countries.

Although these are not the only specific objectives that might be selected, they were the major ones pursued in the original Community Response project and do constitute a viable nucleus for further projects. It should be stressed, however, that it is extremely important for the participating communities to be closely involved in the specification of objectives. This might be done through formal and informal discussions, not only with community authorities or formal groups, but also with ordinary residents. In addition to obtaining suggestions for objectives, an attempt might be made to solicit views about the relative priority of particular objectives.

An attempt should also be made to obtain the views of authorities, groups and individuals at the national and intermediate levels. Hopefully, their objectives would be consistent with those of the local community, which would permit them to be pursued in tandem. If not, it might be worth while trying to reconcile them.

3.2 Definition of Information Requirements: (Questions to be answered)

Once the objectives have been spelled out and accepted by the communities involved, it is possible to define what specific information is required. In doing so, it is sometimes helpful to list the questions to be investigated. The following are some possible general questions relating to the objectives stated above.
i. What is the extent and nature of alcohol-related problems in the population under consideration?

ii. What kinds of responses are currently being made to such problems?

iii. What factors are related to these alcohol problems and responses to them?

iv. What measures can be taken to improve responses to alcohol-related problems?

v. What happens when measures to improve responses to alcohol problems are introduced?

These five questions must be specified further, however. The rest of this section suggests such a specification.

3.2.1 What is the extent and nature of alcohol-related problems?

The following are examples of specific questions about the extent and nature of alcohol problems, answers to which would be expected to help community members, planners and policy-makers develop improved responses to such problems:

i. To what extent is alcohol involved in various individual problems, such as short-term impairment of functioning and control (aggressiveness, accidents); exposure to climatic conditions (physical disorders); arrests for drunkenness; long-term impairment of functioning and control (liver cirrhosis, malnutrition); impairment of working capacity, alcohol dependence syndrome, psychosis; loss of friends, means of support, self-esteem, family?

ii. To what extent is alcohol involved in various family problems, such as marital discord, child and spouse abuse, poverty, fetal damage, child neglect (malnutrition), child development difficulties, school dropout, juvenile delinquency, loss of esteem for drinker?

iii. To what extent is alcohol involved in various community problems, such as public disturbances, violence, property damage, victim injuries, resource losses (health, welfare, law enforcement), output losses (absenteeism and low productivity, loss of skilled manpower), environmental pollution?

iv. To what extent is alcohol involved in various national problems, such as economic and social underdevelopment, and resource losses?

v. Which groups have a high incidence or prevalence of alcohol-related problems?

vi. Which community or geographic areas have a high incidence or prevalence of such problems?

vii. In what situations are such problems particularly prevalent?

viii. What is the relative magnitude of alcohol problems in comparison to each other and to other health problems?

The answers to such questions can be enormously helpful in determining whether or not action is required, what the main problems requiring intervention are, and what groups, areas, or settings interventions might be aimed at. If such questions are answered in relation to specified periods of time, they can also help to identify new problems requiring attention and to assess whether or not interventions have an effect on the problems.
3.2.2 What kinds of responses are being made to alcohol-related problems?

There are two main types of community or national responses to alcohol-related problems: informal and formal. Informal responses include the way families cope with the consequences of alcohol consumption among their members, as well as the way neighbours, employers, and other residents of the community respond in various situations where such consequences become apparent. They might include the attitudes or customs that sustain or militate against the various patterns of drinking and associated problems. Formal responses, on the other hand, include the services provided or the facilities made available to deal with alcohol-related problems as well as policies associated with such programmes or more general policies concerning alcohol consumption and problems. In developing improved responses to such problems, it is important to have information about both these types of response.

The following are some questions pertaining to informal responses, the answers to which may be useful to those attempting to develop such improvements:

i. What attitudes are generally expressed towards alcohol use and problems?

ii. How is alcohol use controlled in the family? For instance, at what age are children allowed to drink, and what reactions are there to episodes of drunkenness or violence associated with drinking?

iii. What controls are used in the village or larger community? For example, what are the customs or mores regarding drinking and problems and how are these normally expressed in action?

The following are among questions pertinent to describing the formal community responses to alcohol-related problems:

iv. What general policies exist concerning alcohol-related problems? For example, what statutes and legislation pertain to alcohol consumption and problems, what local control bodies are responsible, how are pertinent laws enforced?

v. What services or facilities are available to deal with alcohol-related problems?

vi. What are the official and the real policies of agencies that provide services for alcohol-related problems?

vii. How adequately do existing agencies discharge their responsibilities to people with problems related to alcohol? For instance, do they recognize such problems, are the staff trained to deal with them, and do they relate to other agencies?

viii. How many people are in contact with community agencies for alcohol problems?

ix. What are their characteristics?

x. What are the costs of intervention approaches?

In addition, there are a number of questions pertaining to both formal and informal responses, such as:

xi. Who are the primary care givers in the community (whether formal or informal) as far as alcohol problems are concerned?

xii. What are the views of community residents regarding formal and informal responses to alcohol problems?

xiii. To what extent is there a fit between the extent and nature of alcohol problems and the responses made to them?
xiv. How are formal and informal responses to alcohol problems linked to one another?

Answers to such questions can be useful in a number of ways. They can help in assessing the adequacy of community and national responses to alcohol-related problems. They can also help in selecting promising points of intervention. For example, knowing who the primary care givers are automatically identifies people who might be approached in order to improve responses. Information obtained from these questions can also be suggestive of the content of intervention approaches. For instance, knowing something about attitudes toward alcohol use and associated consequences may suggest a specific strategy for intervention, as may knowing something about the extent to which agencies recognize alcohol-related problems among their clientele.

3.2.3 What factors are related to these alcohol problems and the responses to them?

The answers provided to the questions posed above will, if appropriate action is to be taken, require "explanations". For example, the observation that alcohol problems are unevenly distributed in the population requires some sort of explanation if it is to lead to appropriate action. Is the distribution related to age, sex, occupational status, religious affiliation or, more probably, some combination of variables? Similarly, the observation that patients presenting, for example, to casualty clinics display a higher level of consumption than those included in a general population survey requires some explanation. It may be that those people admitted to casualty wards differ with respect to certain important demographic variables from those not admitted and that those variables explain their greater consumption.

In addition to the questions posed above, the following points are likely to be of importance in determining a course of action:

i. Does the particular distribution of alcohol problems observed in the general population bear any relationship to the other variables employed to describe this population? Do the problems appear to relate, for example, to age, sex, marital status of respondents, level of alcohol consumption, certain reasons for drinking or some combination of these variables?

ii. Are those people identified as having alcohol problems who are not yet in touch with treatment agencies different from those who are? Are they, for example, at an earlier point in their drinking careers? Or are the agencies inaccessible to them?

iii. Are particular consumption patterns associated with particular problems? For example, is heavier drinking among young men particularly associated with arrest for public drunkenness?

iv. Are there contextual factors associated with high consumption of alcohol, for example, all-male drinking?

v. Is there evidence that different segments of the population hold different views about the acceptability of drinking in specific situations or is there considerable uniformity of such views? For example, are more permissive views held by higher consumers and is this a reflection of their higher consumption or is it, for example, associated with youthfulness which is itself related to higher consumption?

Answering such questions can be helpful in suggesting possible strategies for intervention. For example, the fact that alcohol problems are associated with the level of per capita consumption in the population suggests that one possibly useful approach might be to reduce per capita consumption through limiting availability of alcohol. Similarly, the fact that agencies are inaccessible to some people with alcohol problems may suggest the need for more agencies or relocation of agencies.
On the other hand, it should be noted that, in the sort of investigative exercise described here, an explanation can never be other than relative - it can only represent what is thought to be most likely in relation to the data collected and the analyses carried out. While the explanations offered to account for the relationships observed between the data provide a basis for action, such action may have unpredicted consequences if the relevant variables have not been considered.

3.2.4 What measures can be taken to improve responses to alcohol problems?

Answering the questions in section 3.2.3 can help to identify the measures to be taken to improve responses to alcohol problems. But in addition, it is useful to examine other experiences with a view to identifying possibly worthwhile interventions. In doing so, one might, for example, try to answer the following specific questions:

i. What have been the experiences of other countries in the prevention and reduction of alcohol problems? Which approaches appeared to work and which did not? What were the likely reasons for their success or failure?

ii. What have been the experiences within one's own country or community in the prevention and reduction of alcohol problems?

iii. What approaches to intervention have been suggested but not tried?

iv. What approaches have not been suggested but might be promising?

v. To what extent will new measures be accepted?

vi. Who is in need of assistance for alcohol problems?

Answering such questions might help the project team considerably in the design of effective interventions. It may also help in forecasting the outcome of programmes.

3.2.5 What happens when measures to improve responses to alcohol problems are introduced?

When interventions based upon answers to these questions, or on other considerations, are introduced in a community or a country, it is important to try to determine what happens as a consequence. In particular, it is useful for community members, planners and policy-makers to obtain systematic answers to at least the following questions:

i. What was the range of interventions introduced? What was the scope, type and duration of each intervention? What led to its establishment? What was it designed to accomplish? What did it cost?

ii. How did the interventions work?

iii. What impact did the interventions have on the extent of alcohol-related problems?

iv. What side-effects occurred as a result of the interventions?

Approaches to dealing with the first two questions have been described as "formative" or "process" evaluation and approaches to the last two as "summative" or "outcome" evaluation. Both types of evaluation are useful in helping to improve the effectiveness and the efficiency of programmes. Results of the first type, in particular, can help to make ongoing changes in programmes. Such evaluations can also help to identify emerging problems and identify target groups in the population.
The questions suggested here are certainly not the only ones that deserve consideration. They are simply illustrative of the type of information that might usefully be collected. Investigators involved in collaboration with the communities and appropriate policy-makers should determine which questions need to be answered in the particular community or country and thereafter to select and design the most appropriate method or combination of methods for investigating them. These matters are considered in the remainder of this section and in the annexes.

3.3 Selecting and Designing Approaches

As illustrated in Fig. 1, several approaches can be used in seeking answers to each of the questions in the last section. Take for instance the question, "To what extent is alcohol involved in various individual problems?" One approach might be simply to collate existing information and studies. Alternatively, a general population survey could be made, inquiring about whether respondents had experienced such problems. Or a survey could be made of a special group such as persons under arrest or clients of agencies. Another useful approach might be a study of knowledgeable or key informants, such as police or treatment personnel. Additional methods of obtaining the required information would include observation studies in various agencies, or establishment of a reporting system.

This range of approaches applies also to most of the other questions noted, although modifications would be required depending on the questions. For instance, in attempting to answer the question on alcohol involvement in national problems, it would be desirable to draw a nationally representative sample rather than one representing a single community. Similarly, a key informant study at the national level might involve people with national rather than local responsibilities. The type of information sought would also differ according to the questions to be considered.

However, even though a number of methods might be employed to answer each question, every method would necessarily have certain limitations. A general population survey for example, would be likely to yield a picture of the nature and extent of alcohol problems limited to those experienced by a so-called "normal" drinking population. Heavy drinkers and people with very serious drinking problems would be missed or under-represented in numbers. In order to study the latter, it would be necessary to search them out in other settings such as enforcement or treatment institutions or in drinking places, using case interviews or observations. Interviewing key informants might also give an impression of alcohol problems somewhat different from that obtained by interviewing the general population, since in the former case there might be less of a tendency to hide personally embarrassing information. On the other hand, the informants might tend to exaggerate or might be unaware of drinking problems. Official statistics might provide a slightly different picture of the extent of alcohol problems, but the information could be incomplete.

Thus, it can be argued that the optimal strategy for obtaining a comprehensive view of alcohol problems would be the use of several complementary or convergent approaches, no one of which would be relied upon solely to provide definitive answers as to the most appropriate responses to such problems. Although this strategy has much to recommend it and should be pursued where possible, it must be recognized that it may be precluded because of lack of resources, trained personnel or other reasons. Thus, it is important to identify clearly the particular strengths, limitations and costs of the various approaches so that the most cost-effective ones can be chosen. The characteristics of each of the six major approaches will therefore be considered in turn, followed by a discussion of combined approaches.

3.3.1 Collation of existing information

It is clear that a great variety of information is required as a basis for developing policies and programmes, and for their assessment and modification. Before time and energy are devoted to obtaining new information, however, all available sources should be explored for material that has already been gathered. In this process, a valuable compendium can be established of institutions and persons who might be approached for involvement in the continuing work of information collection.
Information will be required relevant to each of the levels at which action is to be taken. Thus, even if the main concern is a specific community, its problems and the way they are dealt with are shaped by many factors and occurrences at national or sub-national level. Conversely, information from defined populations is needed to formulate national action.

At each level, general information is required as a framework within which to study information more specifically related to alcohol use and alcohol problems. Census data on populations, for example, are needed for computing average rates of alcohol consumption; obviously, alcohol-specific information is also required.

Collation of existing background information differs from the other approaches described in these guidelines in that it could conceivably provide answers to all of the general and specific questions listed in section 3.2. If this is in fact the case, there may be no need to use any of the other approaches. It is, however, quite unlikely that all of the required answers will be available through a study of existing data and other information. Nevertheless, such a study is likely to reveal important gaps in knowledge that can be filled by using other approaches.

The major purposes of bringing together already available information are: to provide the background for determining in what respects the communities selected are representative of the countries in which they are located; to place the communities' problems in a national perspective with regard to the priority and possibility of action; and to place the project in a broader cross-national perspective.

The collection of this information may serve a number of subsidiary purposes. It might be expected to reveal gaps in the available data and deficiencies in methods of collecting such data; to establish a basis for national planning; to establish a basis for the study of trends and for the evaluation of programmes; to initiate and strengthen collaboration between individuals and bodies concerned with alcohol-related problems; and to identify institutions that might be implicated in the recommendations following upon other studies.

The collection of background information should not be seen as a separate activity discrete in time. Rather, after an initial major effort, it should continue in parallel with the other approaches described here.

In summary, a careful collation of all the readily available relevant information is an essential preliminary step in carrying out a project on community and national responses to alcohol problems. To omit an exploration of what has already been studied and reported on might prove wasteful of time and resources. Moreover, making early contact with agencies and community members and involving them in data collation can be an effective way of mobilizing their interest in alcohol problems and ensuring their collaboration in later stages of the project.

On the other hand, the use of background information initially collected for other purposes has certain limitations. The information required may be unavailable or inaccessible; the available information irrelevant, of questionable quality, not comparable or unanalyzable. While there are ways of reducing these limitations, some of which were suggested in the last section, it is generally not possible to eliminate them entirely. Thus, if these limitations preclude sole reliance on existing information and some additional resources are available, consideration should be given to using the additional approaches for studying alcohol use, alcohol problems, and responses to them, as described in the rest of this section.

Methodological and administrative considerations involved in collating the existing information are discussed in Annex 1.

3.3.2 Key informant studies

A key informant approach entails asking selected individuals to report on the practices of groups familiar to them rather than asking an individual to report on his or her own behaviour as in typical survey methods. The informant is not personally involved with
describing the behaviour of the group and he or she does not disclose anything about the results. The approach was originally designed by anthropologists for use in small, non-literate populations, but has since been modified for use in large, literate societies.

The use of respondents as informants is implicit in a number of the methods described in this document. It has been suggested, for example, that where information relevant to the local communities studied is deficient it might be complemented by recourse to people who have been long-term residents of those communities. Similarly, in determining which agencies are relevant in the study of alcohol-related problems, advice might be sought from those knowledgeable in such matters. The principal investigators responsible for coordinating the several activities described in these guidelines are themselves to be regarded as key informants in the sense that they can be expected to be familiar with much of the literature concerning alcohol-related problems in their country and also to be aware of the agencies dealing with these problems.

However, informants can be used more formally and systematically to determine the extent and nature of alcohol-related problems and responses to such problems. For example, a systematic sample of persons who provide services to those with alcohol-related problems might be interviewed in order to determine their perceptions of the characteristics of those persons with alcohol-related problems coming to the attention of their agencies. They could also be asked about the practices of their agency or those of other agencies in relation to people with alcohol-related problems. This would constitute the use of a key informant method to study a particular sub-group of the population, namely those with alcohol-related problems coming to the attention of the authorities. This method could be equally applied to other subgroups in the population, such as students, by asking samples of teachers or other school personnel to describe the drinking behaviour of students in their particular school. A key informant approach can also be used to study drinking practices in the general population or the community as a whole and as such constitutes a lower-cost alternative to a general population survey.

A key informant approach can be used to seek answers to all of the general and many of the specific questions noted in section 3.2.

For example, it can be usefully applied to provide at least approximate answers to all of the specific questions on the extent and nature of alcohol problems. It can be especially useful in attempting to answer questions about current responses to alcohol-related problems (e.g. What policies exist concerning alcohol problems? What services? What controls? Who are the care givers?). It may be somewhat less useful in testing explanations about alcohol problems and responses, but may suggest hypotheses for testing by other means. It can be very useful in identifying measures which could be taken to improve responses (e.g. What have been the experiences within one's own country or community? What approaches to intervention have been suggested but not tried? And what approaches have not been suggested but might be promising?). Finally, it can be helpful in answering all of the specific questions about what happens when measures are introduced, although it may provide only approximate answers to some (e.g. What impact did the intervention have on extent of problems?).

According to the authors of a manual describing one key informant method (Lihan & Smart, 1980), the method has several advantages over a general population survey: (i) relative ease of sampling; (ii) ease of data gathering; (iii) low cost; (iv) ease of data handling; (v) improved estimates of alcohol consumption; and (vi) community development potential. Such advantages, in their opinion, make the method attractive for use in developing countries.

Although there may be some dispute about some of the suggested advantages (e.g. improved estimates of alcohol consumption), there is no doubt that the method has much to recommend it as an alternative to a much more costly general population survey, especially in developing countries. The same might be said of other key informant methods applied to the study of the general population (e.g. Murphy et al., 1979), as well as methods applied to subgroups of the population.

On the other hand, it should not be forgotten that this approach relies entirely on the reports of people who are removed from the phenomenon of concern. Such reports may be distorted by faulty recall, lack of knowledge, a tendency toward exaggeration or outright prevarication. Thus, key informant studies may be particularly likely to produce data of
questionable validity. It is therefore especially important when using this method that all possible attempts be made to ascertain the validity of the information obtained by comparison with other methods. If this cannot be done, investigators should be especially cautious in their interpretation of the findings.

The approach also generally precludes following up individual cases, in contrast to other methods such as a special population study, which may permit such follow-up.

Methodological and administrative considerations involved in using a key informant approach are presented in Annex 2.

3.3.3 Observational studies

While the distinction between observational studies and other approaches is not as great as is sometimes implied, observational studies have a number of distinguishing features:

i. the observer is the principal instrument of measurement and documentation;

ii. most observations take place in settings that are natural to the subjects being observed;

iii. a conscientious, concerted and sustained attempt is made to describe situations in terms of "objective reality" (i.e. What appears to be happening);

iv. a similar (but separate) attempt is made to understand at least some of the situations from the points of view of the various participants.

Another feature of observational studies is that the person giving the information is often unaware that the information being communicated is thought to be of any importance.

The concept of observational studies covers a wide variety of methods and possible subject matters. It is possible to observe objects, spatial relations, individual behaviours, or interactions. The observations may be reported as straightforward descriptions, in formalistic or structural terms, or in quantitative terms. All of these topics and methods have been used in alcohol studies. Studies have mapped the number, types and locations of drinking establishments in a community and discussed their functions and social position. They have also mapped the spatial arrangements within drinking establishments and have counted and mapped the detritus of drinking (e.g. beer cans, bottles).

Observational studies of behaviours and interactions may be divided into those that involve a study of people in their natural settings and those that study behaviour in contrived or laboratory settings.

Observational studies provide a means of addressing many of the questions identified in section 3.2, although they are perhaps less suited than other approaches to systematic examination of explanations of observed behaviours. They may be used as a preliminary means of enquiry in order to ensure that other approaches address relevant questions in appropriate settings. They might also be used to identify suitable agencies in which to pursue intensive case interviews as well as to depict the workings of such agencies, and to assist the interpretation of results obtained from other approaches.

One of the main strengths of observational studies in comparison with other approaches is that they can bring to light values, attitudes, beliefs and behaviours that would not be recognized or elicited in other kinds of research. It can do so by freeing the researcher from conceptual restraints imposed by methods that limit data to the collection of specific responses. The observer is not specifically looking for certain types of precategorized information, but rather may consider any relevant interaction regardless of its immediate relevance for a particular study.
This approach has the advantage of producing a sample of behaviour that is relevant to the local people and to their culture. On the other hand, such a sample may not be typical of behaviour in the community and it may be difficult to estimate its representativeness through the use of observational methods alone.

From a practical point of view, observational studies can be done quickly and relatively inexpensively, especially if the observations are done on a small scale with existing personnel. Elaborate equipment and procedures are not generally required for this kind of work.

Perhaps the major limitation of the approach, however, is that its value depends very much on the perceptiveness of the people doing the observations. If they are not perceptive or properly trained, the information obtained is likely to be of questionable quality if not completely misleading.

It is therefore necessary to complement observational studies with information obtained by other means. At the same time, such studies can be helpful in preparing the necessary groundwork for using other approaches to data collection (e.g. identifying suitable agencies).

Considerations involved in observational studies are discussed in Annex 3.

3.3.4 General population surveys

In a survey, certain items of information are collected systematically: in this case, information about the people who comprise some "general population", i.e. the inhabitants of a particular area, usually politically or geographically defined. The area can be as large as a nation or large city with millions of inhabitants, or much smaller, such as a village or neighbourhood.

Most surveys involve the collection of information from a representative "sample" of people in the population of concern, although in some cases, especially in small populations, an attempt may be made to include the entire population. Sometimes the samples exclude certain segments of the population (e.g. children, residents of institutions or people without regular residences) for pragmatic reasons. In such cases, the results cannot be generalized to those omitted segments but only to the rest of the population.

There is no doubt that general population surveys can help to provide answers to the five general questions noted in section 3.2. They can also help to provide answers to many of the specific questions listed.

With regard to the extent and nature of alcohol problems, a general population survey can help in answering the question "What is the extent of alcohol involvement in various individual problems?", although it will not necessarily shed light on all such problems (e.g. cirrhosis or psychosis). It can also provide some information on family, community and national problems, although other approaches, such as background information collection and studies of special populations, may be better suited to this purpose. In addition, it can provide at least partial answers to the other specific questions on the extent and nature of alcohol problems. A general population survey is in fact the only way to obtain some kinds of information about the extent and nature of alcohol problems (e.g. the perception of such problems by the population as a whole and self-reported drinking behaviour of the population). It is certainly a way of identifying some people with alcohol problems who have not had contact with any treatment or intervention programmes.

The general population survey can also be a good source of information about the current responses to alcohol problems. For instance, it can be used to answer the question "What attitudes are generally expressed to alcohol use and problems?" It can also be used to provide some answers to the questions "What are the views of the community residents regarding formal or informal responses to alcohol problems?", "How is alcohol controlled in the family?" and "What controls are used in the village or larger community?" It is, however, not very useful in providing answers to the question on formal responses to alcohol problems, which can perhaps best be obtained through other approaches (e.g. key informants, observational studies, and reporting systems).
General population surveys can also be extremely useful in identifying factors related to alcohol problems or responses to them, that is, in providing or testing some "explanations" which in turn could be used to initiate public action. In fact, all of the specific questions suggested in section 3.2.3 could be addressed using a general population survey. Such surveys are particularly useful in the identification of individual-level factors that might be responsible for a given behaviour (e.g. personal characteristics associated with particular self-reported attitudes or behaviours). Other approaches may be more useful in providing collective or aggregate-level explanations (e.g. background information collation, observational studies).

Such surveys may be helpful in identifying measures to improve responses to alcohol problems as well. In particular, they may be able to suggest new approaches to intervention by drawing on the opinions of the public. They may also be useful for determining the extent to which new measures will be accepted by the public at large.

Information derived from general population surveys can serve as a very useful baseline against which change can be measured. A follow-up study can be made after an intervention has taken place to see whether or not there has been any change in the problems or community responses measured through the original survey. This may give some clues in answer to the question "What impact did the intervention have on the extent of alcohol-related problems?" noted in section 3.2.5. The assessment of interventions directed at the population as a whole may be particularly amenable to the use of repeated general population surveys. Repeated surveys may also give some answers to the question "What side effects occurred as a result of the intervention?", but they are unlikely to yield information on what interventions were introduced or how they worked.

Thus, a general population survey can be an extremely valuable approach in answering many of the specific questions listed above. Such a survey can also accomplish other purposes such as providing basic demographic data about the community, baseline data about general health issues and life events not connected with drinking, and information about the drinking patterns of the community or country under study.

On the other hand, general population surveys have a number of important limitations. A major drawback is the cost in terms of funds, personnel, time and effort. Although some of this outlay can be reduced by using less expensive designs and methods (e.g. mailed or self-administered questionnaires, telephone surveys), carrying out a general population survey is invariably costly and difficult.

Another limitation concerns the accuracy of the information obtained, particularly in relation to alcohol consumption and problems. General population surveys have, for instance, been shown to underestimate alcohol consumption in a population as a result of a number of factors, including low response rates, especially among heavier drinkers, but mainly because of selective reporting and forgetfulness.

A considerable amount of census and population information is needed when selecting samples for general population surveys. Such information is simply not available in many developing countries and it may be too costly to try to generate it.

There is also some suggestion that questions customarily employed in self-reporting studies require a type of thinking that is uncommon in many societies, so that the answers may have little meaning in some settings.

A general population survey tends to reinforce the view of drinking problems as properties of the individual rather than the group or community (Room, 1977). Thus, certain problems that exist more at a system level than an individual level (e.g. loss of production due to drinking) are not easily seen in individual interviews.

A final limitation is that people's expressed attitudes and opinions are not necessarily good predictors of their actual behaviour in real situations. Thus, attempts to describe behaviour on the basis of answers to a general population survey may be ill founded.
For these reasons investigators, especially in developing countries, would be well advised to consider possible alternatives to a general population survey (e.g. a key informant approach) before embarking on such an enterprise.

Considerations involved in designing and using a general population survey are discussed in Annex 4.

3.3.5 Special population studies

In contrast to a general population survey, a special population study focuses on some sub-group within the general population. Groups that might be singled out for special attention include young people, members of particular occupational groups, clients attending different social or medical agencies, arrested persons, accident victims, and homeless persons. By definition, studies of such groups miss out major segments of the general population, and even major segments of the same age group.

One persuasive reason for carrying out intensive studies of special populations in the alcohol problems field is the low expectation of finding a sufficient number of heavy drinkers or persons with alcohol problems in a study of the general population. It may be more efficient to seek out high-risk groups directly. A general population survey can in fact suggest which groups might be deserving of in-depth study. Such groups will be likely to have special characteristics with important implications for the prevention and treatment of alcohol problems.

Studies of such groups can be particularly useful in answering a number of the specific questions noted in section 3.2, such as the extent of alcohol involvement in individual, family and community problems; or the formal responses to alcohol problems (e.g. How many people are in contact with community agencies and what are their characteristics?), as well as, perhaps to a lesser degree, the informal responses to such problems. As is the case with a general population survey, such special studies can also be used to develop explanations or hypotheses about alcohol problems and the responses to them. They may suggest measures that might be taken to improve responses to alcohol problems by revealing how existing measures affected those who were subject to them. Finally, studies of special populations can be used to assess the impact and the side effects of interventions on likely target groups.

Perhaps the major strength of a special population study is that it is an effective means of obtaining detailed data on populations at risk. Such populations may be the ones for whom specific treatment and prevention programmes are being developed and such detailed information may thus prove particularly helpful.

Another possible strength of such studies is that they quite often deal with so-called "captive" populations. This sometimes means that they can be fairly rapidly studied. For example, questionnaires can be administered to a whole class of school children or college students in an hour or two. If this is done, the costs can be reasonable. Of course, not all special populations can be studied using self-administered questionnaires.

A limitation of special population studies is that the results cannot be generalized to the population as a whole. If, however, no generalization is intended, such a limitation is not important.

Another potential limitation of special population surveys is that they require the cooperation of institutions, since usually the population of interest is defined in terms of its membership in or contact with some social institution. This means that permission has to be sought from the agency, school or other authority with responsibility for or control over the group of interest. Such permission may not always be forthcoming. Even if permission is granted, it is sometimes difficult to arrange the conditions for collecting the information in a satisfactory way (e.g. a proper space in which to work may not be available in a busy, confusing emergency room). This means that the quality of the data may not be as high as one would like.
Sampling limitations can also be imposed by working in institutions or agencies. The work flow may not permit the use of the most desirable sampling procedures. For example, when too many cases arrive at once, it may not be possible to select the sample in the most efficacious way. Similarly, agency procedures may not permit interviews to be conducted when desired. The condition of the clients (for example in an emergency room) may also impose some constraints on data collection. Such potential limitations of studies of special populations can sometimes be avoided by proper planning and cooperation with institutional authorities.

Specific methodological and administrative considerations involved in carrying out special population studies are described in Annex 5.

3.3.6 Reporting systems

A reporting system was defined in a recent WHO publication on the subject as "an information system based on reports submitted to a central body using systematic reporting procedures" (Rootman & Hughes, 1980, p.6). The publication also identified three major types of reporting systems: event-reporting systems, case-reporting systems, and case registers. Another type of reporting system focuses on the characteristics of programmes rather than on individuals served by the programmes.

Event-reporting systems are capable of presenting information on occurrences only, such as the number of arrests, hospitalizations, or deaths and do not necessarily reveal the total number of individuals involved. Case-reporting systems are, however, capable of linking different events for the same individual in the same reporting institution. For example, two hospitalizations of the same individual can be linked and considered as a single case. However, if the same individual was reported by two institutions, he or she would be considered as two cases. Case registers are capable of linking events that occur in different settings to the same individual. Thus, reports on a person who is hospitalized, arrested, and visits the clinic may be brought together and analysed as related experiences of one individual with different institutions.

As is true of the other approaches described here, reporting systems might be used to answer the five general questions posed in section 3.2. They may be particularly useful in answering some of the specific questions.

For example, in relation to the extent and nature of alcohol problems, reporting systems may be especially useful in measuring the extent to which alcohol is involved in various community problems (e.g. public disturbances, violence, property damage, victim injuries, etc.). They can also be employed for examining alcohol involvement in certain individual problems (e.g. liver cirrhosis, arrests for drunkenness, psychosis) and may be of help in identifying groups or areas with high incidence or prevalence of problems, although persons not coming to the attention of authorities will be excluded.

Reporting systems are especially useful in answering questions on the formal as opposed to informal responses to alcohol problems. They are, for instance, uniquely suited to answering the question of how many people are in contact with community agencies for alcohol problems and what their characteristics are. They can also help to identify some of the factors related to alcohol problems and community responses to them, although they may be able to provide only superficial answers. Such systems may also help to identify some approaches that can be taken to improve responses based on the experiences of agencies in one's own country or others.

Reporting systems can be especially helpful in the assessment of formal measures to deal with alcohol problems by providing a basis for examining the impact and side-effects of such measures on a continuous basis.

In addition to answering some of the questions noted in section 3.2, reporting systems can be used as a way to raise the sensitivity of agency staff and perhaps the community as a whole regarding alcohol involvement in the work of community agencies.
The continuous nature of reporting systems is one of their chief strengths. Once they are operating, such systems will make it possible to answer questions about alcohol problems on an ongoing basis. This makes such a system ideal for monitoring changes in the extent and nature of problems associated with alcohol use.

Another strength of reporting systems is their ability to identify persons experiencing serious effects from alcohol use. Thus, they can also be effectively used to identify groups that are at high risk of alcohol-related problems.

On the other hand, these systems usually do not provide information on informal responses to alcohol problems, although they could be structured to do so. Moreover, they cannot provide information about those people with alcohol problems who do not come to the attention of investigators, and thus any extrapolation to the population as a whole may be misleading.

In order to run reporting systems, trained personnel are usually needed who can work on a long-term basis, although recently lay reporting systems have been developed with lower requirements in this regard (WHO, 1978). Another condition, sometimes difficult to achieve, is the willingness of various agencies to participate in the reporting on an ongoing basis. Finally, and possibly most importantly, the cost of reporting systems can be considerable.

There are, however, ways of reducing the cost. For example, it is possible to reduce the size of the system by sampling the reporting agencies, taking one or a few of each type or sampling only one type of agency, such as emergency wards. Costs may also be reduced by limiting the information required to a few basic elements, reducing the frequency of information requests, using precoded forms and applying new low-cost computer technology. It is also possible to lower costs by integrating alcohol information into more general-purpose information systems. Nevertheless, it is likely that reporting systems will remain a relatively expensive approach to answering the questions noted in section 3.2 and therefore cheaper alternatives should be considered first.

Considerations involved in designing and implementing reporting systems are discussed in Annex 6.

### 3.3.7 Combining approaches

The preceding section has described six relatively discrete approaches to investigating alcohol-related problems. It was suggested that an optimal strategy would be to combine some of these approaches. Applying such a strategy gives rise to certain issues, such as how to select the most suitable combination and in what sequence to carry out the work. In short, how does one implement such a strategy in practice? These matters will be discussed in this section.

A critical factor in choosing the approaches to be used is a decision regarding what information is needed in order to improve community responses. Knowing what questions are thought to be particularly important by the community can be an extremely useful guide to choosing approaches or combinations of approaches, since each approach is particularly well suited to answering certain questions or provides a special perspective on some questions.

However, determining the key questions from the point of view of the community is by no means simple. It requires considerable effort and investment of time on the part of the project team in collaboration with members of the community and with others likely to use the resulting information.

While these consultations are going on, it would be advisable to begin the collation of background information, preferably with the involvement and assistance of members of the community. As noted in section 3.3.1, this approach could conceivably provide answers to all of the questions mentioned in section 3.2, although it would probably reveal gaps in knowledge. It would thus be helpful in identifying questions for which answers are required. It is therefore highly recommended that, in all circumstances, the collation of existing background information be seen as an indispensable approach to be initiated first and to be continued throughout the life of the project.
A key informant approach can also be extremely useful in identifying the questions for which further work is required. For this reason, it is probably desirable at an early stage of the project to carry out such a study by interviewing various strategically placed members of the community in order to determine in a somewhat systematic way what information they think is needed to improve responses to alcohol-related problems.

Through the use of these two low-cost approaches, combined with consultations involving the community, it should be possible to assess the state of knowledge about alcohol problems and to determine what further knowledge, if any, is particularly desirable or what the high priority questions are. This should be of considerable assistance in making critical choices regarding other approaches to be undertaken.

For example, if it is decided that in order to improve responses to alcohol-related problems, it is most important to determine how many people are in contact with community agencies for alcohol problems and this information is not already available, a key informant study, a special population study, or a reporting system might be considered. The relative advantages and limitations of each approach might then be compared in making the appropriate choice. As indicated in Table 1, a key informant study might have the advantages of low cost, technical simplicity, speed, low manpower requirements and ethical neutrality; a special population study might permit follow-up; and a reporting system would allow for continuous monitoring. If cost was an important consideration, the obvious choice would be a key informant study, even though this might lead to less exact answers than one of the other approaches. If, on the other hand, continuous monitoring of numbers was thought to be especially important and resources were available, a reporting system might be indicated.

The situation becomes more complicated when it is decided that it would be desirable to try to answer more than one high priority question, as is likely to be the case. The choice of approaches would, however, involve the same process of assessing the extent to which the various approaches can answer particular questions and comparing the relative strengths and limitations of each. In the end, this process may be reduced to choosing those approaches or combinations likely to provide answers to the largest number of high priority questions within the available resources. This will obviously differ from situation to situation.

However, in a situation of limited resources, as is likely to exist in most countries, the following combination and sequence might be seen to be reasonable:

i. Collation of existing background information.

ii. Key informant study to determine questions of concern.

iii. Observational studies to determine how alcohol is consumed in the community and how alcohol-related problems are expressed.

iv. Key informant studies to provide estimates of alcohol consumption, alcohol problems and informal responses to them in the population; numbers coming to the attention of agencies; and formal responses by agents.

v. Studies of special high-risk populations (e.g. schoolchildren, arrestees, people in treatment) in order to determine their characteristics. Use of a self-administered questionnaire with schoolchildren or simple forms to be filled out by police or agency personnel may be particularly cost-effective in this regard.

If additional resources are available, it may be desirable to embark on more ambitious in-depth studies of special populations, to carry out an intensive case finding study and/or to establish a reporting system. Carrying out a general population survey, while it may prove to be extremely enlightening, should not be embarked upon precipitously as it is the most costly, time-consuming and demanding of the approaches described in these guidelines and may thereby preclude the development of other more cost-effective approaches.
# Table 1. Advantages of Different Approaches to Investigating Alcohol-Related Problems

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Approaches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Cost</td>
<td>Collation of Existing Information</td>
</tr>
<tr>
<td>Technical Simplicity</td>
<td>Observational Studies</td>
</tr>
<tr>
<td>Quickly Done</td>
<td>Key Informant Studies</td>
</tr>
<tr>
<td>Low Manpower Requirements</td>
<td>General Population Surveys</td>
</tr>
<tr>
<td>Ethical Neutrality</td>
<td>Special Population Studies</td>
</tr>
<tr>
<td>Wide Scope</td>
<td>Reporting Systems</td>
</tr>
<tr>
<td>Easy Access</td>
<td></td>
</tr>
<tr>
<td>Flexibility</td>
<td></td>
</tr>
<tr>
<td>Generalizable to Entire Population</td>
<td></td>
</tr>
<tr>
<td>Follow-up Possible</td>
<td></td>
</tr>
<tr>
<td>Comparability</td>
<td></td>
</tr>
<tr>
<td>High-Risk Group Focus</td>
<td></td>
</tr>
<tr>
<td>Continuity</td>
<td></td>
</tr>
<tr>
<td>Community Involvement Potential</td>
<td></td>
</tr>
</tbody>
</table>
In conclusion, it should be mentioned that one strategy that might be used to combine more than one approach is this intensive case-finding. Although it has not been used often in the alcohol problems field (Rosenbaum, 1978), it has been used fairly extensively and effectively in the study of use of drugs other than alcohol and a review of its application has recently been prepared (Hughes, et al., 1982). This strategy has also been used in the general mental health field (Isaac & Kapur, 1980) and in the nutrition field. It may be worthwhile to consider such examples when developing a strategy for combining approaches.

REFERENCES


---

4. GATHERING INFORMATION

Each of the six approaches described in the last section is relatively distinct from the others and special considerations are involved in their development, as discussed in detail in Annexes 1-6. There are, however, some methodological and administrative considerations common to all of them. Some of the main ones could be summarized under the following headings: testing, training, representativeness, accessibility, comparability, analysability, reliability and validity, ethics, integration, presentation, and cost. These considerations are discussed in the following sections.

4.1 Testing

Before actually carrying out the data collection, it is desirable to test the instruments and procedures that have been designed in order to determine whether they can be used as intended. This could involve testing individual elements of the proposed studies as well as carrying out full-scale pilot studies. The latter is certainly to be recommended wherever possible. On the basis of this testing, the research team should be willing to make appropriate modifications in the instruments and procedures.

Pre-testing has a number of important purposes, including:

i. Exploring the extent to which instruments effectively gather the information required. One might for instance want to know if respondents from all groups understand the questions and, if not, to try to discover if the wording is confused and how it can be changed.

ii. Sensitizing team members to areas of information that may be relevant but have been missed. Tape recordings of pre-test interviews may be useful in that they allow team members to discuss each others' interviews and also interview techniques.

iii. Pinpointing areas which are difficult to enquire about. This information might be passed on to the data collectors so that they can be warned.

iv. Validating questions. For instance, friends of the data collector could be interviewed to see how closely the information collected corresponds with observations.

v. Checking processing and analysis procedures. Data collected during pre-testing can be used to determine if the processing and analysis procedures that have been described are likely to be appropriate.

In pre-testing, adherence to rigid sampling procedures is not necessary. It is, however, desirable to test the instruments or segments of them on a variety of the types of people who are likely to participate in the actual study.

Pilot testing, although it serves many of the same purposes as the pre-pilot testing, involves much more systematic trials. In general, an attempt should be made to test the complete instruments and procedures under real conditions or as close to them as possible, with as large a sample of respondents as possible, using the proposed sampling procedures. It should be carried out by the team that will be involved in the actual study. It thus becomes an important way of checking on the practicality of actually operating the study and training staff. It will also provide information about the usefulness of certain questions, particularly those that all respondents answer positively or those nobody answers, which might then be excluded. Pilot testing can also provide preliminary findings that permit consideration of the possible outcome of the study results.

There is no point in carrying out testing if the results are not used to modify the project design. Thus, throughout the pilot and pre-pilot testing, implications for design
should be discussed and appropriate modifications made. Further testing may be required to
determine if the changes actually help. In the original community response project, numerous
changes were made before the methods were finalized.

4.2 Training

It is obvious that it is desirable to have well-qualified staff to carry out the
investigations. On the other hand, it is recognized that such staff may not be readily
available in some countries, especially developing countries. One of the functions of a
project such as this is to provide training opportunities. The emphasis in selecting such
people should therefore be on their potential for benefiting from such training and doing
similar work in the future. Thus, formal qualifications should not be the governing factor
in recruitment.

The testing of methods provides an opportunity for training as well as for improving
their quality. In addition, however, it is desirable for project leaders to use other
training devices such as lectures, workshops, individual instruction sessions and background
reading. Training procedures used by the countries participating in the original Community
Response project are described in the country reports and may prove useful to others carrying
out this type of work. Other considerations in training in relation to specific
approaches are discussed in the relevant annexes.

4.3 Representativeness

Any project whose objective is the introduction of changes must be concerned with the
generalizability of its results. This issue is particularly pertinent in a project which,
while carried out in specific locations, is either intended to consider the situation in a
nation or recognizes that certain changes at local level will require that initiative be
taken at a national level.

If communities are to be the basis of enquiry, there can be no certainty that they are
representative of nations, as each community is unique. The extrapolation of results from
communities must therefore always be of uncertain value. It may be desirable to select
communities representing a range of differences in composition, economy, etc. In any reports
based on these communities it will of course be necessary to point out how they differ from
one another and from other communities in the country, so that the reader can judge how far
the results can be applied to the country as a whole.

The question of representativeness applies also to the selection of any other units on
which generalizations might be based (e.g. individuals, agencies, events, cases, etc.). This
entails using appropriate sampling procedures. Devising such procedures requires a knowledge
of sampling theory and of some of the characteristics of the population to be sampled. In
order to make sure that information obtained is not biased or partial, it is necessary to
establish a sampling frame based on boundaries around the population or events to be studied,
and then to make random or probabilistic choices within that frame. How such frames are
drawn up and the sampling is designed and carried out will depend on the particular approach
and is discussed in the relevant annexes.

It is important that the extent to which the particular sample is representative of the
unit studied be made clear in any report based on the particular studies.

4.4 Accessibility

The need for access to people and information has to be considered no matter which
approach is used. For example, in collating existing information, it is sometimes difficult
to obtain access to information because of its confidential nature or its cost, or for other

---
reasons. Similarly, in a general population survey, getting access to the people selected for interview may be difficult because of their frequent absence, their status, etc. The same holds true for a special population study. In a key informant study of agents or reporting systems, the agencies may not be willing to give access to personnel or records and in an observational study, some pertinent location may be inaccessible because of its remoteness or entrance criteria.

Some proposals for resolving such problems are discussed in the annexes on specific approaches. In general, many of these problems can be simplified or overcome through the support of the community and of local and national authorities. This is one more reason for involving potential users of the results of the project at every stage of its development.

4.5 Comparability

As mentioned in section 1, one of the subsidiary purposes of these guidelines is to enhance the possibility of comparability in cross-national studies. Comparability, however, is also an issue - and perhaps more important - within countries. In using the approaches described here, attempts should be made to ensure that the information is collected in comparable ways, otherwise its collation and interpretation will be complicated. As a general rule, the possibility of obtaining comparable information can be increased by developing and using instruments with common wording and ordering, by defining the categories to be used in recording the information, by preparing detailed and specific instructions for data collectors, by careful training and supervision of staff, and by extensive pre-testing.

Ensuring comparability where there are language difficulties may cause particular problems. If it is considered desirable to translate the particular instruments, they should be translated back into the original language by a person not involved in the research. This should help in assessing how far the intended meaning has been retained or lost in translation. Even with such an approach, however, there are likely to be changes of meaning and hence less comparability where translation is required. Another approach is to train data collectors thoroughly in the intention of the questions and allow them to convey the meaning to the respondents as best they can. This approach too, however, makes comparability questionable.

4.6 Data Analysis

The information collected in the course of the enquiries described here will need to be analysed. Generally, this means that it will need, by whatever means, to be collected and recorded in a form that renders it susceptible to statistical analysis and in a way that conforms to the assumptions implicit in such methods of analysis. Lengthy written accounts of conversations held with informants, however illuminating and however useful at a preliminary stage of enquiry, will remain largely inaccessible unless means of reducing such data are developed. Furthermore, the data collected will need to be analysed in relation to the questions posed at the outset of the enquiry.

One means of making data suitable for analysis that is common to most of the approaches is to code it in accordance with agreed and uniformly applied categories. Such coding will need to conform with local computer conventions and capacities. The appropriate code should preferably be assigned by the data collector at the time of the data collection, otherwise the process of coding will need to be carefully monitored. The punching of these codes on machine cards (if the data are to be analysed by computer) should be validated and appropriate cross-checks run.

4.7 Reliability and Validity

Reliability implies the extent to which a procedure can yield comparable findings on repeated occasions when the phenomenon being measured has not changed. Validity, on the other hand, refers to the degree to which a procedure measures what it is supposed to measure (i.e. whether or not the information obtained represents the true state of affairs). A measurement procedure must be reliable to be valid, but it can be reliable without being valid.
Many factors contribute to unreliability and invalidity, including a number already discussed — unrepresentativeness, varying interpretation of instructions, inappropriately applied statistical analyses and errors in punching and coding. In addition, respondents may fail to report the truth because they have not understood the question, do not know the answer, or are unwilling to reveal it. This last source of error may apply particularly in an area such as alcohol use and problems where the answers are seen as reflecting on the individuals themselves.

One way to get more truthful responses in an interview situation is by establishing good contact with an interviewee. Suitable techniques can be taught, but much may depend on interviewer selection. Self-administered questionnaires or other such methods may also be useful.

Whatever is done to enhance validity, it cannot be assumed that this has, in fact, been achieved. One of the advantages of the multiple approach strategy advocated here is that it provides an opportunity to check "external validity" by permitting the comparison of findings obtained by one approach (e.g. general population survey) with those obtained by another method (e.g. intensive case finding). This of course assumes that definitions are comparable between the approaches. Another way of checking is to test for "construct validity", in other words, to test whether the variables relate in consistent predictable ways with other variables known or thought to be related to them. Reliability can be examined by checking for logical consistency among multiple measures of the same variables (through comparing multiple items on the same instrument or by re-administering questions to another sample of respondents later).

Whatever means of checking are used, it is advisable for investigators to ascertain the validity and reliability of their measures of alcohol use, preferably prior to undertaking the full-scale study.

4.8 Ethics

There are two main reasons for considering ethical issues. The first is a fundamental concern for the protection of the individual. The second is the desire to make the project useful and acceptable to the community and country in which it is being carried out. The work must therefore not be pursued or presented in a way that threatens, undermines, discredits or is seen as a betrayal.

The general experience is that sensitive research can, in fact, be carried out and published, provided that research workers think through problems beforehand and build in safeguards and agreements. The general principle to be borne in mind is that practices should be consistent with generally accepted ethical standards for research work and with local ideas and customs. Clearance from appropriate authorities at local and national levels should be obtained before the research is begun.

4.9 Integration

If, as is suggested here, more than one approach is used, it will be necessary to devise ways of integrating the resulting information to provide a comprehensive view of what is going on in the area under study. While there are no hard and fast rules for doing so, a number of suggestions might be considered.

For instance, dummy tables might be prepared in advance to show how information obtained using one approach can be compared directly with that obtained from another. Such tables can also be useful in the design of the data-collection instruments to be used.

Another possibility is that, once the data are collected, they might be examined in relation to a number of common questions, particularly those of use for planning. The findings of the various approaches in relation to these questions could then be compared directly.
A third way is to prepare reports that are integrative, that is, that do not report findings study by study but draw information from all of the studies as appropriate. It may be useful to refer to the examples of the final reports on the Community Response project as models in this regard.¹

4.10 Presenting Findings

One of the distinguishing features of the project described here is the continuous interplay between the project team and the community. It is thus desirable to report regularly on progress as this is an important way of keeping the community, funding agencies and other interested persons informed. It is also a way of monitoring progress on the project by the participants as well as of creating a historical record of what happened. Reports should be designed to suit the intended audience.

In addition to preparing written reports on the project, team members should be involved in making formal and informal presentations directed at various individuals and groups in the community. Slides and transparencies showing graphs and charts may be helpful in this regard.

4.11 Cost

Cost is obviously an extremely weighty consideration in projects such as this, especially in developing countries where personnel, funds, and other resources are likely to be limited and other problems may be of equal or more pressing concern. It is important to weigh up the costs of various approaches in relation to the expected results. This may lead to choosing less costly approaches (such as a key informant approach rather than a general population survey) or less costly techniques (such as a mailed self-administered questionnaire rather than an interview) even though such approaches may yield information of somewhat lower quality. It may also involve using smaller samples or carrying out projects at a slower pace than would be desirable, or using volunteers rather than paid staff. An additional advantage in tailoring the project to fit local resources, is that it may enhance the possibility of genuine community participation.

On the other hand, with careful planning and preparation of appropriate proposals, it may be possible to obtain at least seed money from national governments, voluntary organizations and external sources of funds. Whatever is done in this regard, however, it is desirable to estimate as closely as possible the resources required to carry out such a project. Considerations in doing so are discussed in the annexes.

5. IMPROVING RESPONSES TO ALCOHOL PROBLEMS

Since communities differ from one another, as do countries, it is unrealistic to think that there is one blueprint for improving responses to alcohol problems that will work in all communities and countries. Rather, each community and country will have to develop approaches that fit their unique circumstances. In doing so, however, certain principles, mechanisms, options and suggestions might be considered. This section presents such considerations for improving responses to alcohol problems at both local and national levels, drawing on the experience of the Community Response project and other relevant experience. It also discusses the relationship between research and action at both levels as well as the possibilities for action at other levels.

5.1 Improving Responses at Local Levels

5.1.1 Principles for action at local level

In the development of action at the local level to deal with alcohol problems, consideration can be given to strategies such as those discussed in the report of the Alma-Ata International Conference on Primary Health Care (WHO/UNICEF, 1978).

Primary health care is referred to in that report (p. 38) as "a practical approach to making essential health care universally accessible to individuals and families in the community in an acceptable and affordable way and with their full participation". Health care is described as being an integral part of overall social and economic development and emphasis is laid on the need for proper coordination between public health efforts and other sectors such as education, anti-poverty measures, and food production.

It is becoming widely accepted that individuals and families can acquire a capacity for assuming considerable responsibility for the health and welfare of themselves and the community. In the words of the Alma-Ata report, "they come to know their own situation better and are motivated to solve their common problems. This enables them to become agents of their own development instead of passive beneficiaries of development aid ... They have to acquire the capacity to appraise a situation, weigh the various possibilities and estimate what their own contribution can be."

Adopting a primary health care strategy implies the use of certain principles in responding to alcohol-related problems. Among the most important are community participation, integration with local circumstances, comprehensiveness and flexibility.

As has been stressed throughout these guidelines, community participation is critical in all stages of the project described. If this principle is not energetically adhered to, it is unrealistic to expect that communities will take the results of investigations seriously and implement appropriate actions. The findings are more likely to be seen as irrelevant.

It is also extremely important for any actions dealing with alcohol problems to be sensitive to local circumstances, including local sociopolitical factors, cultural nuances and available resources. There is no point in developing a response to alcohol problems that is inconsistent with the local political structure, violates strongly held beliefs, or exceeds local manpower or financial resources.

Responses might be comprehensive in a number of ways. For example, they might consider the full range of alcohol problems confronting the community, including the multiplicity of consequences for drinkers, their families and the community as a whole. They might also be comprehensive in the sense that they encompass the possible contributions of the range of agencies, institutions and individuals in the community as well as external sources of assistance. Thus, not only health institutions would be involved but political and enforcement agencies as well. As implied by the primary health care strategy, responses to alcohol problems should be integrated with responses to other public health and community
problems since efforts to prevent or reduce alcohol problems may detract from, enhance, or be enhanced by efforts to deal with other problems that may be of equal or perhaps even greater importance.

Finally, responses to alcohol problems should be flexible. They should be considered to be dynamic, changing quickly to fit new circumstances or to accommodate new ideas. The investigations carried out can perhaps assist in maintaining such flexibility.

5.1.2 Mechanisms for action at local level

As suggested in section 2, an important mechanism for stimulating action to improve responses to alcohol problems in the local community might be an alcohol problems team. As also noted, such a team might originate and be composed in different ways in different communities but its main role would be to plan and ensure the application of appropriate responses to alcohol problems in the local setting.

Such a team cannot, however, operate in isolation. It must reach out to others in the community to pass on knowledge acquired, to stimulate other groups, to seek further information, and to discuss the implications for action.

Such an alcohol problems team might also be well placed to take on a more structured coordinating function. This might include continued collection, analysis and monitoring of information that becomes available from the various agencies in the community, as well as from specific studies; making available additional information and experience from other parts of the country or other countries; and promoting consideration of such information for application to a variety of health, welfare, education, and general development programmes and for planning more effective responses to alcohol problems.

In addition to such community work, the team might consider the need for action at a national or intermediate level in responding to local problems. Action involving legislation and trade practices may, for example, have to be stimulated at local level and an alcohol problems team could share local responsibility for ensuring enforcement of laws and regulations. It could also be charged with transmitting to authorities at higher administrative levels the data and experience collected locally. This should contribute to the development of a broader picture of the situation and of trends concerning alcohol problems, and help to provide a basis for national policies and programmes.

From the beginning of its work, an alcohol problems team would need to be aware of possible constraints on developing the type of action it might wish to promote. Overcoming or adapting to such constraints may require much patience and diplomacy as well as understanding of the reasons for opposition. One constraint is the widespread use of alcoholic beverages for enjoyment, celebration and as socially expected behaviour, so that efforts to reduce consumption may be resented. It may therefore be desirable for each step to be preceded and accompanied by explanatory campaigns prepared with the help of the local population. A balance may have to be sought, for example, between restrictions on quantities of alcoholic beverages available, which might lead to serious reduction in revenue from this source, and increase in price, which might tend also to reduce consumption but without necessarily affecting the total revenue. An attempt will also have to be made to weigh the interests of producers and others employed in the alcohol beverage trade against the advantages expected from a reduction in social, mental and physical problems through application of control measures.

An alcohol problems team is, however, not the only possible mechanism for stimulating and introducing action to deal with alcohol problems in the local community. Other possibilities might be more limited groups such as a coordinating committee involving police and public health authorities for the prevention of impaired driving accidents. Alternatively, a community group with a much broader focus might be an appropriate vehicle for stimulating and introducing measures to deal with alcohol-related problems. Such community action groups have in fact been developed in Zambia in the communities that participated in the Community Response project there. Although it is too early to say whether or not they have been successful, the results so far are encouraging. Another mechanism may simply be one or two...
individuals acting as "change agents". It has for instance been argued that individuals can move faster and more effectively in forming coalitions and action programmes than can existing committees.

A variety of mechanisms exist or could be developed to improve responses to alcohol problems in the community. Whatever mechanisms are used, however, must fit the local circumstances.

5.1.3 Options for action at local level

Many different kinds of measures can be introduced at local and national levels to prevent and manage alcohol-related problems. Some of the main types of approaches that can and have been used are: limiting availability of alcohol; information and education; changes in the environment; family support; management of persons identified as alcoholics; and programmes in the occupational setting. These approaches are described and discussed in detail in Annex 7.

On the basis of their own review of the literature, personal intuitions and discussions within the communities, the alcohol problems team in Zambia identified six ways of improving responses to alcohol-related problems:

i. Prohibition:
   - total and
   - selective;

ii. Education for restraint;

iii. Control of amount drunk;

iv. Substitution:
   - alternative forms of recreation and
   - alternative sources of income;

v. Separating excessive drinking from its socially damaging effects;

vi. Helping individuals with serious drinking problems.

Armed with this classificatory framework, the team developed a list of concrete examples of feasible activities for implementing each type of strategy.

i. Prohibition (selective) (legislation and enforcement)
   a. Control of drinking time.
   b. Control of the number of drinking places, licensing of home-based brewing and selling.
   c. Limiting supplies to drinking houses.
   d. Restricting under-age children from patronizing drinking places.
   e. Control of off-sales (enforcement).
   f. Control of supply of alcohol at public functions (e.g. receptions).

---

ii. **Education**

a. Educating the public on the ills of excessive drinking (topics to include the practice of quietening crying babies with alcohol). (Specific tactics: produce and distribute pamphlets on the subject; or organize a party to explain/interpret and distribute posters to the public.)

b. Forming clubs to dramatize and demonstrate to the public the possible methods of discouraging drinkers from drinking heavily.

c. Selected members of the committee to give talks or lectures to various sections of the community (e.g. schools, churches, women's groups).

iii. **Control of the amount drunk**

a. Bar owners to watch who is and who is not showing signs of drunkenness and to instruct the salesmen not to sell beer to any customer who is seen to be drunk.

b. Removing people who are drunk from the bar.

iv. **Alternative forms of recreation**

a. Creating sports clubs.

b. Increasing the number of knitting and sewing classes.

c. Setting up adult education classes.

d. Introducing more evening classes and discussion groups in the townships and villages.

v. **Separating excessive drinking from its damaging effects**

a. Advising employers to impose severe warnings on drivers found drunk while driving.

b. Protecting drunks from danger (the police may assist in escorting them home).

c. Advising people at parties that if they are all drunk that they should not drive home but stay the night.

d. Reminding authorities to improve road maintenance and also to keep road signs up to date.

e. Suppression of prostitution in bars.

vi. **Helping individuals with serious drinking problems**

a. Agencies to be on the lookout for such cases.

b. Neighbours, family and friends to refer people to the agencies.

c. Better liaison among agencies (e.g. police and health, housing and health, courts and health).
d. Identifying an appropriate and authoritative layman to give counselling to a given individual.

This list was then reduced and simplified for presentation and discussion by local community groups.

Although it is not intended to suggest that the intervention approaches listed above are the only ones that might be considered by communities, the idea of constructing such a list and adapting it to local circumstances may be worth considering. Sources referred to in Annex 7 may be helpful in this regard as may be the experiences of the Community Response project teams in Mexico, Scotland and Zambia.¹

It should be noted in this context that the investigations or studies that are carried out may be extremely useful in identifying various options for action and their feasibility in the local situation. As described in section 6, such investigations may also help to assess the extent to which the options implemented are, in fact, successful in improving responses to alcohol problems.

5.1.4 Suggestions for developing action at local level

A number of suggestions for developing and implementing actions to improve responses to alcohol problems at local level have already been made in this section and in other parts of these guidelines (especially Annexes 7 and 8). Some additional proposals are presented here. The final reports on the second phase of the Community Response projects in Mexico, Scotland and Zambia provide further examples.¹

One suggestion worth consideration is that local plans and actions to deal with alcohol problems might be integrated with national plans. For example, if a national plan exists, local groups can take it as a reference and guide in drafting their own plans. They might also request and obtain technical support and material from the national programme.

Another suggestion that should be viable in most local situations is that primary health care workers be involved in the development of plans to deal with alcohol problems and in their implementation. This may in some cases require the provision of additional training to such workers in techniques of detoxification, referral of patients, detection of problems in the family and development of self-help groups. Even if such training is not possible, however, primary health care workers have an important role to play in dealing with alcohol problems in the community and should be encouraged to do so.

A third suggestion is to take advantage of opportunities as they arise. If representatives of the police, for instance, are invited to a discussion meeting with the alcohol problems team, the latter could then arrange for more extensive information and discussion with the police as a preparation for the more detailed studies. The link could be maintained for subsequent phases, including continued collection and monitoring of information. Another example in some areas might be contacts and discussion with education authorities and teachers as a preliminary to more sophisticated studies of alcohol use and problems among school children, the results of which would be important in the development of elements in school curricula concerning alcohol problems. Contacts with health and welfare agencies and religious groups are other obvious examples.

Local action can be promoted by trying to work with existing structures rather than creating new ones. Developing new structures is particularly difficult if they lack an independent base of support. Thus it is preferable to take advantage of those bodies that already have and can mobilize community support. The particular bodies will, of course, differ from community to community (being in some cases political, in others health or enforcement bodies, etc.). A realistic assessment of the power structure of the community is therefore desirable at an early stage of a project.

If it is necessary to create new structures, leaders of organizations already established in the community should be invited to participate in setting them up. It should not, however, be assumed that the best members of such groups are necessarily the official representatives of the established organizations. The goal should be to recruit committed and concerned individuals who will give generously of their time and efforts to the work of the group. The roles of participants in action planned by such groups should be clearly defined and invested with the necessary authority to carry out the tasks assigned to them.

5.1.5 Relationship of research to action at local level

Throughout these guidelines, the importance of a strong, continuous relationship of research to action has been stressed. In particular, what has been advocated here is a participatory research strategy. The African Adult Education Association has suggested the following guidelines for such a strategy:

"a. A research process can be of immediate and direct benefit to a community (as opposed to serving merely as the basis for an academic paper).

b. A research process can involve the exploited or oppressed portions of the population in the entire process from the formulation of the problem to the discussion of how to seek solutions and interpretation of the findings.

c. A research process can be part of a total educational experience which serves to increase awareness, identify community needs and support commitment of action in meeting the needs.

d. A research process should be viewed as a dialectic process, a dialogue amongst those involved over time and not as a static picture from one point in time.

e. The object of a research process, like the object of rural communication, can be the liberation of human creative potential and the mobilisation of human resources for the solution of social problems.

f. A research process can clarify and de-mystify social reality."

While in practice it is sometimes very difficult to adhere to this rather optimistic credo, it is certainly worth striving for. In doing so, there are some steps that might be helpful.

First, the project team could and should make certain that the research does address the questions of concern to the community and does focus on aspects of the community situation that can be changed. There is little point in studying the connection of particular variables with alcohol problems if those factors cannot be changed by community action; the collection of information, analysis of data and presentation of results should emphasize those factors that the community can influence.

Another step in making the research relevant is to carry out an interpretative review of the findings once the data have been assembled. In doing so, it is sometimes useful to pose specific questions to the data that may bear implications for community action. These might include questions noted in section 3 or other more evaluative questions such as "How adequately is the community responding to alcohol-related problems?" In any case, such a review should attempt to make clear what implications for action the project team itself sees in the findings.

Once this is done, the results should be presented in a coherent, simple format to various groups in the community, including those who have participated in the studies, to try to obtain their reactions and interpretations. One way to do so is to formulate a series of "observations" based on the findings. Alternative courses of action and their possible consequences might be suggested.
5.2 Improving Responses at National Level

5.2.1 Principles for action at national level

As was the case at local level, there are a number of principles that might be considered in developing and introducing improved responses to alcohol-related problems. These include: need for a clear policy statement; integration with other policies; participation of several sectors; linkage with other levels; and political commitment.

In many countries, the lack of a clear policy statement about alcohol availability and alcohol problems has led to an ambivalent situation (see Moser, 1980, pp. 13-20, 24-37). It may be that alcohol production and use are being promoted (to increase state revenues, provide employment, or encourage private enterprise) and at the same time public expenditure on services for dealing with harmful consequences of alcohol consumption is rising.

Policies vary, from place to place and over time, between strict prohibition and complete freedom of alcohol production and consumption. Increasingly, however, it is being recognized that whether or not the national policy contains proposals for meeting the "legitimate" demands of the population for access to alcoholic beverages, provisions should be included for limiting harmful consequences of consumption. This implies the need for a clear policy statement concerning alcohol availability and the prevention and management of alcohol problems. Following a period of growing liberalization of policies, accompanied by widespread increases in production and consumption of alcoholic beverages as well as in related problems, there has been a recent swing back to stricter controls, a move towards more carefully designed educational programmes and a search for more effective methods of treatment and management.

Programming for alcohol problems at national level must be in line with other health and welfare policies and with the structure of existing services. For example, if, as is the case in many countries, the strategy for dealing with health matters in a country is a universal extension of health services through the development of primary services properly linked with more complex services, it would be folly to develop approaches to dealing with alcohol problems that were inconsistent with such a strategy.

The planning of activities in relation to alcohol problems should not be undertaken by the health sector alone, much less by specialists in alcoholism. The planning of action should involve, apart from the health sector, those other sectors that directly or indirectly have to do with the problems; education, trade, justice, transport, and communications, to enumerate only a few. This will of course require coordination.

Similarly, it is important that there should be consideration of and linkages with other levels. In particular, an attempt should be made to ensure that national policies are consistent with policies at local and intermediate levels. There are also advantages in developing policies coordinated with those in other countries, so that a country's programme to deal with alcohol problems is not undermined by actions taken by its neighbours or others. For instance, broader trade policies may either undermine or support national preventive efforts.

Political commitment is an essential ingredient in improving national responses to alcohol-related problems. In the absence of such will, it is extremely unlikely that effective policies and programmes to deal with alcohol-related problems can be implemented.

5.2.2 Mechanisms for action at national level

The Expert Committee on Problems Related to Alcohol Consumption (WHO, 1980, p.54) recognized that "because of the complexity of their causes and consequences, there is a need to consider the health, welfare, educational, social and economic aspects of preventive and management programmes as well as the total implications for the socioeconomic development of the community or country". The importance of establishing national instruments for the coordination of such efforts has been accepted in many countries in recent years and considerable experience is available on the development and working of suitable mechanisms (Moser, 1980).
Their functioning comes under the responsibility of a ministry of health in many countries, or possibly of a special unit, institute or commission attached to a ministry, or of a special governmental advisory body, which may eventually develop into a national institute. Several countries have established coordinating bodies with membership representing various branches and levels of government, in many cases complemented by voluntary bodies and sometimes by representatives of economic interests. In some countries, such bodies have been set up at sub-national level (e.g. within the separate states of Australia and the USA, and at provincial level in Canada). Examination of these varied experiences may be of value to countries newly considering the establishment of a national coordinating body.

Depending on the national context, a coordinating body may be empowered to take responsibility for investigating, carrying out or merely promoting the activities necessary for programme development. An early task of this body might well be to formulate an explicit policy statement or to consider the need to amend existing policies.

An essential basis for programme development is an initial review concerning alcohol use and problems in the population concerned, as set out in Annex 1. The national coordinating body may need to take the responsibility for preparing such a review or ensuring that an existing draft is made more comprehensive. Where the review is being undertaken for the first time, the preparation process may provide valuable experience in collaboration between a variety of disciplines, interests and power structures.

In ensuring continued review of the situation and follow-through into action, the central body may need to spend much time in consultation, explanation and debate and in securing agreement on recommendations. It may need to meet and overcome resistance at many levels from groups that may at first see their concerns as incompatible with health and social interests. It will have to ensure that programmes concerning alcohol problems are adequately linked with other health and development programmes. A major task will be to secure political commitment to the proposed programme development.

5.2.3 Options for action at national level

As was the case for the local level, the main approaches to intervention at the national level are described in Annex 7.

Considering the problem in a somewhat simplified way, it can be said that there are two basic strategies for achieving a reduction in the magnitude of the problems associated with alcohol: reduction of supply and reduction of demand. These two strategies are not mutually exclusive and, in fact, are complementary, but in accordance with the policy in each country the character and magnitude of the action can be more accentuated in one direction or the other.

The reduction of supply, that is to say of the availability of alcoholic beverages, to the population can be achieved mainly through legal, economic and fiscal measures that aim at diminishing production and importation of beverages, regulating the place, time and management of places of sale, regulating the minimum age for purchase, and regulating the alcohol content of the beverages, among many other measures. In addition, legal and police action is required to prevent illicit production, trade and consumption of alcoholic beverages.

In theory, it should be relatively easy to reduce the supply of alcohol and therefore the frequency of alcohol-related problems simply by applying the above-mentioned measures. In practice, many obstacles arise, such as the economic and fiscal constraints (reaction of the liquor industry, the amount of tax revenue) and those of a cultural and political nature (reaction of the population to the reduction of supply), which can neutralize any action attempted. In any case, there must be a consensus between the sectors involved (education, trade and industry, and agriculture), which is not always easy to achieve.

Reduction in demand for alcoholic beverages presupposes that it is possible to induce a change in the present and potential habits of consumers. Some legal and fiscal measures can have a certain influence on the reduction of demand, such as raising the prices through
taxes, penalization of alcohol intoxication in certain circumstances (for example, driving a car) and control of advertising that promotes consumption. But most of the measures to promote reduction of demand are educational and are oriented towards changing habits concerning quantity, frequency, context, alcohol content, and other circumstances concerning consumption of alcoholic beverages. As for measures likely to have widespread results, there is no complete evaluation of their effectiveness.

In any case, it is the national policy that will determine where the emphasis will lie concerning control of supply and demand.

Specific recommendations for national action to improve responses to alcohol-related problems were put forward in Mexico, Scotland and Zambia as a result of the Community Response projects carried out there. They are contained in the report on Phase II of the project.¹

5.2.4 Suggestions for developing action at national level

One suggestion that might be considered in developing a national policy on alcohol-related problems is to try to identify among documents and official statements what might be called an expression of implicit policy. There will also be a need to submit to decision-making groups all the available information that could serve as a basis for establishing such a policy, if none exists. Among such materials it is worth while emphasizing the various resolutions put forward by WHO where the problem is identified on the continental and the world level, and where specific recommendations are formulated concerning the topic.

The absence of policies is no reason for stopping or postponing activities concerning control and prevention of alcohol problems. On the contrary, it is frequently necessary to initiate activities that can contribute to the better identification of the problem and can assist decision-making groups in the establishment of such policies and the development of programmes.

Participation of the various sectors in developing and implementing policies to deal with alcohol problems cannot be left to the goodwill of their directors. Certainly it is necessary to count upon their personal cooperation, but in addition it is important to have more forceful means of getting action. A legal mandate, such as a law or a presidential decree, could give impetus to the programme but this is not enough. Experience in Latin America suggests that only when it has been possible to mobilize public opinion energetically has there been an appreciable and sustained response on the part of authorities and the private sector.

The existence of a national coordinating group can serve these ends, but the role of its members should not be limited to approval of recommendations on actions to be carried out by others. A definite agreement should be made by each sector as to the action it should ensure.

Establishing objectives and methods for a programme on alcohol problems of an inter-sectoral character needs to be undertaken systematically, otherwise it runs the risk of falling into anarchy. A listing of priorities, setting out the main and secondary objectives, may be helpful in this regard. For example, the desire may be to reduce the magnitude of problems in certain populations considered more vulnerable, or it may be thought that alcohol-related problems should be reduced in the general population, or in a determined geographic area. The establishment of the primary objective should be complemented by the determination of secondary objectives dealing with topics such as the extent of services that need to be set up or determination of progress to be accomplished in specified areas.

Although the treatment of the medical aspects of alcohol-related problems belongs to the health services, special mention should be made of the role that will have to be played by the social security systems in many countries. In a few of them, alcohol dependence is con-

sidered as an illness covered by the benefits of the system; in others this is not so and there is a need to promote a change in policy. There are no known cases where social security protects the family of the alcohol-dependent patient from problems related to his or her circumstances. In the programming of services on a national level, provision might be made to remove these obstacles and to prevent duplication of efforts when social security initiates activities for control of alcohol problems.

The financial problems arising in trying to develop a programme of prevention and treatment of alcohol problems can be very important. An expedient employed in some areas has been to devote part of the money from alcohol taxation to cover costs arising from the consequences of consumption. Apart from the contradiction implied by such a method of financing, a programme may find itself in an uncertain situation when dependent on funds derived from taxation, as such funds are frequently used for other purposes in cases of emergency.

In the Community Response project in Mexico, Scotland and Zambia, national meetings were held to consider the implications of the project for national action. Such meetings included representation from the local communities that participated in the project. As mentioned above, these meetings resulted in concrete recommendations that are being implemented or are being considered for implementation. In addition to producing recommendations, however, the meetings also helped to promote interest in alcohol problems among political leaders, government officials and the public at large. They also resulted in dissemination of useful information about alcohol problems. Thus, organizing and holding such meetings should be considered an important step in mobilizing national action to deal with alcohol problems. Suggestions as to how such meetings might be organized are contained in the reports on Phase II of the Community Response project.1

5.2.5 Relationship of research to action at national level

As is the case at the local level, research has a role to play at all stages of the process of planning and implementing national action to improve responses to alcohol-related problems.

An important first step towards policy determination or revision is an assessment of the current national situation on the basis of the information available, as set out in Annex 1. In addition, account will have to be taken of prevailing economic and financial interests, and the effects of policies on employment, especially in producing areas; religious and moral forces in the community, including variations between sub-groups; and existing and changing sociocultural influences affecting drinking patterns.

Once this is done, however, it will probably be necessary to carry out special studies to obtain missing information on the extent and nature of alcohol problems and of existing or potential resources for resolving them. Some of this information might be obtained through studies conducted in the local communities, but it may be desirable to design and carry out special studies at the national level as well. Such studies might focus on issues of particular concern at national level such as the availability and distribution of alcohol and national rates of alcohol-related problems. Nevertheless, the approaches described in Annexes 2 - 6 are applicable at this level as well.

When new policies are introduced at national level, it is also desirable to assess them. Again, the approaches described in Annex 8 can be adapted for doing so.

It should be understood that the flow of information should be continuous, and in fact provision should be made for setting up at national level, within the alcohol programme, an office for collection and processing of information on alcohol problems which would include statistical data produced in the system together with those produced through special investigations. In all cases, the information should be of use not only to planners, but also to the

centres from which they originate. The detailed information should be fed back to the data sources with indications of their use in evaluation at local level.

Collection of information, however, is not an end in itself but a means of improving the subsequent action. Therefore, there is a need for caution in programming the necessary action for diagnosis of the situation. It is not justified in a country with limited resources to undertake a detailed epidemiological study, involving disproportionate human and material resources. In such cases, one could consider, as an alternative, a study of the available statistics and an analysis of the information existing in the country. This does not deny the possibility of carrying out more detailed studies at a later time.

5.3 Improving Responses at Intermediate Levels

Although these guidelines have focused primarily on improving responses to alcohol-related problems at local and national levels, it must be acknowledged that responses are possible, indeed desirable, at other levels as well. For example, one could conceive of the value and need for appropriate responses to alcohol problems at regional, provincial and municipal levels. In addition, there are other points of intervention that may not coincide neatly with geographical boundaries, and yet provide opportunities for effective action to deal with alcohol problems.

For instance, the territories served by some hospitals may reach beyond the local community. Similarly, universities, work organizations, voluntary groups and professional organizations may define their spheres of influence in terms that cut across geographical boundaries.

It is thus important that the possibilities for intervention at other than local and national levels be recognized and taken advantage of. There are, no doubt, special approaches that could be used to do this effectively, but many of the ideas and suggestions put forward in these guidelines would apply as well. In particular, the close and ongoing relationship between research and action, which has been stressed throughout these guidelines, would apply to efforts at intermediate levels as well.

In this context, the desirability of links between the various levels should be stressed. Duplication can perhaps be avoided and economies effected if effort is coordinated between levels. For example, if local resources are not available to carry out full-scale investigations, it may be possible at intermediate or national level to develop models of the basic information required in communities, which could then be obtained locally.

REFERENCES


6. MONITORING, ASSESSMENT AND ADJUSTMENT OF POLICIES AND PROGRAMMES

It is not sufficient simply to plan and implement programmes and policies to deal with alcohol problems on a one-time basis. Not only are such actions likely to have some unanticipated consequences, but the situations in which they take place are unlikely to remain static (for example, there may be changes in the extent and nature of alcohol problems, or in sociocultural conditions). Thus, programmes and policies will need continual adjustment to make them more relevant, efficient and effective. In order to make such adjustments in an informed way, it is desirable to both monitor and assess programme and policy implementation. This section discusses some of the considerations involved.

6.1 Monitoring Policies and Programmes

In Phase II of the Community Response project, collaborators monitored the implementation of the interventions resulting from the first phase of the project. To assist them in this task, a monitoring protocol was developed. This protocol has been revised and is presented in Annex 8 of these guidelines. It could be a useful source of suggestions on how to monitor the implementation of programmes and policies.

Although it is not necessary to discuss the protocol in detail here, it should be noted that it draws a distinction between "monitoring" and "evaluation", the former being defined in terms of simply keeping track of events and activities and the latter in terms of systematic assessment of policies or programmes. Monitoring can and should be used as a way of stimulating and guiding improved community responses to alcohol-related problems. Specific techniques for monitoring, such as keeping a log-book and contact cards, are described in the protocol. The importance of describing policies and programmes and documenting the process of implementation is stressed as desirable preparation for more systematic evaluations.

The need to continue to collect the type of background information described in Annex 1 is also stressed. This implies a need to standardize methods of data collection and reporting within countries, or at least to ensure that differences are taken into account. International standardization would permit inferences to be drawn from comparison between countries that might be useful in evaluating alternative programme strategies. Contributions to standardization of terminology have been made through the International Classification of Diseases (WHO, 1978) and the WHO publication on alcohol-related disabilities (Edwards et al., 1977). Another publication (FFAS & WHO, 1977) provides suggestions for improving the collection of statistics on production, trade and consumption of alcoholic beverages and points to the need for supplementing these data with estimates of the magnitude of unrecorded production and consumption.

Special mechanisms may need to be established to ensure the continuing collection and transmission, by a central body, of information on such matters as prices of alcoholic beverages, number of selling places and opening hours, as well as on consequences of drinking, (e.g. death from cirrhosis, alcoholism and alcohol poisoning; admissions to health or other services with a diagnosis of alcoholism or alcoholic psychosis; arrests for drunkenness; drunken driving; and industrial absenteeism), together with information on relevant changes in legislation as well as changes in enforcement, and in diagnostic, admission and statistical recording practices, since this information is needed to assist in the interpretation of trends.

Where a coordinating body has been established, an important task would be to continue the work started by the initial review and to improve the coverage, the reliability and the ongoing collection and analysis of the information. This will provide the most useful basis for consideration — with the representatives of a variety of disciplines, interests, and levels of power — of the probable effectiveness of current policies and programmes, the need for changes of a kind and at a cost acceptable to the population, and the constraints that may have to be overcome in implementing proposals for change. Among the conclusions reached may be that there is a need for further investigation before taking action, or for testing proposed action on a limited scale. Investigators and even specialized research institutes have been funded in some countries for this purpose and to collaborate in policy development.
6.2 Assessment of Policies and Programmes

The word "assessment" is used here rather than "evaluation" in order to underline the possibility and desirability of gathering information on the effects of interventions even when formal evaluation is not possible. A broad range of approaches should be used in examining the effects of programmes or policies and not just those approaches that fit neatly into rigorous experimental or quasi-experimental research designs. Thus, for instance, much is to be learned simply by astute observation of programmes or policies in action.

All of the approaches described in Annexes 1-6 can be used to assess the implementation of programmes or policies and therefore most of the methodological and administrative considerations discussed there are pertinent here as well. There are, however, some unique considerations which deserve special mention.

Fortunately, they have received considerable attention in two recent WHO publications which are available on request. The first is a document entitled Health Programme Evaluation (WHO, 1981), which discusses assessment in the context of the overall Managerial Process for National Health Development (MPNHD). The second, entitled Evaluation of Drug Dependence Treatment and Rehabilitation (Klett et al., in press), presents the results and instruments developed in a WHO collaborative project to measure treatment outcome for different types of drug users receiving various types of treatment in different sociocultural environments, with emphasis on developing countries.

Without exhaustively summarising these reports, it should be noted that both stress the need for flexibility in carrying out evaluation studies and for adapting methods to fit existing circumstances. The importance of seeing assessment or evaluation as an integral part of programme development is emphasized as well. To quote the first document in this regard: "The very process of carrying out evaluation can be just as important as the conclusions drawn, since involvement in the process itself often induces a better understanding of the activities being evaluated, and a more constructive approach to their implementation and to any future action" (WHO, 1981).

Both documents also note the special difficulties of assessment research. One difficulty is establishing criteria for assessment, that is, technical or social standards against which actions can be compared. Sometimes such criteria cannot be quantified. In such cases, it may be necessary to resort to evaluation based on qualitative rather than quantitative assessment. The importance of involving all parties to the intervention programme in the establishment of such criteria has been stressed in another publication (Pilstedt, 1978). Other considerations in establishing criteria are also discussed in the WHO publications.

The first report also identifies and discusses the following components of the process of assessing health policies and programmes (WHO, 1981):

- specify the particular subject for evaluation;
- ensure information support;
- verify relevance;
- assess adequacy;
- review progress;
- assess efficiency;
- assess effectiveness;
- assess impact;
- draw conclusions and formulate proposals for future action.

These components also apply to evaluation of policies and programmes in the alcohol problems field.
There are many design considerations that apply particularly to evaluation studies. These are discussed in detail in numerous publications (e.g., Campbell & Stanley, 1966; Fildstead, 1978; Morris, 1978; and Weiss, 1972). The main types of design (experimental, quasi-experimental and non-experimental) are described in Annex 8.

Whatever the design used, however, a careful watch will need to be kept on internal validity and the issue of causation: one needs to be confident that the programme or initiative produced the changes that have been detected and that alternative explanations have been ruled out. The following threats to internal validity were identified by Campbell (1969):

a. history: events other than the programme occurring during the experimental time period that could account for the effects;

b. maturation: changes that occur naturally with the passage of time;

c. instability: unreliability of measures, fluctuation in sampling, autonomous instability of measures;

d. testing: the effect of previous administration of a test upon the scores of a second testing;

e. instrumentation: changes in the measurement instrument or persons doing the measurement that may produce effects on the measured scores or results;

f. regression artifacts: pseudo-shifts occurring when persons or treatment units have been selected on the basis of their extreme scores;

g. selection: biases resulting from differential recruitment of comparison groups;

h. experimental mortality: the differential loss of respondents from the comparison groups;

i. selection-maturation interaction: selection biases resulting in differential rates of "maturation" or autonomous change.

One characteristic of assessment evaluation research is that there seems to be more apprehension of such research among people involved than is the case with other forms of research. This is particularly true of administrators, clinicians or others directly associated with the programmes or policies to be assessed. Such apprehension is often based on a misunderstanding of assessment research by those involved in the group being studied and occasional misuse and misunderstanding of such research by those doing it. Such misunderstandings can be cleared up by open and honest discussion at the beginning and participation of all parties at all stages of the research. Such participation has the additional advantage of enhancing the probability that the findings will be used constructively.

The great importance of careful planning in carrying out useful evaluations or assessments of programmes has recently received considerable attention. Special methods have, in fact, been developed for what has come to be called "evaluability assessment". Such methods can help to ensure that evaluations or assessments are feasible and useful. A helpful reference describing such methods is Rutman (1980). Other recent books on evaluation are: Fildstead, 1978; Morris, 1978; Pasavac & Carey, 1980; Reichardt & Cook, 1979; and Rossi et al., 1979.

6.3 Adjustment of Policies and Programmes

There is little point in monitoring and assessing policies and programmes unless the result is some beneficial change. As suggested, the likelihood that this will occur can be increased by the way in which the research is carried out, e.g. by involving communities and decision-makers at every stage, and by careful planning. It can also be enhanced by the establishment of explicit mechanisms for doing so, such as setting up a continuing body repre-
senting various interests responsible for overseeing programmes and acting on assessments of them. The way the information is presented can also be extremely important, e.g. whether it is understandable to the relevant groups and points to obvious actions they might take or alternatives they might consider.

Unfortunately, knowledge about how to ensure the appropriate modification of programmes and policies based on monitoring and assessment is limited. It is hoped that more will be learnt from observing how past and future collaborators in community response projects attempt to do so.

REFERENCES


Annex 1

COLLATION OF EXISTING INFORMATION

1. Examples

Examples of collation of background information are contained in the final country reports on the first phase of the Community Response project as well as in the final international report. Other examples are contained in a compilation of national and sub-national profiles of alcohol use, alcohol-related problems and preventive measures, policies and programmes. There are some further examples of such compilations but they tend to focus on alcohol use and associated problems without bringing together more general information and are limited mainly to developed countries (e.g. Canada, 1981; DeLuca, 1981; McKelh et al., 1981). Thus, the Community Response project and the Prevention project are the primary sources for the material included in this annex.

However, a recent WHO compilation of existing health and more general information covering developing as well as developed countries is a useful reference (WHO, 1980). Part 2 of that report contains a country by country summary of background and health information and Part 1 provides a global analysis of these country profiles. Part 2 was used to supplement some of the material gathered by collaborators in the first phase of the Community Response project.

2. Methodological and Administrative Considerations

On the basis of the experience obtained in the first phase of the Community Response project, the following relatively discrete activities appear to be involved in collating existing information on alcohol-related problems: identifying what information is required; identifying sources from which it might be obtained; getting access to it; recruiting assistance in retrieving the information; training in data collection; collecting the information, preparing it for analysis, assessing its quality and coverage; and analysing and reporting the information. Each is discussed below.

2.1 Identifying information requirements

An important early step is to decide what information to seek. This will depend on the objectives of the study. The specific questions to be posed might be identified in collaboration with community members and local and national authorities. There may be some advantage in spreading the net rather wide, to permit collection of information whose relevance may not be immediately apparent. On the other hand, a fairly clear idea must be formulated of the probable uses to be made of the data, otherwise the volume of material may overwhelm the resources available for collation and analysis.

In any case, it will probably be desirable to collect data both of a general nature and more specifically alcohol-related at both national and local levels. Detailed outlines listing the type of information that might be sought under these four headings were produced during the first phase of the Community Response project and are available on request from WHO. A simplified outline for collating such data with special reference to prevention policies and programmes at national or sub-national (individual state or province) level was produced for the prevention project and is also available on request from WHO along with examples of completed profiles based on the outline (Moser, 1980).


2.1.1 National general background information

The main types of data to be sought under this heading would be geographic, demographic, economic, sociocultural, health and historical.

2.1.2 Local general background information

In addition to the types of information sought at the national level, it would be useful to compile local information on health, social welfare and educational agencies as well as police and judicial institutions. It is important to determine in what sense the areas chosen for study might be regarded as communities and how far they are representative of communities in other parts of the country. Such local general data can be used as a basis for selecting population samples, mapping areas to be allocated to interviewers and estimating time required for communications. It is also needed to provide a basis for making various calculations (e.g. per capita consumption and rates of alcohol problems).

From this beginning of the project, considerable attention should be given to exploring any specific structures that exist in the study areas for community discussion and action. While the other investigations are carried out locally, information should continue to be gathered about how such structures are used, who initiates and carries through any community action decided upon, what local or national assistance can be called upon for implementing action and what the constraints are likely to be.

2.1.3 National alcohol-related information

During the early stages of carrying out a project on national and community responses to alcohol problems, it is suggested that a short national review should be prepared concerning alcohol use, alcohol problems and the way they are being dealt with. This review could be based on relatively easily collated information in the first instance. A full inquiry would demand much time and effort but the detailed information could be accumulated throughout the duration of the project and desirably on a continuing basis thereafter.

It is proposed that the review should provide a brief historical description of the role of alcoholic beverages in the country (source and availability of various types of beverages, drinking customs and patterns, and attitudes to drinking, with emphasis on changing trends). Trends in the extent and nature of problems related to alcohol consumption could also be discussed. Some attempts might then be made to assess the impact of preventive and treatment measures and resources on current and past alcohol problems.

The detailed information could be collected under such broad headings as: (i) role of alcoholic beverages; (ii) nature and extent of alcohol-related problems; (iii) prevention and management policies and programmes; and (iv) assessment and research. Each of these topics is discussed below.

i) Information under the first heading would include statistics on the availability (production, importation, exportation) and distribution of alcoholic beverages (types, numbers and dispersion of outlets) as well as on percentages of employed populations engaged in such production and trade, the responsibility for production (State or private) and trends towards amalgamation of trade enterprises. For many countries it would be of great importance to gather any information that may permit estimates to be made of quantities of alcoholic beverages produced that are not recorded (e.g. illicit distillation, small-scale home production) which may account for a high percentage of the alcohol consumed.

Trends in average consumption levels for the total population and for the population likely to be drinking (e.g. over the age of 15 years) could then be computed and are likely to be useful indicators of changes in levels of alcohol problems. It is considered of particular importance to specify the ethanol content of beverages consumed so that average per capita consumption levels can be shown in terms of quantities (usually litres) of ethanol.

Reliable information on drinking patterns is likely to be scarce but some estimates or survey results may be available about proportions of abstainers and heavy drinkers in the adult population, beverage preferences, percentage of household budget expended on alcoholic beverages, and customary drinking occasions and settings.
ii) National information on the nature and extent of alcohol-related problems is also likely to be scanty but some data are probably to be found on morbidity and mortality rates from conditions more or less related to alcohol use. The most frequently used physical index of alcohol problems is liver cirrhosis mortality rates, which is sometimes broken down into alcohol-related and other etiology for recording purposes. If estimates of alcoholism are provided, the definition employed should be stated, since it is known that these vary widely. Accident rates may be available with indication of association with alcohol use, especially with respect to traffic accidents. A valuable indication of the burden on the community is the percentage of hospital admissions and beds devoted to these categories.

Data on social and economic problems in relation to alcohol use are likely to be even more rarely available, although statistics on arrests for public drunkenness may be maintained and scattered information may be found on alcohol-related occupational problems such as absenteeism and loss of employment.

iii) In preparation for the planning of future action, a compilation of information about existing policies and programmes concerning alcohol availability, use, problems, and responses to problems will be valuable. This will involve a review of general legislative provisions relevant to controls on production, trade and distribution, including advertising; of the existence of means for detection of alcohol problems and the provision of assistance, including both established services and voluntary or self-help efforts; and of the availability, and types of programmes providing information, education and training on alcohol problems. A description of any mechanisms in use for coordinating relevant policy and programme planning and implementation would be necessary for consideration of future proposals.

iv) Information on any established mechanisms that might be used for the assessment of national policies and programmes on alcohol problems would also be valuable for planning purposes. Included here would be research bodies and various national commissions that might include consideration of alcohol problems in their ongoing programmes.

The collaborators in the Community Response project realized that obtaining all of the information sought would be impossible. However, it was expected that the search might reveal where essential information was lacking but might be obtainable through special efforts. In fact, such gaps were identified. In addition, the information actually obtained provided a basis for a coordinated approach and further planning of preventive and treatment programmes as well as research. This use of the information can easily be seen in the country and international reports on the project.

2.1.4 Local alcohol-related information

Collection of readily available local information will serve in making a preliminary assessment of the local situation concerning alcohol and drinking in the areas selected for study, the related problems and the ways the community is dealing with them. Consideration would be given to the same topics as outlined for collection of national information. In the course of this work, a provisional list can be established of community agencies, groups and individuals involved in the local responses to alcohol problems. Such materials would assist in defining special local features and conditions that would have to be taken into account in later studies, and also persons and agencies that could assist a local project team in continuing research and action.

For some of the topics mentioned, more detailed information may be uncovered locally than nationally. Certain information may, however, be more difficult to obtain. For example, statistics about alcohol availability may be recorded nationally only and some ingenuity may be required to get local estimates, although the search may reveal additional important data. An investigation might first be made of the types and quantities of alcoholic beverages produced locally, both commercially and at home, with special attention to ethanol content and to contaminants and other harmful ingredients. It may be possible also to trace the amounts of various beverages coming into or leaving the particular area. An estimate can then be made of quantities of 100% ethanol available per person in the area. Where some data are available on persons likely to be drinking (e.g. percentage of males and females above specified ages) it is useful to be able to relate the total amounts available to such groups. It may be necessary to take into account population mobility and
periodic influx of people from outside the area. Once the basic data have been established, it will be important to set up mechanisms for following trends over the years.

This step can be linked to a study of the number, types and distribution of places where alcoholic beverages are available. In some localities, such places may be exclusively licensed commercial establishments, selling alcoholic beverages to take away or for consumption on the premises. In other areas, it may be important to seek information on unlicensed and possibly illegal outlets. Purchase and sale statistics are likely to be available for licensed outlets and can be used together with estimates on turnover in unlicensed places to calculate total availability.

In practice, it was found in the Community Response project that even less of the alcohol-related information desired was available at the local than at the national levels. Nevertheless the data collected did, in addition to pointing to gaps in knowledge, provide a framework for the preliminary assessment of the local situation.

In summary, drawing up outlines of the information to be sought was extremely useful to the collaborators in the Community Response project, even though some of the information was not available or of questionable quality. Thus, future participants in such a project would be well advised to produce such an outline based on their identified information requirements. They may find elements for their outlines in the ones used in the Community Response\(^1\) or Prevention project\(^2\).

2.2 Identifying sources

Once the data requirements are identified it is necessary to identify potential sources of the information. A number of sources might be of general use. These include coroners' offices, hospitals, vital and health statistics offices, ambulance and emergency services, doctors, insurance agencies, social welfare and assistance offices, the police, the courts, missions, industrial concerns, newspapers, and universities.

In many countries, all of these institutions keep some kind of records if only for controlling their own activities and for budget justifications. Often the institution will itself accumulate these records and publish them or at least compile tables.

Records are most likely to be kept of deaths, casualties, accidents, illnesses, disabilities, crimes, civil court proceedings such as divorces and claims for negligence, social welfare system transactions and "transfer payments" (unemployment, social security, disability payments, etc.).

In some cases, records will cover categories that are intrinsically alcohol-related (drunkenness arrests, diagnoses of alcoholism and alcoholic psychosis, drunken driving charges) or may be considered sufficiently strongly alcohol-related to be used as indicators (cirrhosis, vagrancy arrests). In some cases (fairly rare everywhere), there will be a specific notation of alcohol involvement (on the death certificate: "alcoholism" as underlying cause; cirrhosis "with mention of alcoholism"; blood-alcohol level at post-mortem; on the arrest record: "had been drinking"; blood alcohol level at arrest; in the court record: "habitual intoxication" as grounds for divorce.) In most cases, though, records will not be kept with such information on the involvement of alcohol, except for the intrinsically alcohol-related categories.

Records may be published and easily available, compiled for office use but not published, or simply filed and not compiled. The process of asking about the availability of and system used for the records is in itself often revealing of the way the community inter-

---


acts with alcohol problems. Researchers have noted how records are kept very differently in different cultural situations, in line with different assumptions about the nature and significance of alcohol’s role in social and health problems. It is worth writing a description of the systems for keeping alcohol-related data found in the various community institutions when the study of official and institutional statistics is started. Often those who keep or compile the records know a lot about their limitations: for instance, that alcohol involvement is recorded only rarely because it would exclude from insurance coverage, or would make a legal charge worse, etc. While such problems need to be taken into account in using data from records, they do not necessarily invalidate the data: at least the statistics will often serve as a low estimate.

A different kind of official information that is often available is statistics on the production and distribution system for alcohol, records of licences to produce or sell alcohol, of administrative actions taken against liquor law violators, of taxes paid on alcohol and other sales statistics, and of permits to buy alcohol or prohibitions on individuals buying alcohol.

In addition to records, some of the above-mentioned institutions also have books, journals or manuscripts reporting or summarizing relevant studies or statistics. Such information can also be sought and obtained from sources outside of the country, such as regional clearing houses, and regional or international offices of international organizations such as WHO. Reference has already been made to the WHO report on the world health situation (WHO, 1980). Some of the international organizations, including WHO, also have regional collaborating centres which may prove to be useful sources of data.

As well as searching for written materials, study teams may find it valuable to talk to long-term residents of the communities or to other knowledgeable observers, such as historians or ethnographers.

Less conventional sources of information may be discovered. For example, information from comparable communities or from the national level may be applicable to the project communities. It may also be possible to use information obtained by other approaches to supplement missing background information (e.g. characteristics of population survey samples might be used to describe the demography of study communities).

2.3 Obtaining access to information

Sometimes, even though potentially useful information exists, it may be difficult to obtain access to it because of its confidential nature or for other reasons. In such instances, it may be possible to obtain authorization from relevant authorities. This will involve convincing them of the value of the project as well as of the integrity of the project team and its ability to protect and to use wisely confidential or sensitive information.

Another difficulty about access to information might be its cost. For instance, aerial photography could be used as a way of mapping communities but it is likely to be prohibitively expensive. In such instances, the project team can only attempt to assess the value of the information in relation to other information needs and available resources and make the appropriate allocation of funds. This may result in bypassing some sources of information but may stimulate the search for less expensive alternatives, such as updating existing maps with the help of local staff or volunteers.

2.4 Recruiting assistance

Judicious recruitment of assistance may also be helpful in obtaining access to particular sources. Persons connected with the various sources of information may be willing to assist voluntarily in the project and would be able to act as advocates with respect to those particular sources or even as data collectors. This will, however, depend on arousing sufficient interest in the project in the community.

It may, however, also be desirable to recruit paid staff to assist with the data collection. In that case, there is a great advantage in recruiting people who already have connections with various sources of information and have some familiarity with how to draw upon them. Such staff need not, however, be highly trained.
2.5 Training in data collection

For the approach described in this section, only minimal training in data collection is required. It is necessary to establish clearly the types of information being sought and to discuss where the information might be obtained and how it can be requested and recorded. If the data collectors are to be asked to code the information as well, a codebook with unambiguous instructions will have to be set up. In addition, it will be necessary to watch over the process while the codes are tried out, and to set up a procedure to resolve cases where the code is in doubt.

2.6 Collecting information

Collecting the information sought can be a time-consuming, sometimes difficult but challenging enterprise, especially if it is used as an opportunity to involve and mobilize community members.

One difficulty that may arise is a discovery of an excessive number of cases in files that are of interest. In such an instance, it may be desirable to take a sample of cases, decide on a number of cases (N) needed for the planned analysis and define a population (P) of cases to be sampled from. If X is equal to P divided by N, then the sample must choose one case in every X cases. Normally, this is done by choosing a random number between 1 and X. Starting with the case thus chosen, every Xth case following will be coded.

Another difficulty that may arise is a lack of appropriate space in which data collectors might work in some place where information is available. It may be possible to reduce this problem by arranging for data collectors to work after hours or at slack times. Another solution might be to arrange to have copies made of the relevant materials or to remove them from the premises for brief periods. These solutions, of course, depend on the willingness of the staff of the agencies to accommodate the needs of the research team.

Some of the difficulties of collecting data might be avoided by brief early visits of project team members to potential data sources in order to make a preliminary assessment of the availability of information and its quality and to arouse the interest of the agency staff. In this way, the likely problems can be anticipated and strategies devised for minimizing them.

2.7 Preparing information for analysis

Quite often the information that is found is not in a form readily amenable to analysis. One possibility might be to record or make a copy of all of the information in the records and then to code it later. An alternative might be to decide in advance what data are needed and have research assistants abstract the required information directly from the records. These more limited data could then be coded by either the abstractor or project team members trained specifically for this purpose. It would be desirable to develop a set of detailed instructions for abstractors and coders.

An example of this alternative method is a project undertaken by the Traffic Injury Research Foundation of Canada. Either once a year or once every two years abstractors are hired for short periods of time to abstract information pertaining to alcohol involvement in traffic fatalities from provincial coroners' records. This information has been used to monitor alcohol involvement in traffic fatalities and to identify high-risk groups (Warren, 1978).

In some cases, the derived information may already be on computer tape or cards. If so, it is well to check that the records were coded so that they will be analysable. It may be necessary to return to the original records and recode them or to transform the machine-readable data so that it can be analysed for the purposes of the project. An original code book will be necessary for these purposes.

It may be found that data are simply not amenable to quantitative analysis. In such instances, the team can either discard the data or use it in an anecdotal or exemplary fashion. The value of the latter should not be underestimated.
2.8 Assessing quality and coverage of information

In all of the approaches to data collection described here, it is extremely important to assess the quality of the information obtained. This may be particularly true in the case of existing information when the team has had no control over its production.

There are several ways of attempting to determine the reliability and validity of existing information. One is to interview the people responsible for collecting the original information regarding the procedures used. Another is actually to observe how it is collected. A third might be to follow up a sample of persons on whom information was collected to try to determine its veracity. The internal consistency of the information can also be checked as can its consistency with other sources of information or other approaches to data collection. The use of such procedures can at least help to identify what the most reliable and valid items of information are likely to be. In presenting the findings, greater weight should be given to those data in which the project team has the most confidence. The potential limitations of the information should, however, also be indicated.

2.9 Analysing information

Existing information can be analysed usefully in a variety of ways.

A traditional form of analysis provides breakdown by sex, age, social class, ethnicity, marital status, etc. Often these traditional tables are not very helpful, however. Where possible, the joint relations of the demographic variables should be examined: sex by age by social class, sex by age by marital status, etc.

This kind of tabulation becomes more useful when it can be compared with something. One common comparison is with the community's total relevant population; for instance, the finding that men with no family or employment are over-represented in a particular agency's clientele suggests something about the local situation. Comparisons between the cases in one record system and those in another can also give a helpful perspective, for instance on whether these systems are serving the same or different strata of the population.

One classical form of study starting from an agency-recorded population involves utilizing matched cases from other records or from outside the agency-recorded population. In the latter event, of course, new data must be collected on the matched cases. What the cases are matched for must be very carefully thought out in terms of the intended analysis. A general population survey sample can serve the function of providing the matching cases either by picking them out or, more simply and safely, by running cross-tabulations or multivariate analyses controlling for the variables that matching would have controlled.

Official statistics can be analysed in conjunction with each of the other approaches discussed here. For instance, one study compared arrests for drunkenness in a city with survey respondents' reports of how often they got drunk, to calculate a risk of getting arrested for a given bout of drunkenness in different segments of the population. Other studies have compared the characteristics of problem drinkers identified in surveys with those in official statistics. One study looked at the incidence of drunken driving when a drinking law was changed, by observing patrons leaving taverns to drive home drunk before and after the law was changed, using also their drunken driving records obtained through observing licence-plate numbers.

Where time-series of statistics are available, correlational or regression analyses can be done very cheaply to indicate changes in community behaviour or response when conditions change. For instance, changes in drunkenness arrests can be related to changes in alcohol consumption and in alcohol control laws; changes in alcohol consumption can be related to trends in price and income to estimate the elasticity of local demand for alcohol. Time sequences of statistics for shorter periods can also be valuable. Data on alcoholic beverage sales by months will allow a description of seasonal variations to be made: data by weeks will show the effect of temporary changes in local conditions, such as a temporary shortage of alcohol due to a strike or disaster or conditions of civil disturbance; data by days of the week and hours of the day (e.g. of drunkenness arrests and drunken driving cases) will help fill in the picture of the regular rhythm of local drinking patterns.
The particular analyses done will, of course, depend on factors such as the objectives of the project team and the availability of data-processing equipment. It should be stressed that sophisticated analyses are not always required. Merely reporting the various statistics gives some useful information about alcohol problems and responses to them, allowing comparisons to be made between different problem areas and between one community and another. Comparing data for different times is a simple, direct way of looking at the effects or concomitants of changes.

Whatever approach to analysis is used, however, the primary emphasis should be on analyses that help to characterize the community and understand what is going on in it in order to suggest possibly worthwhile interventions.

2.10 Reporting information

There is no one best way to report information obtained from a collation of existing information. A variety of means of information transfer including reports, pamphlets, and oral presentations should be considered. One possibility worth considering would be to hold a workshop in which all the agencies and individuals who were asked to obtain background information are given the opportunity of reporting their findings.

The emphasis should be on making it available to interested parties as soon as possible. Collation of background information is in fact one approach that permits regular if not continuous feedback of information.

A particular issue might be the quality or completeness of the information. About the only thing the project team can do in this regard is to acknowledge explicitly the limitations.

In some cases, there may be reluctance to reveal a particular source. The project team might attempt to determine such attitudes prior to the release of any reports and take appropriate action to disguise the identity of the sources if necessary.

REFERENCES


Annex 2

KEY INFORMANT STUDIES

1. Examples of Key Informant Studies

Key informant approaches have been used extensively by anthropologists in developing countries. They have only recently, however, been applied to the study of health conditions such as mental disorders or problems associated with the use of alcohol. An example of study of the former as applied to a sub-group of the population is a collaborative study carried out in seven developing countries to determine how mental disorders were perceived in communities, what reactions to them were like, from whom help could be sought and what cases existed (Wig et al., 1980). Alcohol problems were included in two of the countries as one of the areas of inquiry.

The project on Community Response to Alcohol-Related Problems also used a key informant approach to study a sub-group of the population, namely clients coming to the attention of community agencies. A sample of agents were interviewed to determine, among other things, the characteristics of people with alcohol problems coming to their attention, their own responses to such people, their knowledge and training about alcohol problems and their suggestions for improving responses to such problems.

Recently, reports have been published on two somewhat different key informant approaches to the study of alcohol problems in whole populations which have implications for developing countries.

One used the so-called Jellinek method in Mexico, Honduras and Canada (Smart et al., 1980). The method involved gathering data from groups of informants who met for one or two hours to discuss the answers to questions about drinking within their own occupational group. A manual describing this approach in detail has recently been published (Liban & Smart, 1980).

The other was developed and tested in several Canadian communities (Murphy et al., 1979). A sample of persons drawn from a voters' list were asked to identify a list of 20 or more people whom they knew in the community. Inquiries were then made about their health conditions, including "... trouble because of drinking within the last year". Additional questions were asked about those individuals with problems. The information collected in this way was then used to estimate the magnitude of alcohol-related problems in the study communities.

The discussion of methodological considerations in the next section will draw on these examples, especially the Community Response project and the Jellinek method.

2. Administrative and Methodological Considerations in Developing a Key Informant Study on Alcohol Problems

2.1 Planning design

The general research design will depend largely on the objectives to be pursued and the policy and programme-relevant questions for which answers are to be sought. It is highly desirable for such objectives to be defined in collaboration with relevant potential users of the information.

---

If the main objective involves obtaining information about alcohol use or problems in the population as a whole, designs similar to those used in the last two above-cited examples (Liban & Smart, 1980; Murphy et al., 1979) might be appropriate. If, however, it is intended to obtain information about sub-groups in the population, designs like those used in the first two examples (the Community Response project and Wig et al., 1980) might be considered. The advantages of the designs used in the Jellinek approach and the Community Response Agents Study over the other two might be the greater depth of information obtained on alcohol problems. On the other hand, the other two approaches may have the advantage of providing information about other problem areas at the same time and perhaps at lower cost if they could be done in collaboration with people working in other fields.

2.2 Hiring core staff

The considerations here might be the same as those involved in doing a general population survey or a special population study (see Annexes 4 and 5).

2.3 Instrument construction

It may be useful as a first step in constructing instruments to list the areas to be covered. For example, in the Community Response Study on agents, it was suggested that the following areas be covered in an interview with agents:

i. their conception of the way alcohol-related problems are manifested to the agency, e.g. in association with destitution, aggression, head injury, etc.;

ii. number and percentage of clients manifesting such problems over the previous month (for each category of client separately);

iii. recorded information on such clients (for each category);

iv. demographic characteristics of such clients (for each category), to include: sex, age, occupational status, place of residence, marital status;

v. source of referral of such clients (for each category);

vi. services offered such clients (for each category);

vii. disposal of such clients, including agencies to which referred (for each category);

viii. staffing structure of agency;

ix. designation of respondent.

Similarly, for the Jellinek method, a list such as the following one might be appropriate:

i. quantity and frequency of consumption of alcohol in the community;

ii. age of onset of alcohol use;

iii. drinking with meals and between meals by both men and women;

iv. customs concerning drinking, e.g. at festivals, with visitors, at work and sporting events;

v. attitudes toward drunkenness among both men and women (e.g. avoidance of their company, reluctance to marry them);

vi. characteristics seen to define drunkenness;
vii. customs about drinking at work;

viii. attitudes toward non-drinkers;

ix. need for treatment facilities.

The next step would be to draft questions that seem likely to capture the information wanted. For example, to determine the conception of the way alcohol problems are manifested to the agency, agents might be asked: "Which of the problems you deal with here are commonly associated with alcohol?" as they were in the Community Response project. Similarly, to determine the quantity of alcohol consumption in the community, respondents might be asked: "In your opinion, how much beer and/or wine and/or liquor would most men (women) drink on an average drinking day within the past year?" as was done in the Jellinek method studies.

An alternative to designing new questions might be to draw on questions used in similar studies. Investigators may, for instance, wish to consider questions used in the Community Response Study or in the Jellinek method studies in constructing their own schedules. These questions would, of course, have to be adapted to fit the particular circumstances. For example, in a study using the Jellinek approach in Mexico, the drinking of pulque (the most popular beverage) was included rather than wine, which was more appropriate for the European population studied originally by Jellinek. Similarly, in a study in Honduras, the questions regarding wine drinking were omitted and some about aguardiente, a spirit distilled from sugar cane, were added.

Once a draft schedule is designed, it is useful to pre-test it on a small number of respondents of the type desired for the study. This may result in modifications to the instrument, for example, changes in wording and question order.

2.4 Sampling

Although the general principles of sampling are the same for a key informant study as for other approaches, the actual design may of necessity be quite different. For example, in the Community Response Study among agents, before selecting agents to interview, it was first necessary to select agencies. This required preliminary investigations to determine what agencies existed in the communities of concern. Where there were too many, it was necessary to select from among them. In doing so, the following criteria were employed: accessibility of the agency to enquiry, its relevance to the project objectives, the comprehensiveness of its recordkeeping, the availability of other information relating to the agency's working and its uniqueness. This meant that with the exception of police and casualty departments, where interviews were conducted in all three countries, the type of agency and specific agencies selected differed. For example, in Zambia, agents were selected from rural and urban health centres, from staff of a housing project, from among community development officers, and from among chairmen of the local branch of a political party. Equivalents did not exist in the other two countries. Thus, persons embarking on such a project afresh will need to determine the most appropriate agencies from which to select key informants, possibly using the above-noted criteria.

Once agencies were selected in the Community Response project, it was necessary to design a strategy to select specific persons for interview, as some agencies had a number of people working for them. The collaborators decided that consideration should be given to including agents with different lengths of experience in the agency, having different responsibilities and of different ages and sexes. Whenever possible, the senior person in an agency was interviewed. While such a strategy does not ensure that agents selected are representative of the agency concerned, it does help to produce a range of views about the alcohol problems coming to the attention of the agency concerned. Of course, it would be preferable if the key informants interviewed were in fact representative of the persons working in the agency and some attempt might be made to ensure that this is the case in future studies.

In the Jellinek studies, informants were selected in a manner reflecting both the major socioeconomic differences and the rural/urban differences of the region or country being surveyed. Thus, a first step in drawing a sample was to determine the occupational distribution of the population from census and other information. Groups of about five or six
people were then selected, the number of groups in each occupational type being proportionate to the size of that group in that population. Groups were comprised of persons of the same sex and occupational classification as reflected in the population figures. Specific participants in groups were selected with the help of various community members (including hospital personnel, local political leaders, teachers, priests, group leaders), or local newspaper articles.

2.5 Development of field procedures

As is the case with other approaches, it is important to provide data collectors in key informant studies with appropriate instructions. This was in fact done in the Community Response project. The instructions covered who should administer the interview form, a description of the specialized and non-specialized form, suggestions regarding coding, suggestions regarding selection of informants, the need for distinction between answers relating to the agent's personal experience and those related to the agency as a whole, the suggestion that the interview be recorded, the suggestion that it be augmented by group discussion, and a statement of the aims of the interview. Other information can of course be included in either written or oral instruction.

Similarly, instructions for group leaders were prepared for the studies using the Jellinek method and are published with the manual (Liban & Smart, 1980).

2.6 Hiring and training field staff

The principles for hiring and training field staff in a key informant study are similar to those for other approaches. However, the Jellinek method involves some unique considerations because of the necessity for field staff to lead discussion groups. In the studies carried out in Mexico, Honduras and Canada, leaders were selected to be of the same sex, occupational category and age as group members. They were also required to be able to read and write. They were selected for their apparent ability to recruit others for discussion groups and for their ability to control and direct discussions.

Each leader attended a training session during which the questionnaire schedule was discussed in detail and the trainees received any special instructions pertaining to their occupational group. Group leaders were also encouraged to recruit participants for discussion groups and were given instructions as to what to look for. In the Honduras study, leaders received about ten hours of training prior to convening the group. Some leaders were paid for their participation as were some group members if they had to miss work in order to participate.

2.7 Pilot testing and revision

Pilot testing is as important for a key informant approach as it is for others. Again, it is desirable that such testing be done in circumstances as close to the "real thing" as possible. In an agency study, this would for instance involve trying the schedule in a variety of agencies with a variety of agents.

Once more it is important to leave enough time to make appropriate revisions. On the basis of the pilot study of the Community Response Study it was, for instance, found desirable to develop somewhat different forms for specialized and non-specialized agencies. It was also considered desirable to ask more open-ended rather than fixed-choice questions in order to allow freer expression of views.

2.8 Carrying out field work

There are some special considerations to be kept in mind when carrying out field work in studies using the Jellinek method. These involve the scheduling and conduct of the discussion groups.

Sometimes it is extremely difficult to schedule certain groups such as those comprised of farmers and farm workers. This problem can, however, be resolved by understanding the work patterns of the particular group and fitting the meetings into those patterns. For example, it is sometimes possible to schedule meetings with farmers early in the morning or in the fields at lunchtime.
This flexible scheduling can lead to considerable demands on the time of investigators. In addition, in some rural areas, it is necessary for investigators to take sufficient time to become acquainted with the community and to become known and trusted by residents. For example, in the study in Honduras, there was some suspicion in the community that the investigators were from the tax department. While there is no easy answer to this problem, perhaps forewarning the investigators can be helpful in preparing them or in selecting those who are willing to make the required efforts.

With regard to the discussion groups themselves, the meetings tended to be held in homes of group leaders, although they might be held anywhere, including public meeting places and even in the fields. Meetings lasted between two and three hours.

At these meetings, the group endeavours to complete the questionnaire under the direction of the leader who also records the responses. The group members are instructed to answer the questions only as far as the occupational group and geographical region represented by that group is concerned. They are instructed to consider the occupational category as a whole, and the questions are designed to elicit accounts of behaviour by "the majority of adult men", "a large majority", "only a few", etc. The discussions are intended to be spontaneous and the objective is to reach consensus on each question. If such consensus cannot be reached, then both a majority and a minority viewpoint are recorded. Leaders are encouraged to obtain responses from all group participants and to prevent the domination of discussion by any one.

2.9 Data preparation and processing

Considerations involved in data preparation and analysis are similar to those involved in other approaches. Key informant approaches, however, may be particularly amenable to less sophisticated methods of data preparation and processing than other approaches such as a general population survey. Hand tabulation might be a satisfactory way of proceeding.

2.10 Data analysis

Data analysis may also be less complicated than with other approaches if fixed-choice questions are used. On the other hand, if a lot of open-ended questions are used, quantitative data analysis may be difficult. In such cases the information might be used anecdotally or content analysis techniques might be applied. It may also be helpful to approach the data collected with a number of synthesizing questions. For example, the collaborators in the Community Response project found it helpful to look at the interviews with the agents keeping the following general questions in mind:

i. What are the agents' perceptions of the problem?

ii. Is there sensitivity to alcohol problems in this agency?

iii. Is there access to and use of other resources?

iv. Is there a sense of competence in dealing with alcohol-related problems?

v. Are alcohol-related problems actually dealt with by this agency?

Attempts were made to characterize those agencies in which several agents were interviewed in terms of these questions, or at least to consider the level, variability and coherence with which these dimensions were expressed within particular agencies, while it was recognized that a different selection of agents within the same agency might reveal a different configuration.

2.11 Writing reports and disseminating results

There are no special considerations pertinent to key informant studies in relation to writing reports or disseminating and using results.
REFERENCES


Annex 3

OBSERVATIONAL STUDIES

1. Examples of Observational Studies of Drinking

Although it was suggested that collaborators in the Community Response project might carry out observational studies, they were not able to do so because of lack of time, resources or trained personnel. They did, however, make informal observations, which helped them in the design of other approaches to data collection as well as in the interpretation of findings. In addition, two background papers on observational studies were produced for discussion and use by the collaborators.2,3 These papers contained numerous examples of pertinent observational studies and also provided guidelines for carrying out such studies. They form the basis for the material presented in this annex.

2. Methodological and Administrative Considerations in Carrying out Observational Studies of Drinking and Alcohol-Related Problems

Among the main points to be considered in carrying out observational studies of alcohol consumption and associated problems are the following: defining objectives; deciding what is to be observed; selecting places to observe; deciding how to observe; recording, analysing and assessing information; dealing with ethical issues; and training observers. Each will be dealt with in turn in this annex.

2.1 Defining objectives

As is the case with other approaches, it is desirable to define objectives carefully and at an early stage. Possible general objectives of observational studies might be:

i. to understand the normal patterns of drinking in communities and the range of variation from these norms;

ii. to understand the nature of alcohol-related problems in the community;

iii. to understand formal and informal responses to such problems.

Possible specific objectives include:

i. to describe drinking patterns in selected public places in the community;

ii. to describe incidents involving problematic behaviour in public places;

iii. to describe informal reactions to such behaviour;

iv. to describe the actual operation of agencies dealing with such problems.


2.2 What to observe

Some likely objects of observation are:

a. Who is present. The approximate age, sex and estimated social status of individuals who are drinking should be noted. Such concepts as "social status" should be characterized in terms relevant to each community. It may also be important to record some information about people present but not drinking, including those who are serving.

b. Where does drinking occur. Drinking in a men's club may be different from the same individual's drinking in a restaurant or at home. Thus, if there are specific places for drinking, these should be described in detail. Where else does drinking take place? Where should one not drink?

c. How do people drink. It may be important to note how often and for how long an individual drinks, whether a drink is swallowed in a single draught, or in a given number of sips, or whether verbal or non-verbal toasts accompany drinking. It may also be important to note whether people sing while drinking, or whether they fight or become sexually aggressive. In what type of drinking groups do these behaviours occur?

d. What do people drink. Even in communities where only a single beverage is customarily drunk, it is important to pay attention to describing that beverage, rather than simply naming it. Some details on the manner in which it is prepared will be useful, including, for example, the grain, food, or vegetable employed, and whether it is distilled or merely fermented.

Another factor of great relevance is the alcoholic content of the beverage. In communities where facilities are available for chemical analysis, this information should be obtained.

Also of relevance is the volume being drunk. While it may be useful to record behaviours in terms of the units actually used in a given situation, analysis and interpretation will be difficult if it is not possible to relate such units to cross-culturally standardized measures. The cost or value of a drink should also be stated, if possible in terms that render it comparable to the value of other commodities.

e. When do people drink. It is important that observers note the time of day in their field notes, in order to check whether people drink in different ways or perhaps even abstain from drinking during specific periods. It is to be expected that such times differ from place to place, even within a single community, even as they may differ with respect to one beverage or another or for different categories of drinkers.

While the focus of a particular inquiry may be drinking or alcohol, it is crucial that field workers strive always to pay attention to those aspects of behaviour in the context of the overall special cultural situation. Drinking and alcohol must, in other words, be thought of as intimately linked with whatever else people may be doing or talking about. It is also important to emphasize that observational studies should be concerned not merely with extreme or problem-related alcohol use but also with alcohol use that is normal for a particular community. Only in this way can an appreciation be gained of the relationship of alcohol to other foods and drugs, how drinking functions in relation to other activities and institutions and how such activities and attitudes are learned and sanctioned.

Many practitioners of observational research regard the opposition of breadth and depth as spurious and strive to maximize both. While it would be unrealistic to expect that the observer should note everything, it is neither absurd nor unrealistic to expect that any conscientious observer would strive to come as close to that ideal as possible. A rule of thumb to be applied in this connection is that it is better to err on the side of inclusiveness than of exclusiveness, since it is always possible to delete data that are found to be redundant or irrelevant, but impossible to reconstruct data that have not been reported.
2.3 Where to go to observe

It is important that observers go where the data can be efficiently collected. In so far as the focus of research may be on patterns of behaviour associated with the act of drinking, then clearly places where drinking occurs will be especially important. Assuming that drinking is one of the most important things to be observed, it is clear that the strategic sites will differ from one community to another. If various social classes, ethnic groups or other sub-populations within a community have strikingly different patterns of recreation, it may well be necessary to observe drinking in a number of different settings.

Thus, as a preliminary step, perhaps as part of the collection of background information, investigators will need to look first at the range of drinking places and try to select fairly typical examples for study.

2.4 How to observe

Questions will inevitably arise as to whether researchers should intervene in the events under observation or remain as detached onlookers to such events. Observational researchers regard this as a false dichotomy and acknowledge the advantages implicit in both techniques, depending on the situation that is being studied and the kind of data sought. An observational researcher must always be prepared to adjust in order to take advantage of exceptional opportunities as they occur. In extreme cases, however, intervention or participation may be disruptive to the point of significantly altering the behaviour to be observed, alienating people who resent such intrusion and placing both the researcher and the project in jeopardy. While some intervention is clearly inappropriate, there are degrees and kinds of intervention, some of which may not be merely tolerated but actively enjoyed. Whether an observer intervenes or not, no attempt should be made to disguise the fact that he or she is observing.

There are a number of helpful rules for participant observers to try to follow. Some of the main ones are: do not bother people; do not take notes when with people; try not to offer your own opinion; avoid asking questions; never criticize people; offer some information about yourself when asked; avoid excessive contact with any one or a few people; conduct observations at various times; and do not observe for too long a period at once (Rosenthal et al., 1980).

It is important that those engaged in observational studies have a common understanding about the categories or types of situations and responses being investigated. So, for example, if there is an interest in comparing quantity and frequency of alcoholic ingestion, observers in each community should pay special attention not just to counting drinks but also to measuring the quantity of individual drinks. The reality of differences in detail among counters should not obscure the search for legitimately comparable classes or kinds of data.

A researcher employing observational data is attempting to learn the rules by means of discerning patterns in behaviour. It is, however, often useful to test one's understanding of the rules by questioning a member of a group who "knows the rules". While interviewing is a skill basic to a number of the methods discussed in this document, a few points with respect to this activity, as it relates to observational studies, are pertinent. It should be recognised, for instance, that interviewing is itself a skill that can be improved with practice and that can and should be tested before observers enter the field. Considerable attention will need to be given to the form in which questions are asked; direct questions, while acceptable in some cultures, are considered impolite in others. Leading questions can easily distort responses, while broad statements may often elicit highly detailed responses.

---

2.5 Recording information

It is crucial that interviewers be faithful to their informants in recording and reporting the data. Many beginner interviewers make the error of not merely paraphrasing but actually summarizing and even sometimes interpreting what has been said. Although it may be difficult at first, it is desirable for observers to try to get quotations verbatim. Recording the observations immediately following the events is helpful in this regard.

A decision will need to be made as to whether detailed notes are to be taken during the course of the observation or following observation. At least two factors will be relevant to such a decision the probable reaction of the community to note-taking and the personal attitude of the observer. In the event that an observer decides for whatever reason not to take notes in the setting of the observation, it will be important to ensure that an accurate record is retained. It may be advisable, for example, to establish the habit of getting away from this setting from time to time in order to make brief notes. With conscientious practice it is often possible for an observer to reconstruct in considerable detail long conversations and sequences of behaviour on the basis of a few notes written to trigger the memory. Drawings of the setting may also be helpful in this regard. Practice in recall should be part of any training programme provided observers, no matter how brief. Trainees should be tested on their skill at remembering details.

Rough notes or reminders need to be transcribed and amplified before their meaning is forgotten and notes should be individually marked so that they can be readily identified and put into context. The fact that photographs or other documentary evidence were collected in response to a particular situation should be recorded in such notes.

In typing or dictating notes, it is sometimes helpful to map out the main observations in point form first. Dictation should be "free flow" with interpretations forming separate paragraphs. It is probably not necessary to worry about grammatical or stylistic accuracy as editing could be done later. Recording should be concrete and in as much detail as possible. It should be noted if the observer is not sure about certain details. Identifying information should be recorded for each set of notes. This might include the name of the observer, place of observation and time of observations.

Following the recording of observations it is sometimes useful to discuss them with colleagues. In doing so, observers should attempt to raise questions about the truth, typicality and interpretation of the events observed. Any sensitive situations that might jeopardize field work should be stored.

2.6 Analysing information

There is no question that observational data cannot be as quickly analysed in quantitative terms as data obtained through many other approaches. This is less of a problem than might be imagined, however, for two reasons:

i. The data can be analysed and grouped into a limited number of categories, classes, or types, which in turn can be used as bases for quantitative analysis. Although this requires some study after the data are collected, the time/labour inputs are probably no greater than those invested at an earlier stage with other methods, e.g. when one devises pre-coded categories such as are listed in forced-choice responses on survey instruments (questionnaires). Ex post facto analysis has the additional advantage of reflecting local realities, some of which might not have been anticipated in the original design of a standardized research instrument.

ii. Even if one chooses not to quantify observational data, their potential for providing insight and illustrative information is enormous. In other words, the investigator should recognize that such information can fruitfully be quantified, but also that it can be valuable without quantification.

2.7 Assessing information

In the latter regard, it is desirable that observers attempt to analyse the information obtained throughout the process of observation. Informal discussions with colleagues may be
particularly helpful. Ideas regarding the meaning of interpretations of events should be
recorded.

Critics of observational studies tend to emphasize the softness and imprecision of
qualitative data. The imprecision of qualitative data is contrasted with quantitative, (i.e. numerical)
data, the latter being thought more important or more scientific. While the issues of reliability and
validity are clearly relevant to observational research, the deficiencies of the latter are frequently
over-stated. So, for example, those few research workers who have addressed the question of
reliability in observational studies have reported a degree of agreement that would surprise
many unfamiliar with such approaches.

Nevertheless, investigators who use this approach need to assess the validity and
reliability of the data obtained wherever possible. Observation studies in which such
assessments have in fact been made are cited in Heath¹ and might be used to suggest
suitable techniques.

2.8 Ethics

Although one advantage of the observational approach is that it generally does not
create any risks for the subject of the research, there are certain risks inherent in the
way data are used. These can be avoided by employing anonymity, pseudonyms and other such
deVICES in published reports. According to Heath: "Although the concern with privacy and
Confidentiality may be much greater in some cultures than in others, it is a good general
rule to err on the side of greater (rather than less) protection of the subject in these
terms. This is especially true when some of the behaviour, whether verbal or other, might
be considered immoral, illegal, politically or economically sensitive, and so forth."¹
There is, however, no need for observers to be preoccupied with this issue nor of securing
the subjects' consent, except perhaps where photographic or other records are being made for
public display or blood samples taken or other intrusions on privacy are made.

2.9 Training observers

Training might consist of familiarizing potential observers with the considerations
noted here. A more exhaustive presentation of practical advice on the training of observers
for studies on alcohol is contained in Heath¹ which is available from WHO on request.

REFERENCES


Annex 4

GENERAL POPULATION SURVEYS

1. Examples of General Population Surveys on Alcohol Problems

General population surveys on alcohol use and problems were reviewed by Room in 1977. That review cited a number of examples of general population surveys focused primarily on alcohol use, and sometimes on problems associated with its consumption. However, most of the surveys were carried out in developed rather than developing countries. In fact, the review cites only one study carried out in a developing country.

Slightly more recently, Johnston (1980) reviewed general population surveys of drug abuse. This review cited a few general population surveys from developing countries that covered alcohol, along with other drugs, although alcohol was generally of secondary concern.

Thus, experience with general population surveys on alcohol use in developing countries is somewhat limited, especially surveys focusing primarily on alcohol use. The experience obtained in Mexico and Zambia during the first phase of the Community Response project is therefore particularly important and will be a major source for the discussions in the following section. The reviews by Room and Johnston will also be drawn upon liberally.

2. Methodological and Administrative Considerations in the Development of General Population Surveys on Alcohol Problems

2.1 Flowchart of a typical study

Johnston (1980) presented a flowchart (see Fig. 2) of a typical general population survey in his review on drug abuse surveys. This flowchart, in addition to depicting the major steps in carrying out such a survey, shows their sequential interdependence. According to Johnston: "It shows, for example, that interview development, field procedures development, and the sampling process all may be proceeding simultaneously, if sufficient research manpower is available. However, the actual data collection may not start until all three of those sequences are complete." The chart can usefully be applied to a survey on alcohol problems and will therefore be generally followed here.

2.2 Planning of general research design

Considerations to be taken into account in the planning of general research design for a general population survey include: specifying the objectives and rationale for the survey; assessing available resources; and choosing the appropriate design.

It is highly desirable to determine at an early stage what specific objectives are worth pursuing in carrying out a general population survey on alcohol problems. This will involve deciding what issues should be investigated, what questions (e.g. from the list in section 3 of the main report) need to be covered and what kind of results might be expected. In arriving at such decisions, it is extremely important to involve members of the community, local leaders and national representatives or anybody else who may be a potential user of the results of the survey. Although this process may be time-consuming, it is highly desirable as it will help determine how much support can be expected from the community and what the likelihood is that the findings will be implemented. Spending time defining the objectives is also important because the final discussions will influence a number of subsequent decisions about design (e.g. whether to draw a sample, how large a sample to draw, what kind of sample to draw and what information to seek in the survey).

FIG. 2. FLOWCHART OF A TYPICAL STUDY

Planning of general research design
Hiring core staff
Development of field procedures
Hiring and training interviewers
Designing the sample
Securing data for sampling
Drawing the sample

Development of interview
Pre-test of interview
Pilot test of interview and field procedures
Revision of interview and field procedures

Data collection in the field
Cleaning and editing interviews
Keypunching data onto cards
Building computer files
Analysing the data
Writing the report
Dissemination and utilization of results
Assessment of resources is also an important early activity that will have inevitable consequences for later on. Resources in this case include not only money but technical expertise, field staff resources, data available, and community and institutional support available. Determining the availability of such resources is discussed in detail in Johnston (1980), but it might be noted that no general purpose cost estimate fits all general population surveys because of variations in the size and complexity of studies and fluctuations in the costs of such factors as labour, computer time and sampling. As a rough indication, however, it might be mentioned that a Canadian household survey was estimated to cost from US$ 80–100, a Mexican survey to cost US$ 20–30 and a survey in Pakistan to cost US$ 10 per completed interview.

There are a number of types of design and methods that might be chosen. The appropriate selection will depend on the particular objectives as well as available resources. Some of the main choices are between single cross-sectional surveys and repeated cross-sectional surveys, between interviews, mailed questionnaires and self-administered questionnaires, and between specialized and non-specialized surveys.

The main advantage of repeated surveys over single surveys is that the former allow assessment of the directions and rate of change in alcohol consumption and problems, as well as changes in the characteristics of the drinkers, problem drinkers, and contributing factors. They also permit study of the impact of planned interventions or historical events. They are, however, much more costly than single cross-sectional studies and require greater commitment of time and personnel.

The major advantages of the interview over the self-administered questionnaire or mailed questionnaire are: literacy is not necessary; the interview tends to get higher response rates; interviewers can ensure that questions are clear and well understood; complex information can be collected; respondents are allowed free expression; spontaneous answers can be recorded; the correct question order can be pursued; and the influence of others can generally be excluded. Disadvantages include: heavy time requirements; the need for more trained personnel; suspicious respondents; variation in interview situations; interviewer bias and error; and higher costs.

The non-specialized survey has some possible advantages over a specialized survey, including lower cost and less technical expertise required from the alcohol team since others will draw the samples, train the interviewers and do the field work. On the other hand, it has the following comparative disadvantages: only a limited amount of information on alcohol use can be collected; coordination between more collaborators is likely to be required; having alcohol questions in the same interview with questions on other subjects may have a detrimental effect on answers to one or another section; and control over the quality of the survey rests mostly in the hands of others.

There are ways of overcoming some of the difficulties inherent in each approach, however. For instance, some of the costs of a specialized survey might be reduced by the choice of methods (e.g. a self-completion questionnaire might be used instead of an interview, or cluster sampling could be used in order to reduce travelling costs). Similarly, some of the limitations of a non-specialized survey may be reduced if the main study deals with a closely related subject, like drug abuse, or health status. In such a case, compatibility in purposes, design and content is more likely.

One issue that should be considered during the design phase is ethics. Although discussed in general in section 4 of the main report, the following points deserve consideration in relation to a general population survey: all questionnaires bearing the names of subjects should be stored in a secure place; access to these questionnaires should be limited to the research team; an assurance of confidentiality should be given to all persons interviewed; and no material transmitted from one country to another should bear the name of subjects. Appropriate ethical clearance should of course be obtained.

2.3 Hiring core staff

One special consideration in hiring core staff for a general population survey has to do with the possibility of using an outside organization to conduct the survey, as was done in one of the countries participating in the first phase of the Community Response study. If
there is a readily available unit experienced in carrying out general population surveys, there are some advantages in using it as it obviates the need for the project team to train or acquire their own technical experts for this purpose. An existing organization may also have contacts that might facilitate a study as well as more background information needed for sampling. Use of such a unit, however, has the disadvantage of taking the study out of the hands of the project team. It may also preclude the possibility of involving community members in a more active way in the collection of the data or of providing training experiences for people. Use of an outside unit may also affect the ability of the team to influence policies or programmes. Thus, choosing to use an outside unit is a decision that must be entered into carefully. One alternative is to use such a unit only for very limited parts of the survey (e.g. drawing a sample). Further considerations in selecting an organization to conduct the research are discussed in Johnston (1980).

If a population survey is to be carried out by the core staff, they will need to have some knowledge and experience of such surveys, although not necessarily on alcohol problems. Social scientists are most likely to have this sort of background. Local university departments of sociology, anthropology or psychology are likely sources for recruiting such people or obtaining suggestions as to where they might be found.

2.4 Instrument construction

Once the general design has been selected and available resources determined, it is possible to develop the interview schedule or questionnaire to be used in the survey. In the process, the particular objectives being pursued should be an important guide to determining the proper content as will be patterns of alcohol use and social conditions known to exist in the study populations. The collection of existing information is thus a desirable prior step in determining the content of a population survey. Information obtained from observations in the community or discussions with key informants can also be extremely useful.

In any case, it is often useful at this stage to develop a list of areas to be covered by the schedule to be employed. For example, in the Community Response project, the collaborators developed a list similar to the following one prior to actually attempting to construct an interview schedule.

---

**AREAS TO BE COVERED IN POPULATION SURVEY SCHEDULES**

1. DEMOGRAPHIC DATA

   Age
   Sex
   Household Composition
   Marital Status and Family Structure
   Language(s)
   Ethnic or Tribal Status
   Educational Status
   Religion/Religious Attendance
   Employment (degree and nature of occupation)
   Involvement with Police/Courts
   Residential Circumstances and Length of Present Residence
   Date and Place of Birth
   Nutritional Status
   Health Status
2. PATTERNS OF DRINKING

(The emphasis will be on obtaining details for the recent past and a summary statement relating to prior drinking behaviour.)

i. Frequency/Quantity

- In detail over past week
- Quantity
- Determine seasonal or other fluctuation
- Check list of beverages drunk
- Amount usually drunk (for different beverages)
- Context of drinking (Where? With whom?)
- Amount spent on alcohol

For abstainers: previously drinkers - repeat some of the above questions
never a drinker - establish reasons

ii. Consequences

- Experience of acute effects
- Experience of dependence
- Experience of reaction of others:
  - medical
  - legal
  - familial
  - tribal
  - societal (including occupational)

- Effects on health
- Injuries
- Diseases alcohol-related and unrelated
  (i.e. cover section on physical health here rather than separately)

iii. Consequences experienced as a result of others' drinking

(same as categories above)
Concern for children/parents

3. ATTITUDES TOWARDS DRINKING

i. Personal

- perceived good effects (functions)
- perceived harmful effects (functions)
- whether own drinking perceived as problematic
- sources of help perceived as available/useful
  (both formal and informal)

ii. Societal

- range of tolerance/ambivalence,
  qualified in terms of status of drinker,
  e.g. age, sex, etc., situational context, occasion
- behaviour regarded as problematic
- changes in above over time
- sources of help available/useful

iii. Other Use of Drugs

List of drugs used
Frequency of use
Intensity of use
Context of use
4. SOCIAL ENVIRONMENT AND PERSONALITY VARIABLES

i. Social Environment
   - pattern of daily life (inquire about seasonal and other periodic variations, e.g. week-ends, end of month, etc.) to include leisure activities
   - aspirations/expectations with regard to work, housing, education
   - network of social contacts/relations/ supports
   - political involvement
   - religious affiliation/involvement

ii. Personality Variables
   Abbreviated measures of
   - self-esteem/sense of personal control
   - anxiety
   - depression
   - anger

5. MODELS

i. Attributes of persons identified with
   - age
   - status
   - drinking patterns
   - behaviour

ii. Persons disassociated from
   - same categories as above

As can be seen, the list covers a considerable number of topics, each one of which was thought to be related to the objectives of the study. It was subsequently determined on the basis of further discussion, testing and realization that an interview should not be too long, and that some areas were less relevant than others (e.g. personality variables, models). However, the initial list provided at least a reasonable basis for developing a draft questionnaire. Preparation of such a list, after discussions with community members and other potential users of the information, is highly recommended. In establishing such a list, it is important to ask what each particular piece of information will be used for.

Once a list is established, questions can be developed to suit the topic areas. One option is to develop questions devised specifically to fit the circumstances of the study community. While this has a great deal to recommend it, there is also some advantage in considering questions that have been used by other investigators, as this may save time and also permit some comparability, which may be helpful in putting the findings of the study into a larger context. The optimal strategy is probably a combination of the two (i.e. use or adaptation of others' questions where suitable, otherwise, development of new questions).

There are many possible sources of such questions, including studies that have been done in the country, region or other parts of the world. Specific suggestions for possible instruments might be the modified version of the general population survey carried out in the first phase of the Community Response project,¹ the studies referred to by Room (1977), and those referred to by Johnston (1980). It should be stressed, however, that these instruments should not be seen as definitive models for general population surveys on alcohol problems but rather as sources for possible questions that might be adapted to suit local purposes and circumstances.

In formulating questions, it is important to strive for concreteness. For example, instead of asking "How many times did you get drunk in the last year?" it may be preferable to ask "How many times in the last year did you drink enough alcohol to affect your speech?" or possibly, "How many times in the last year did you drink enough alcohol to make you unsteady when standing?"

It may be necessary to translate the questionnaire into some other languages. The procedure generally used is to translate it into the local language and then have it translated back to the original language. However, problems can arise when the local language is not a written language. In such a case, it may be useful to tape record the questions for the interviewers to play during the interview.

Once a draft questionnaire has been constructed, it is necessary to review it thoroughly for wording, sequence, format, coding and so on. Pre-testing can be a helpful way of doing this. It can also be valuable for exploring the extent to which the schedule effectively gathers the information required, sensitizing team members to areas of information that may be relevant but have been missed, examining the "flow" of interviews, determining areas that are embarrassing or difficult to ask about, and establishing the amount of time required to administer the schedule. In the Community Response project, collaborators carried out at least 20 pre-test interviews in constructing the population survey questionnaire, because it was felt that fewer interviews would not give sufficient experience with the instrument to make all the changes that might be needed. Members of the research team were interviewed, as were friends, relatives and strangers. The team members met from time to time to discuss progress.

After the pre-testing has been done and the results discussed, modifications can be made to the schedule and pilot testing can be done. This is discussed in section 2.7 in this annex. In general, however, it should be noted that developing an interview or questionnaire for a general population survey is complex and difficult. Further suggestions for doing so are contained in Johnston (1980), who also cites some relevant references. Room (1977) also discusses the measurement of alcohol use and problems in surveys and cites useful references.

2.5 Sampling

Another important part of designing a general population survey involves developing procedures for sampling, securing data for doing so, and actually selecting the sample.

To devise a good sampling strategy for a population requires a knowledge of sampling theory and also a knowledge of some of the characteristics of the population to be sampled. In principle, a list of the population is needed, from which probabilistic choices can be made. In many countries, sampling strategies will rely solely on lists of small but known segments of the population which are collected as part of the field work. Sampling strategies may also take account of other considerations, for example, the need to cut down interviewing costs when the survey covers a large area.

The desirable size of the sample to be chosen depends only very little on the size of the population to be sampled (except that of course a sample cannot be larger than its population). It depends much more on its intended use. If only a rough estimate of the size of a problem, for example, is desired, a sample of say 150 would probably be adequate. A sample of 500 would give quite an accurate estimate. If analysis of the relation of several variables, by cross-tabulation or other methods, is desired, the sample should be as large as possible. Just to look at patterns for particular sex/age/social status groups, for instance, requires a fairly large sample. In a sample of 1000 adults there might be about 50 men aged 20–29 years in the lowest quarter of the class structure.

The probability sample design may include an over-representation of particularly interesting segments of the population. In that case, it can be brought back to representativeness by weighting respondents' data inversely to their chance of being chosen. It might, for instance, be desirable to over-represent heavier drinkers. There are two obvious ways of doing this. One is by conducting short screening interviews with respondents to establish if they are heavier drinkers, and then breaking off the interview with a fraction of those who are not. This method is probably not advisable, however, as questions on heavy
drinking are usually too sensitive to come early in the contact with the respondent, and once an interview has been started there is not a great saving in breaking it off. The other way is by over-representing demographic segments in which heavy drinkers are thought to be concentrated. Since this can mean the costly process of screening extra households, unless the demographic segments chosen for over-representation are usually present in households chosen, the criteria used are usually based on sex and/or broad age categories and/or geographical location (e.g. richer or poorer districts might be over-represented). Since it is probably undesirable to push the maximum weighting ratio above 4:1, and not all respondents in over-represented segments will be heavier drinkers, the number of heavier drinkers in the sample can probably at most be doubled by over-representing particular demographic segments. This strategy also means a relative under-representation of the interesting category of heavier drinkers in lighter drinking population segments.

Unless the sample is of a very limited area, an area-probability design might be adopted whereby, in a first stage of sampling, particular areas are chosen probabilistically, and then in a second stage particular individuals or households are chosen for interviewing. Unless a population list exists, the second stage will involve someone going around each chosen area and listing households or individuals from which the choice is to be made. To do the final listing of respondents, then, the interviewer will need to talk to the respondents or a friend or neighbour. If the chosen respondent is reached, then the interview may proceed immediately, combining the listing with the interviewing. However, if local community customs impose limits on what kind of interviewer can interview what kind of respondent (e.g. young men might not be permitted to ask questions on drinking of older women), then the interview will probably have to be set up separately from the listing.

In the Community Response project, because of the different conditions prevailing in the three countries and in the communities studied, no hard and fast rules for sampling were developed. It was simply agreed that collaborators should seek "representative" samples from their study area. In practice, this meant that sample sizes in the three countries were different, the age groups included differed, and the proportions of males and females sampled differed as did the specific methods of selecting respondents. In each case, the approaches used were tailored to fit the circumstances. Descriptions of actual procedures used are contained in the international and country reports.

There was, however, some common agreement about sampling. For instance, it was agreed that while there are some cultural variations in the meaning of house, the term was taken to refer broadly to a single set of living quarters where cooking and other daily functions are performed communally. Household was interpreted as the respondent's primary grouping, whether family or cohabitees (i.e. people with whom he/she is living rather than those who may sleep under the same roof).

As sampling is an extremely complicated matter, investigators are well advised to consult experts knowledgeable in sampling procedures (by mail if necessary), as well as appropriate reference materials on the topic. Such materials are referred to in Johnston (1980, p.42).

2.6 Developing field procedures

Prior to collecting the data, it is important to develop data collection procedures that are likely to be effective. Some of the difficulties that may be encountered in the field can be anticipated. They include: the acceptability of interviewing members of families, particularly females, who are not heads of household (special problems may arise if wives are asked about their husbands' drinking or young adults about their parents' drinking); the acceptability of recording answers and, in general, the acceptability of the questionnaire form of inquiry; the acceptability of the individual interviewer; and the acceptability of particular questions, for example, about income or attendance at religious services.

In the Community Response project, it was suggested that these potential difficulties might be met as follows: respondents might be identified only after the occupants of the house, including the head of the household, have been enumerated. As this is almost certain to involve the head of the household, permission to interview a particular member of his family can be sought. In certain instances, the head of the household will also need to be
interviewed (and then discarded from the sample) in order that the selected respondent can be interviewed; interviewers should be of both sexes and, where this appears to be necessary, respondents should be interviewed by interviewers of the same sex; respondents should be interviewed in their own language by interviewers fluent in that language, employing a questionnaire translated into that language; the confidentiality and security of records should be guaranteed and the anonymity of the respondent should be preserved in any publication; interviewers might be introduced in such a way as to maximize the likelihood of acceptance by displaying their identification with local authorities or the institution employing them. There are of course other ways to deal with these problems, and investigators should be encouraged to develop approaches fitted to the circumstances in the community. The pilot testing may be of considerable assistance in doing so.

Whatever procedures are devised, it is important that they be recorded in such a way that they are clearly understood by those responsible for collecting the data. Thus, for example, in the Community Response project, a set of detailed instructions for interviewers was prepared. This included general instructions such as:

"The questionnaire is orientated towards drinking and the harmful consequences of drinking. This orientation is likely to be resented by respondents who are only light or infrequent drinkers. While provision is made for omitting certain sections where the respondent is a non-drinker, except in a limited number of instances, no such provision is made for light drinkers. In asking light drinkers about problems associated with their drinking, it will be important for interviewers to be sensitive to the fact that these questions may be thought inappropriate by certain respondents."

"Where responses are identified by numbers, the appropriate number should be circled for each question."

Some more specific instructions were included, such as:

"Each person aged 15 years or older, living (i.e. sleeping) in the same house as the person first contacted, is to be listed by name, sex and age. In the case of houses in which there are several households (families), but excluding boarding houses and apartment blocks, and the identity of the respondent is not known in advance, all those living in the house, aged 15 years and older, should be listed. The respondent is to be selected from this list in accordance with local conventions. The number of the respondent is to be circled on the respondent selection sheet. In recording the relationships of those persons listed as living in the same house, it is the relationship to the respondent which is to be coded."

"Question 28 (Can you tell me about the time when you drank the most during the last month?) is to be asked of everyone who has had a drink in the last month. The following information is to be recorded:

i. Time started and time stopped, expressed in terms of the 24-hour clock, to nearest half hour.

ii. Total variety of beverages drunk (employing the same categories as devised for Questions 23 and 24 details about drinking last week and last two days).

iii. Total amount drunk (employing the same categories as devised for Questions 23 and 24).

iv. Specify the occasion on which the most alcohol was drunk in the last month. Code in accordance with local conventions."

If the interviewer is expected to code the information, the instructions should also tell the interviewer how to code particular questions, especially if the codes are not already on the questionnaire. The following is an example of this type of instruction drawn from the Community Response project:
"If they TRIED TO GET HELP from a particular facility, it should be coded 1, if they also RECEIVED TREATMENT it should be coded 3. If they DID NOT TRY TO GET HELP from a particular facility, it should be coded 2. Any unused columns should be coded 8."

Of course, the particular instructions will depend on the particular instruments used in the study. In general, an effort should be made to make them as clear and simple as possible. To the extent possible, they should be included on the instrument itself.

It may not be necessary for the project team to hire field staff if the actual data collection is to be done by an outside organization. If, however, field staff are to be hired by the project team, a number of considerations must be taken into account. These include: ability to establish rapport with respondents; ability to read and write; ability to follow instructions; sense of responsibility; and ability to work independently. Staff and students working in the mental health field may be a valuable source of personnel, as may other health workers, social workers, university students and educated volunteers.

In training field staff it is important to expose them to situations as close to the real data collection situation as possible. Interviewing one another or neighbours and friends under supervision may be extremely helpful as would be participating in the pilot testing. Thorough familiarization with the schedule (including the purposes of the questions) and with the instructions is critical. A number of manuals for the training of interviewers are available (e.g. Atkinson, 1971; Survey Research Center, 1975). Each of the three project teams collaborating in the Community Response project developed its own instruction manual.

2.7 Pilot testing and revision

A pilot survey is a sort of "dress rehearsal" for the final survey, to see what actually happens when it is tried out in the field and the questions are asked of the actual respondents. A full pilot test is likely to be useful for refining the instruments as well as the field procedures. It also gives an indication of the probable response rate.

According to Johnston (1980), a number of problems are likely to be encountered in the pilot test, such as: the interviews taking too long; respondents' difficulties understanding or answering questions; and difficulty in gaining or maintaining respondents' cooperation. The pilot test provides a low-risk way of attempting to devise solutions to such problems as well as seeing whether or not field staff can follow instructions.

In the Community Response project, pilot testing was carried out on samples of about 100 respondents from the study areas using at least some members of the team of interviewers to be involved in the full-scale survey. The pilot schedules were coded and analysed to provide preliminary findings and consider the possible outcome of the study results. As a result, many changes were made to the instruments and procedures.

After the pilot test has been completed, it is desirable to take full advantage of the experience. This means that sufficient time should be allowed for revision of the interview and field procedures. It may even be desirable to pre-test or pilot test these revisions.

2.8 Data collection

In spite of careful attention to design and testing of instruments and procedures, unanticipated problems are bound to arise during the actual data collection. One such problem might be the performance of data collectors. Some may prove to be unable or unwilling to carry out the work reliably and competently. For this reason, it is important to include quality control checks in the work of field staff at all stages to determine if the work is being done and how well. It may be necessary to correct the mistakes of some of the field staff and perhaps even to replace some staff. One common way to check the work is to return to a sample of persons who were presumably questioned to see if they were in fact interviewed and, if so, that the interview was correctly carried out. This procedure could serve also as a reliability check on the instrument. Field staff should be informed in advance that this will be done at intervals, though without prior notice each time.
Another problem might be the presence of other persons during the interview. Where interviews are conducted in settings that do not permit privacy, it is likely that other family members and even neighbours will be present. This may influence the responses to questions in ways which are sometimes unpredictable. It is therefore advisable to attempt to carry out the interview in circumstances permitting privacy, perhaps by inviting the respondent to meet the interviewer in some neutral setting such as the interviewee's workplace. If this is impossible, the interviewer should record who is present and make some attempt to describe the probable effect of their presence on the answers given.

2.9 Data preparation and processing

The way in which data are prepared for processing and actually processed depends on a number of factors including the methods that were used for collecting the information and the data-handling resources available.

If the schedule for collecting the information is entirely pre-coded (i.e. codes are written into the schedule and information is coded by field staff as they collect it), data preparation is rather simple, consisting of key punching the codes onto cards or tape, possibly direct from the questionnaire, unless it is to be processed by hand. If, however, the data have not been pre-coded or only partially pre-coded, it is necessary to code them afterwards. This will entail establishing a set of mutually exclusive codes that permit the information to be summarized in numerical form. Training will be required in the application of these codes. Establishing a code-book is helpful in this regard; so too is the checking of coding by another person in order to identify and resolve differences. It is usually desirable to code the data onto code sheets established for this purpose, and to check the questionnaires for completeness and accuracy prior to coding.

Some form of coding is usually necessary in order to prepare data for processing, although the exact form may depend on the technology available. For instance, if computer systems are not available, it may be necessary to hand-tabulate data, or use a McBee punch card system or a machine card system. If these types of systems are used, it is an advantage to keep the codes simple, possibly limited to one column. These systems are slow and cumbersome in comparison to electronic data processing and also have the disadvantage that cards or questionnaires can be lost or damaged or may degenerate over time. The use of a non-computer system may give rise to problems particularly in a general population survey where large amounts of data are usually collected. In any case, most developing countries are acquiring computer facilities and the development of microcomputers may further facilitate electronic processing of data. Thus, computer processing is likely to become the rule in the future.

If computer processing is used, the data can be entered in several ways, including direct entry terminals, or machine-readable cards or tapes. The exact method will depend on existing facilities. In the Community Response project, one country used an on-line computer system at a university, whereas in the other two a batch processing system was used on private and government computers. Whatever the approach, it is desirable to check the punching for errors or inconsistencies (e.g. punches out of range, illogical answers or illegitimate punches). A simple FORTRAN consistency-checking programme was used in the Community Response project and could be made available on request.

In that project various versions of the Statistical Package for the Social Sciences (SPSS) were used for data processing, although another popular alternative is OSIRIS. These packages are usually available through computing facilities or can be ordered along with manuals. There is some advantage in training one or more members of the project team to use whichever package is available as this will make the project team less dependent on the goodwill and availability of programmers and will help them understand the quality and nature of their data.

Before a general population survey is carried out, the nature of the computer resources should be known and steps should be taken to ensure the compatibility of the questionnaire codes with the system in use. The latter should be of adequate size to cope with the number of variables likely to be generated.
2.10 Analysing the data

Analysis of general population survey data can be complex and sophisticated. However, according to Johnston (1980), "much of what is of value in them may be derived from rather simple analyses". This was found to be the case in the Community Response project, where conventional cross-tabulation was the dominant form of analysis employed by the collaborators. Other forms, considered but applied to a lesser extent (at least so far) were: profile analysis, correlational analysis, regression analysis and group level analysis.

Profile analysis is done by percentaging in the opposite direction from conventional cross-tabulations where percentages are done across the variable to be "explained". Profile analysis is a helpful way of summarizing differences between groups of interest and is particularly useful when typologies are constructed. Correlational analysis consists simply of computing correlation coefficients between variables of interest. It is a convenient way of summarizing relationships concisely (e.g. in a matrix). Regression analysis can be used to examine the relative strength of the explanatory power of variables, the total variance explained, and the extent to which the prediction variables are explaining the same variation over and over again. Finally, group level analysis consists of examining individual level behaviour (e.g. individual drinking behaviour and responses to it) in the context of group phenomena (e.g. norms). A variety of multivariate procedures, including path analysis, could be used for this type of analysis approach.

The main approaches to analysis just identified should at least be considered by investigators, along with others that might be appropriate to the data collected. Johnston (1980) cites some relevant references in this regard.

Numerous tables were specified in advance by the collaborators in the Community Response project in order to assist in the planning of the analysis to be done. This included setting them out in skeletal form, as in the following example (Table 2).

<table>
<thead>
<tr>
<th>TABLE 2. FREQUENCY OF DRINKING BY SEX AND STUDY SITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency of Drinking (Q...)</td>
</tr>
<tr>
<td>Site 1</td>
</tr>
<tr>
<td>M</td>
</tr>
<tr>
<td>How often do you drink alcohol?</td>
</tr>
<tr>
<td>At least once a day</td>
</tr>
<tr>
<td>Nearly every day</td>
</tr>
<tr>
<td>3-4 times a week</td>
</tr>
<tr>
<td>Once or twice a week</td>
</tr>
<tr>
<td>2-3 times a month</td>
</tr>
<tr>
<td>Less than once a month but</td>
</tr>
<tr>
<td>at least once a year</td>
</tr>
<tr>
<td>Have not drunk during last year</td>
</tr>
<tr>
<td>Have never drunk alcohol</td>
</tr>
<tr>
<td>BASE (N)</td>
</tr>
<tr>
<td>( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )</td>
</tr>
<tr>
<td>Excludes:</td>
</tr>
<tr>
<td>Don't know and no answers (N) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )</td>
</tr>
<tr>
<td>PERCENTAGES DO NOT ALWAYS ADD UP TO 100 BECAUSE OF ROUNDING OFF</td>
</tr>
</tbody>
</table>
Although not all these specified tables were completed by the collaborators and they developed their own analyses as they went along, it was generally found to be helpful to have such tables in advance.

Several typologies were also constructed in advance of the analyses. For example, the following typology for combining the quantity and frequency of drinking was pre-specified (Table 3).

**TABLE 3. QUANTITY AND FREQUENCY OF DRINKING**

<table>
<thead>
<tr>
<th>Largest quantity drunk in last month as 100 ml ethanol</th>
<th>Once a week or more often</th>
<th>1-3 times a month</th>
<th>Less than once a month but at least once during last year</th>
<th>Not in last year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Codes</td>
<td>1,2,3,</td>
<td>4,5,6,</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>60+ ml</td>
<td>1</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 - 59 ml</td>
<td>2</td>
<td>5</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>0.1-29 ml</td>
<td>3</td>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Again, it was found that in practice the typologies suggested did not always work out as expected and collaborators made appropriate modifications or developed their own typologies, but it was still considered a useful exercise to try to specify them in advance because it helped direct the analysis.

Some checks on the internal consistency of responses were built into the general population questionnaire in the original Community Response population study and were identified in advance of the analyses. Such checks were in fact carried out and helped to reassure or warn the collaborators about the validity of the data. Similarly, information collected on the attitudes of interviewers and circumstances of interviews permitted possible interviewer effects to be ascertained. Such checks are highly recommended to future investigators.

Because of over-representation of certain groups in the samples (e.g. males and individuals from small households), weighting procedures were suggested to collaborators. The weighting code was in fact constructed in the following way:

\[(\text{Differential weight for sex}\quad \text{e.g. in Mexico: 2 for F, 1 for M}) \times (\text{No. of people in household eligible for interview})\]
It was further suggested that, since the unweighted data concern the real number of cases involved, the number given at the base of percentage tables should be unweighted and any statistical tests of significance should be computed on unweighted data. In practice, it was found that making corrections for weighting was both time-consuming and expensive and generally did not make much difference. The collaborators therefore recommend that weighting be avoided where possible. A simpler way to weight is currently being developed by the Mexican collaborators in the project.

Finally, an important general principle agreed on by the collaborators was that the bulk of data analysis be undertaken in the collaborating countries. This principle was adhered to firmly, even though, in some cases, it meant delays and difficulties that might have been circumvented by doing the analyses centrally. On the basis of their experience, the collaborators would strongly recommend adherence to this principle in future studies. At a practical level, this means that data should not be transformed in such a way as to make them unsuitable for analysis by individual collaborators using such technology as is available to them. Adherence to the principle does not, however, mean that comparative analyses could not be done at some central point.

2.11 Writing the report

Presenting the findings was discussed in general in section 3. The considerations described there pertain also to a general population survey, although there may be some need to present separate reports on the population survey itself. In such instances, it may be desirable to present the findings in such a way that they can be easily compared to other general population surveys using similar methods. The final reports on the Community Response project may provide useful models in this regard.

It is important to stress that the findings should be presented so that they are easily understandable by community members and policy-makers and their implications clearly outlined. This may be difficult, since quite often the implications of a general population survey are not immediately apparent even to the research workers. Every effort, however, should be made to identify such implications.

REFERENCES


Survey Research Center (1975) Interviewer's manual, Ann Arbor, University of Michigan.
Annex 5

SPECIAL POPULATION STUDIES

1. Examples of Special Population Studies on Alcohol Problems

One of the sub-groups of the population that has received most attention and study in relation to alcohol and drug problems is young people, especially students. This is perhaps because they are relatively easy to study, because they are literate and easily accessible. A number of examples of studies of alcohol and drug use among students in developing countries are described in a recent WHO publication on student drug use surveys which also included alcohol use as one of the areas of inquiry (Smart et al., 1980). Another WHO publication presents examples of studies of drug use among non-student youth (Smart et al., 1981). Unfortunately, the latter does not cover alcohol use but the experience is certainly relevant to designing studies of alcohol use and problems among non-student youth in developing countries.

Some of the examples cited in the latter publication are relevant also for the study of drug and alcohol use among particular occupational groups in developing countries. The report describes studies of factory workers, rickshaw pullers, workers in labour colonies, shop assistants, and workers in an electronics factory in two developing countries. These are, however, rather rare examples. There are many more examples of such studies from developed countries (Moser, 1980).

The same is true for studies of clients attending social or medical agencies and for arrested persons. The Community Response project, however, provides one example of studies in developing countries of clients attending various agencies.¹ Again, more examples are available from developed countries (Edwards & Grant, 1980).

Studies of victims of accidents and homeless persons are also extremely rare in developing countries. One exception is a study of traffic fatalities in Zambia (Patel, 1979). Such studies are more common in developed countries (Moser, 1980).

The United Nations Division on Narcotic Drugs has recently published a manual on drug abuse assessment, Part 2 of which deals with population surveys.² Although the latter does not cite any examples of special population studies of alcohol problems, it does contain some useful advice on the design and execution of such studies and is a useful reference.

In the next section, the main sources of information were the WHO publications on student and non-student surveys and the client studies carried out during the Community Response project.

2. Administrative and Methodological Considerations in Special Population Studies

2.1 Flow chart of typical study

Many of the considerations involved in designing and carrying out a general population survey of alcohol problems are also pertinent to carrying out studies of alcohol problems in special populations. The flow chart developed by Johnston and reproduced in Annex 4 as Fig. 2 in fact applies equally to studies of special populations. It will therefore be used once again in presenting considerations involved in doing such studies. The following discussion will, however, emphasize considerations unique to special population studies.


2.2 Planning of general research design

A very early consideration in the planning of a general research design for a special population study is deciding what special population should in fact be studied, as it would be rather difficult to study every sub-group in the population in depth. The particular choice would be guided by the general purposes of the project as a whole and the specific objectives of carrying out a special population study. In addition, the perceived or actual magnitude of alcohol problems would be an important factor to be taken into account in making such a choice. A background information study or a general population survey should result in useful information for this purpose.

Another consideration might be the perceived ability to exercise some influence in ameliorating alcohol problems in particular sub-groups. For example, it may be felt that young people, because they are more malleable than older people, may be a good choice for special study. Again, when making such a decision, it is once again important to take into account the views of the community, although one danger in doing so is the possibility of singling out a particular group on the basis of prejudice and the desire to find a scapegoat. It has been argued that young people are a case in point. Such dangers can be avoided by trying to draw on existing information on the magnitude of problems in particular groups.

The choice of a particular group for special study has implications for the research design chosen. For example, if it is decided that young people in school should be studied in depth, a self-administered questionnaire approach may be the most effective design. On the other hand, if young people not attending school are to be studied, other designs, such as informal interviews in places where young people meet (e.g. teashops, playgrounds, youth centres, markets), might be more appropriate. If it is decided to study people coming to the attention of agencies for alcohol problems, it may be desirable to ask agency personnel to complete records on their contacts, or to interview such people on behalf of the study team.

The design options noted in Annex 4 on general population surveys are also pertinent with respect to studies of special populations. Single or repeated studies could be chosen, interviews, self-administered or mailed questionnaires might be used and specialized or non-specialized studies might be carried out. The considerations in choosing such designs discussed in Annex 4 are pertinent here as well.

There are, however, many more design options for studies of special populations than for a general population survey. By way of example, the following studies might be considered: (i) A research worker interviewing all patients with a stated diagnosis of alcoholism entering a particular mental hospital over a six-month period. A nurse might be specially trained as interviewer, and would perhaps only have to complete two or three schedules each week. (ii) A research worker interviewing all patients with a stated diagnosis of alcohol-related (but possibly unstated alcohol-related) physical illness entering all general hospitals in the community over a six-month period. (iii) Self-completion inventory filled out by everyone attending an Alcoholics Anonymous meeting in the community over a one-month period. (iv) Minimum data form completed by all persons believed to have an alcohol-related problem by the mosquito sprayer, and subsequent detailed interviewing by a trained research worker of the same subjects or a sample thereof. (v) Probation officer or court welfare officer collaborating by completing a short form on all persons coming before the courts over a one-month period on public drunkenness or drunk driving charges, with more detailed interviewing by trained research workers of sub-samples. (vi) Giving a self-administered questionnaire to students.

Obviously, since not all of these or other possibilities can be considered in detail here, the discussion will draw on the experience in the initial phase of the Community Response project as well as on the studies of student and non-student youth populations.

In the Community Response project, the decision was to carry out studies of the general clientele coming into contact with a variety of community agencies (e.g. emergency and accident departments, health centres, general hospital departments, psychiatric hospitals, police stations, social work offices, and churches). In each of these facilities, samples of clients identified as having alcohol-related problems were interviewed in depth, and some not having such problems were also interviewed for comparative purposes. Three schedules
were used for these purposes. The first was a case report form designed for both specialized and non-specialized agencies that deal with alcohol-related problems. This form included screening questions for alcohol-related problems. The second was a case report form designed specifically for police departments. The third was a client interview form designed for in-depth interviews with specified clients.

In the case of the studies carried out in connection with the development of the methodology for student drug use surveys (Smart et al., 1980), self-administered questionnaires were given to different student groups (almost all in primary, secondary or post-secondary institutions). In all but three participating centres, the questionnaires were administered only once. In those three, the questionnaire was re-administered to check for reliability.

The designs used in the project on drug use among non-student youth (Smart et al., 1981) were more varied, although a common questionnaire was developed and used. In some cases, the questionnaire was used as an interview, in others on a self-administered basis. The questionnaires were administered only once, except at three centres, where they were re-administered with a sub-group from the original sample.

It might be noted in this context that retesting for reliability and doing other follow-up studies pose some ethical problems, because of the need to link information from one source to the information from another. As described in Smart et al. (1980), some methods for protecting the rights of subjects have been developed in this regard (e.g. numbered code, label, self-generated codes).

2.3 Hiring core staff

Similar considerations are involved in hiring core staff whether they are for special population studies or for general population surveys (Annex 4, section 2.3). However, if it is likely that studies will be carried out in certain kinds of institutions (e.g. hospitals or schools), it would probably be desirable to have someone on the core staff with experience of working in such institutions.

2.4 Instrument construction

The content of a study of alcohol problems in a special population may differ from a similar study of a general population, even though an attempt might be made to cover similar areas and use identical questions, as this may permit comparisons to be made. If, for instance, the special population study involves the investigation of a group likely to drink heavily or to have alcohol problems, questions suitable for a general population might either require qualification so as to deal adequately with the heavier end of the drinking spectrum, or include special questions.

Other information may be required as well. For instance, the following types of information might be sought in a study of persons coming to the attention of agencies for alcohol problems: identification of agent or agency; subject's relationship or contact with this agent or agency (e.g. length of time in hospital); type of person completing schedule; developmental history of drinking (e.g. milestones of problems experienced); routing to present treatment; previous treatments for alcohol-related problems; self-appraisal of nature and degree of alcohol problem (e.g. self-identification as alcoholic); self-appraisal of nature and degree of other current problems and place assigned to drink-related problems in hierarchy of problems; subject's explanation of cause of his/her drinking problem; subject's appraisal of worth of present or previous treatments for his/her alcohol-related problems; subject's appraisal of the way in which others (family, friends, neighbours, employer) accept/reject their drinking; subject's perception of treatment goal (e.g. abstinence, controlled drinking, health goal, social goal); and criminal history.

Similarly, a study of students may seek information in the following areas: use of drugs other than alcohol (e.g. sniffing of glue); use of alcohol and other drugs by parents; and use of alcohol by friends.

As was true of the general population survey, it is also desirable with respect to a special population study to prepare a list of possible areas to be covered again, preferably
in consultation with the community or other potential users of the information. Once this list is established, a draft instrument or instruments can be prepared. In doing so, it may again be possible to use or adapt questions used in other studies. Possible sources of such questions would in this case include the project on student drug use surveys (Smart et al., 1980), the study on drug use among non-student youth (Smart et al., 1981) and the Community Response project client study. Copies of the instruments used in the former two projects are contained in the publications available from WHO on request and copies of a modified version of the instruments used in the first phase of the Community Response project are also available on request. It should once more be stressed, however, that these sources should not be seen as definitive models and also that other sources might be considered, depending on the focus of the particular inquiry.

In the execution of studies of clinical populations, it is sometimes desirable to include special questions that might be used to identify persons who have alcohol-related problems for subsequent more complete interviewing. There are some established instruments for doing so such as the Michigan Alcohol Screening Test (MAST). Alternatively, as was the case in the Community Response project, collaborators may develop a set of questions themselves, perhaps drawn from various sources, which might be used to detect persons with alcohol-related problems for further interview.

In developing a questionnaire, especially one designed for self-administration, investigators might keep in mind the admonition of Smart et al. (1980) that it "should be made as short and interesting as possible by including only what is essential". One alternative to increasing the number of variables is to have more than one version of the questionnaire, although this will be effective only if there is a sufficient number of respondents.

As in the case of a general population survey, it is desirable to pre-test the instruments to be used in studies of special populations, thereafter making appropriate modifications. For additional considerations see Annex 4, section 2.4.

2.5 Sampling

Sampling of client populations can be rather difficult because of variations in such populations over time, agency procedures and the circumstances of data collection. The number of alcohol-related casualties occurring and coming to the emergency ward, for example, may vary at different times of the day, court appearances for drunkenness may be more frequent on some days than others, and it may be hard to draw a sample in a busy casualty department. Thus, procedures required to ensure the selection of a representative sample will necessarily vary depending on the particular situation. A desirable step in designing an appropriate sample would be a study of the flow of clients to a particular agency as well as agency procedures. The examination of agency records may be helpful for this purpose. It may also be desirable to try to obtain information on all clients while the information from selected samples is being collected. This will allow a determination of the representativeness of the sample.

Sampling in clinical agencies can be done either by making a collection from agency records of persons who entered at a given period of time or by actually being present in the agency at chosen periods of time and listing or interviewing clients as they come in. It is important to determine whether or not to interview people as they come in to treatment, during treatment or at some time after treatment. The decision may depend on the relative accessibility of the clients at various stages.

In the Community Response project, no specific sampling procedures were established in advance, although collaborators were encouraged to develop procedures appropriate to the various settings studied. Accounts of such procedures can be found in the international report on Phase I of the project. (See Annex 4, section 2.5 for additional sampling considerations.)

---


2.6 Developing field procedures

One consideration particular to special population studies has to do with ensuring the cooperation of the various institutions that are usually involved in such studies. For example, in a school survey, it is essential to gain the cooperation of a number of groups, including authorities responsible for the school district, the principals or headmasters, teachers and students themselves. Similarly, in studies of agency populations it is necessary to enlist the cooperation of governing boards, administration, staff, and clients themselves and to develop appropriate procedures for so doing. While there are no hard and fast rules, it is generally desirable clearly and honestly to explain the reasons for the studies to all concerned and to ensure that they will receive feedback from the information obtained. Procedures to be followed in ensuring cooperation should be included in the instructions to interviewers.

For example in the Community Response project, in order to ensure client cooperation, interviewers were advised as follows:

"It is to be noted that those clients approaching agencies who are given the Case Report Form, and particularly those subsequently given the Screening Annex and Client Interview Form, will not have anticipated being asked detailed questions about their drinking. This emphasis on drinking will therefore require some explanation. It might be suggested that the particular enquiry is part of a more general survey being carried out in order to determine the extent to which alcohol is involved in the sort of problems people bring to .... (insert the name of the agency)."

Another example of an appropriate instruction to an interviewer is the following: "The validity of the information obtained will in large measure reflect the rapport established between interviewer and respondent. Interviewers should introduce themselves and the survey in such a way as to gain the respondent's confidence and acceptance. The fact that the questionnaire is long should not be denied".

Another consideration in developing field procedures for carrying out studies of special populations has to do with the probable condition of respondents. It may be necessary to develop procedures to deal with situations where the respondent's condition makes it difficult to carry out the interview. In the Community Response study, interviewers were instructed to proceed as follows: "In the case of clients selected for interview whose injuries or treatment preclude immediate interview, every effort should nevertheless be made to complete the interview when appropriate. Such patients should not be excluded from the sample chosen to be interviewed in the first instance." Alternative procedures, including subsequent interview or elimination from the sample might of course be considered.

A third consideration pertaining to special studies has to do with the potentially disruptive influence of third parties. For example, if teachers are present during the collection of information about alcohol or drug use, this may affect the responses of the students. Procedures are needed to deal with this kind of situation. In the student drug use project, it was suggested that teachers should not be allowed to wander about and see students' answers nor should they collect questionnaires. Further, students should be made aware that the study is being done by outsiders and not by school authorities and that teachers will not see the results.

A final consideration has to do with the linking of records in cases where several instruments are administered to the same individual or where it is desirable to associate the information with other sources of information. In the Community Response project, for instance, it was necessary to link information obtained by means of various forms and it was suggested that a case number assigned by the agency might be used to link the records. Alternatively, clients' birth dates and addresses might be used for this purpose. The procedures selected should be specified in the instructions to data collectors. Due attention should be paid to the development of procedures to protect the confidentiality of the information.

An example of a set of instructions to investigators that includes field procedures is given in Smart et al. (1980). (See Annex 4, section 2.6 for additional considerations in relation to field procedures.)
2.7 Pilot testing

There do not appear to be any particularly separate considerations involved in pilot testing for special population studies as compared with general population surveys. Such studies should of course be done in circumstances as close to the actual study situation as possible. (See Annex 4, section 2.7 for additional considerations.)

2.8 Data collection

Carrying out studies in agencies is likely to present many problems, some of which cannot be anticipated. For example, in the Community Response project in Scotland, it was found that, contrary to expectation, the number of clients appearing in the casualty ward with alcohol-related problems was minimal. This meant that the investigators had to spend long periods of time waiting for people to interview. In the social welfare agency it was found that clients were often referred on to the social worker without first seeing the interviewer. Such problems, while they cannot always be anticipated, can at least be discussed as they are occurring and attempts can be made to work out solutions.

Another type of problem that may be more likely to occur in a study of a special population than in a study of the general population may be distress or belligerence on the part of clients. Such behaviour may be extremely bothersome to data collectors. While, again, no easy solution is apparent, it would be important in such circumstances for data collectors to be given the benefit of advice and support from the other members of the study team.

Considerations discussed in Annex 4, section 2.8 on the general population survey are pertinent also to special population studies.

2.9 Data preparation and processing

Three general types of instrument have been used in self-administered studies. In a fill-in form, the subject marks his answers directly on the questionnaire. In an answer sheet format, the respondent writes the answer on a separate sheet. On machine-readable forms, the respondent writes the answer on a separate sheet on the questionnaire which can be passed through special equipment for automatic key-punching. The latter method is relatively costly but extremely labour efficient. Considerations in using each of these approaches are discussed in detail in Smart et al. (1980).

It might also be noted here that since studies of special populations may require smaller samples, less elaborate forms of data preparation and processing may be required than for a general population survey. Additional considerations are discussed in Annex 4, section 2.9.

2.10 Analysing the data

If an attempt is made to identify people with alcohol-related problems in a special population study through screening questions, as was done in the Community Response project, certain special analyses might be indicated. For instance, respondents who meet the screening criteria might usefully be compared with those who do not, in terms of answers to questions on alcohol consumption and other topics. The various criteria employed might be compared with one another.

If the study involves collecting data from a number of agencies or departments within a single agency, comparisons of the different groups in relation to background characteristics and responses to questions might be desirable, in order to determine the nature of the clientele coming to the attention of the particular agency.

Studies of special populations may also allow the possibility of making useful comparisons with information obtained from other approaches, if comparable questions were asked. For example, clients attending agencies for alcohol problems might usefully be compared with a sub-sample of the general population whose pattern of drinking may be similar but who are not in contact with an agency. Among other things, this would permit a determination of the characteristics of people who are likely to come into contact with
agencies. Similarly, information obtained through interviewing key informants in agencies might usefully be compared with that obtained from client interviews. This will give a view of difference in the perception of the treatment process by those providing services and by those receiving them.

Analyses such as the above were in fact undertaken during the first phase of the Community Response project and proved to be valuable, as reflected in the final report on the project.1

(See Annex 4, section 2.10 for additional considerations.)

2.11 Presenting the findings

Considerations in writing the report and disseminating the findings for a special population study are no different from those pertaining to other approaches. It might be noted, however, that results of special population studies may be particularly useful to the agencies participating in the study and due attention should be given to making the results and applications readily available and apparent to such agencies.

REFERENCES


---

Annex 6

REPORTING SYSTEMS

1. Examples of Reporting Systems

Another WHO publication (Rootman & Hughes, 1980) describes a number of drug abuse reporting systems, including several from developing countries. Although none of the systems deals exclusively with alcohol problems, several cover both alcohol and other drug problems and thus constitute relevant examples of non-specialized reporting systems. Another example, designed especially for developing countries, is a system based on recording and reporting of information by people with minimal qualifications and minimal training, as described in a recent publication (WHO, 1978). Alcohol abuse, defined as "excessive use of alcohol, with physical, mental and social deterioration", is one possible condition covered by the system. A similar kind of system for recording physical, psychological and social dimensions of health problems (including alcohol) is currently being developed in the second phase of the Community Response project by the Zambian team.

The authors are not aware of any reporting systems in developing countries focusing entirely on alcohol use and problems, although examples can be found in developed countries (e.g. the National Alcoholism Program Information System in the USA).

2. Administrative and Methodological Considerations in the Development of Reporting Systems

2.1 Stages in development of reporting systems

Stages in the development of reporting systems were identified by Rootman & Hughes (1980) and depicted as in Fig. 3. Some of the main considerations in each of the four stages will be discussed here.

2.2 Initial planning

One important consideration in the initial planning stage is the identification of the need for a reporting system. Such a system can be costly and should not therefore be initiated without careful consideration of what is entailed. A major factor in determining the need for a reporting system is the perceived seriousness of alcohol problems and the likely duration of serious problems. If such problems are not known to be of considerable magnitude or not expected to last for a number of years, it is probably not justified to develop a reporting system devoted entirely to alcohol problems.

However, it may be worthwhile while adding the recording of alcohol information and other relevant factors to an existing record system or possibly developing a system that deals with other areas of concern besides alcohol (i.e. a non-specialized system).

Before a reporting system can be developed, a number of conditions must be present. There must be institutions or agencies that are in contact with people having alcohol problems and are willing to participate in such a system. It is also an advantage if these agencies already have record systems and staff experienced in their use.

If it is decided to develop a system, an important early decision is what type of system to establish. Should it be an event-reporting system, a case-reporting system or a case register? Should it be specialized for alcohol problems or non-specialized? Considerations in making such a choice are discussed in detail in Rootman & Hughes (1980). To summarize them, event-reporting systems appear to be most advantageous in terms of early warning, lower direct cost, and fewer confidentiality and maintenance problems. Case registers have the advantages of analytical capability, flexibility, follow-up, interpretation, validity checking, reliability checking and research. Case-reporting systems seem to fall between the other two types on most dimensions. Specialized systems have the advantage that they can address the exclusive needs of alcohol programmers and policy-makers and data collection is likely to be more complete than with non-specialized systems, which are, however, less expensive and more likely to survive when alcohol problems receive lower priority for funds.
FIG. 3. STAGES IN THE DEVELOPMENT OF REPORTING SYSTEMS

I. Initial planning

Identification of need
Clarification of purposes
Determination of objectives
Choosing of types of system
Determining feasibility
Soliciting agency cooperation

II. Design

Specification of objectives
Specification of outputs
Selection of data items
Design of forms
Development of instructions
Selection of reporting agencies
Establishing reporting criteria
Development of reporting procedures
Development of data-processing procedures
Development of quality-checking procedures
Development of analysis procedures

III. Testing

Pre-pilot testing
Pilot studies

IV. Implementation

Obtaining and maintaining agency participation
Training personnel
Maintaining the system
Reporting and interpreting data
Changing the system
Another important consideration in the initial planning stage is soliciting and maintaining agency cooperation. Such continued cooperation is vital if the reporting system is to succeed. In the initial stages it is desirable to spend considerable time with agency personnel to determine their concerns, methods of operation, and the ways in which a reporting system could be of most benefit to them. The purposes of the system should be explained and arrangements made to ensure regular feedback of information obtained. It is also necessary to provide initial and continuing training for personnel in the operation of the system.

Ethical considerations will have to be taken into account in the initial planning of reporting systems. The main ethical problem arises from the need to protect the individual from adverse consequences that might result from his inclusion in a reporting system. Such consequences conceivably could include stigma and loss of job or freedom. The key to avoiding such consequences is to protect the confidentiality of the information in the system. This involves not disclosing the information for any other than the originally agreed purpose. Safeguards that can be introduced include the coding of identifying information, careful training of reporting systems staff, and releasing information in aggregate form only. In the planning of any reporting system, full consideration should be given to the development of such safeguards, which should be protected by government codes or regulations or by special legislation.

2.3 Design

A first consideration in the design of a reporting system is the specification of objectives. These should be stated in terms that are realistic and achievable. It may be helpful to specify in advance dummy tables showing what information could be derived from the system when it is in operation.

Designing appropriate forms is another crucial activity. The forms should be straightforward, simple to complete and related to the basic record keeping of the reporting agencies. Examples of forms used in various systems are given in the two WHO publications cited above (Rootman & Hughes, 1980; WHO, 1978). These forms should be seen only as models that may be amended and adapted as required to fit different circumstances. Possible items for such forms might be adapted from client interview forms used in the Community Response project.1

Unambiguous instructions should be developed for filling in the forms. Too often "alcohol involvement" is recorded simply as a yes or no category, without differentiating between: had been drinking at the time; had a history of alcoholism; or turned out to have had cirrhosis. Examples of unambiguous instructions are given in the WHO publications on lay reporting of health information (WHO, 1978) and on core data for epidemiological studies of non-medical drug use (Hughes et al., 1980).

Other considerations in the design of reporting systems discussed in Rootman & Hughes (1980) include selection of reporting agencies, establishing criteria for what to report, and development of procedures for reporting, data processing, quality checking and analysis.

In selecting agencies, it is suggested that sampling is sometimes desirable, especially when there are a large number of institutions and limited resources. As for criteria, it has been argued that there is an advantage in over-inclusiveness in order to obtain an idea of the natural history of alcohol problems. Whatever the criteria, however, it is important that reporting agencies apply them consistently. In designing reporting procedures, it is often useful to examine existing procedures in the agencies that are likely to participate in order to integrate the system into the agencies' own activities. Making carbon copies is often the least expensive and most practical method for producing duplicate records.

Data-processing procedures should be sensitive to the available technology and labour. Where computer systems are limited and labour costs low, for example, alternatives such as a hand-sorted punchcard system may be quite satisfactory. On the other hand, with the recent

development of minicomputers and more recently microcomputers, it is probable that even in
developing countries reporting systems will be computer-based to some degree. Whatever
approach is used, however, it is important to develop procedures for auditing and checking
the quality of reports submitted, including checking for completeness, consistency and
out-of-range responses as well as keeping track of the flow of reports in order to detect
quickly any malfunction or interruption. In the development of analysis procedures, it is
sometimes helpful to draw on the advice of a technical advisory group.

2.4 Testing

The various components of any reporting system should be tested as they are developed
and from the beginning plans should be made to test the system as a whole through a pilot
study. This process will be helpful in familiarizing participating agencies with the
procedures required, may permit them to suggest modifications to suit their own needs, and
should increase their commitment to the continuation of the system.

2.5 Implementation

In the implementation of a reporting system, the training of personnel to operate it is
important. The pilot testing can be useful in this regard, as can workshops, individual
instruction sessions and practical sessions. Maintenance of the system is not automatic.
It should be assumed that problems will be inevitable and operators should be prepared to
make changes as required on the basis of periodic reviews.

One problem that will probably arise is changes in the participation of agencies. One
way to deal with this problem is to report findings according to the type of agency.
Another is to report findings only for agencies that have remained in the system during the
period in question.

Another problem may arise from changes in institutional practices and policies, which
must be closely monitored so that data may be interpreted properly. In this regard, it may
be helpful to maintain continuous working relationships with agencies and with a network of
informed observers. Another approach would be to examine independent sources of information
in order to discover any discrepancies in trends.

One technical problem that may arise is under-reporting, which may result from the
tendency of agency personnel not to complete or not to send in forms for pertinent events.
This can often be resolved by proper training and encouragement of responsible personnel
(which may include giving bonuses for good reporting and providing regular feedback). Other
problems may be caused by the passage of considerable time between the occurrence of the
event and its reporting. This may be due to administrative factors, such as the need to
wait until court action is completed. In this case, there is not much that can be done,
except to monitor the effects of delay.

Reporting systems also share certain technical problems with other approaches to
information gathering, in particular, ensuring the reliability and validity of the
information collected. Continuous checking of information for consistency and carrying out
special studies can be helpful, although they are unlikely to solve the problem completely.

Considerable attention must be given to the reporting and interpretation of
information. The reports might be presented in a variety of forms, including quarterly or
annual reports, special tabulations, and publication in scientific and professional
journals. Presenting interpretative reviews of the data on a regular basis to sponsoring
and participating agencies can be particularly important in encouraging continuous support
and modification of the system to meet newly perceived needs.

In addition to general methodological considerations in the development of reporting
systems, there are some special considerations applying to different types of systems. For
example, one consideration in an event-reporting system is whether to report on an
individual basis or an aggregate basis. The latter has the possible advantage of lower
cost, but the probable disadvantage of there being less opportunity to check the data. The
choice of approach will depend on the relative importance of these and other factors, such
as confidentiality requirements and the willingness and ability of agencies to submit
individual or aggregate reports. A special consideration in the development of a case register is the establishment of means for matching or linking reports for the same individual. This causes additional concern over protecting the confidentiality of the information.

REFERENCES


Annex 7

TYPES OF RESPONSE TO ALCOHOL PROBLEMS

1. Prevention and Management

The types of action that can be taken in response to alcohol problems can be summarized under the headings of primary prevention (i.e., preventing the problems from occurring) and management, which focuses on diminishing the severity, the duration and the repercussions of alcohol problems affecting the drinker, his family and society in general.

Measures for preventing alcohol problems can be divided into three main types, following the public health model: those concentrating on the agent - in this case, alcoholic beverages; on the other hand, those that aim to modify the drinker and persons affected by his behaviour; and on the environment - in other words, the physical, mental and social conditions that affect the development and distribution of alcohol problems. Preventive efforts are concerned with interruption of the relationships between agent, host and environment, and with rendering the host more resistant or the agent and environment less harmful. In general, such efforts have concentrated on limiting the availability of alcohol, providing information and education about the need to limit consumption, and introducing changes in the environment to limit harmful consequences of alcohol consumption. (See Moser, 1980.)

As pointed out by the WHO Expert Committee on Problems related to Alcohol Consumption (WHO, 1980), for most of the more serious alcohol-related problems, management has much less to offer than prevention.

Even when appreciating the need for primary concern with preventive efforts, however, planning bodies will need to face the realistic situation that a variety of alcohol problems will continue to place a heavy load on society. The question then arises of how to respond to these problems in ways that will reduce their severity, their repercussions on the community and their duration. Viewing these matters from a standpoint of public health and development, it will be necessary to determine the most effective means of reducing the total burden, rather than considering merely the treatment of the individual drinker. In doing so, however, it will be essential to take into account the availability not only of suitable techniques, but also of the necessary human and financial resources.

Management in this context, then, while including where possible treatment of individual disabilities relating to alcohol consumption, would imply a search for economical methods that could reach the majority of persons so affected in the population, without overburdening the resources intended to deal with a wider range of health and social problems and with some likelihood of a reasonable return in terms of reduction of individual suffering and of harm to society.

A main conclusion may be that the management of alcohol problems should be viewed in the broader perspective of other health, psychosocial and economic problems as well as resources. In practice this would mean emphasis on using the existing resources to deal with various aspects of alcohol problems rather than establishing separate services. It would also, however, imply improved information and training concerning alcohol problems and their management for a variety of professions and service providers. It may also give greater prominence to the need for a coordination mechanism to ensure that alcohol problems are not just left out of account and that responsibility for management is not just passed from one service to another. These conclusions would apply also to areas that so far are only sparsely equipped with the health and welfare services found in many industrialized countries. A great difficulty to be faced in the developing world, however, is that whereas social and cultural controls may formerly have been sufficient for the management of alcohol problems, their effectiveness may have been eroded in recent years and new approaches may have to be sought, especially where general sociocultural changes are accompanied by rapid increases in the availability of alcohol. Although the experience of other countries may be helpful, effective solutions to the problems arising will have to be based on a careful appraisal of measures suited to the specific context.
The following sections provide more detailed consideration of specific measures aimed at prevention and management of alcohol problems, and of their application to particular groups or in particular situations.

2. Limiting Availability of Alcohol

Many studies have shown a strong positive correlation between the average level of alcohol consumption in a population and various indices of damage to health, especially those related to prolonged heavy use of alcohol (WHO, 1980; Bruun, K. et al., 1975). Available evidence suggests that increases in consumption in a community tend to be accompanied by increases in harmful consequences and that the frequency of such consequences is likely to decline when average consumption levels are reduced.

An important matter for consideration before defining action steps will be whether there is a need for attempting to achieve such reduction.

For this purpose, information will be required at both national and local levels on the current availability and distribution of alcoholic beverages, as well as the changing trends, and the data obtained will need to be set against estimates in trends of problems related to alcohol consumption, as discussed in Annex 1.

In most countries, availability of alcoholic beverages is regulated by a variety of legal controls on production, on the density, types and location of sales points, and on times of sale, as well as minimum age for purchase and consumption. Adjustment of price of alcoholic beverages relative to income is also an important means of control of availability. On the whole, highly restrictive controls have tended to lower consumption, but only where there is widespread public support for their implementation.

It becomes clear that public understanding of the need to regulate the availability of alcoholic beverages is likely to be an important factor in securing enforcement of existing regulations and possibly pressure on legislative authorities to impose stricter controls.

In doing so, it may be necessary to press in particular for the establishment or enforcement of controls likely to affect certain high-risk groups, which may be identified through the approaches described in these guidelines (also see Moser, 1980, pp. 137, 145).

In many countries the proportion of young people who drink is increasing, the amount and frequency of their consumption of alcoholic beverages is rising and the age when they begin to drink is declining. This may imply an increased risk of severe alcohol problems of long duration compared with groups where the onset of drinking is delayed.

Controls on availability of alcoholic beverages may be effective in reducing undesirable consequences not only for the individual drinker but also for those affected by his or her behaviour. Thus, communities may wish to strengthen controls on availability of alcohol to specific groups, such as persons whose behaviour may affect public safety, e.g. drivers, particularly those engaged in public transport, and other persons involved with the safety of public transport, such as airfield staff and railway signal officials, as well as persons engaged in operating machinery. Special attention may be directed to controlling alcohol availability to certain groups in inappropriate circumstances, for example persons engaged in health, education and administrative work. Considerable percentages of the community may be affected by the behaviour after drinking of, for example, the teacher, the factory manager and the surgeon. Legislative controls would be difficult to establish for such cases, but means of ensuring community pressure may be devised.

As noted in the 1980 Expert Committee report (WHO, 1980, p. 34): "While no single type of control effort can be urged as likely to be effective in all circumstances or for all countries irrespective of their cultural and economic background, three important generalizations can be made.

(1) The effectiveness of any specific type of control effort will depend in part on its integration into a clear governmental policy position that has been carefully defined and coherently expressed."
(2) The effectiveness of any single control measure probably depends on its being embedded in a series of mutually supportive efforts that together constitute a comprehensive and coordinated programme of prevention.

(3) Control measures are likely to be more effective if preparation has been made for their acceptance by the public through appropriate public education and information."

In summary, action at national level designed to limit availability of alcoholic beverages can be seen as comprising the enactment of legislation and the establishment of controls in tune with the current situation and likely to be acceptable to the community, although perhaps somewhat in advance of public attitudes. At local level, greater opportunities are likely to be available for keeping track of the situation concerning consumption and problems, and for enforcing the application of and adherence to controls.

3. Information and Education

Information and education on alcohol and alcohol problems are widely seen as important means of reducing the demand for alcohol and thus of preventing alcohol problems. At both local and national levels it would seem of primary importance that a coordinating group should acquire adequate information on these matters in general, and as affecting the population concerned in particular, so that a clear policy and objectives for an information and education programme can be defined. This process may involve preliminary discussion with a variety of groups, including those with related trade and economic interests, as well as with persons in the health, welfare and education fields and possibly others with an established policy, such as temperance groups.

Considerable information has now been accumulated on a suitable framework for education and information programmes (e.g. within broader programmes for health and sociocultural development) and such matters should be taken into account by the planning group. In addition, accumulated experience concerning specialized techniques for improving communication effectiveness and information transfer as well as for promoting changes in attitudes and behaviour needs to be fully utilized. In efforts to change behaviour, mere provision of information is likely to be of limited value. Emphasis is therefore increasingly being laid on educational efforts that focus on the need to develop individual responsibility for personal health and welfare and that of the community. Whether or not a national policy or programme has been defined, it will be important at local level to involve community members in shaping educational programmes according to the significance attached to alcohol use locally, to the existing drinking patterns, and to the prevailing social controls as well as to the social changes under way.

Public education programmes that involve local communities can be valuable for arousing public interest in collaborating in effective action and countering constraints.

Specific sub-programmes will have to be geared to particular target groups, such as schoolchildren, persons concerned with the high-risk groups mentioned and special occupational and professional groups. Representatives of such target groups would, of course, have to be involved in designing the programmes. (See also WHO, 1980, pp. 34-42; Vuylsteek, 1979.)

4. Changes in the Environment

Excessive use of alcohol may be an indicator of underlying social problems that need to be tackled through change in the environment. In some areas, therefore, persons concerned about alcohol problems have collaborated in other community endeavours that aim at providing increased opportunities for employment, income, education and leisure activities. As stated in the report of the Expert Committee already mentioned (WHO, 1980, p. 42), "A sense of access to opportunity can also constitute a stake in society and underwrite a commitment to its norms and values" and "can serve, in turn, as a barrier to transgression of accepted norms in the area of alcohol abuse and alcohol-related problems." There may, of course, be a prior need to promote change in the prevalent accepted norms, through education emphasizing moderate use and disapproval of excessive and socially inappropriate use.
Certain additional preventive measures may be easier to implement at local than at national level. For instance, on occasions when particularly heavy drinking may be expected because of festivities, special arrangements can be made, even informally, to preclude driving by those who have been drinking.

Changes in the occupational environment may be necessary to prevent problems arising from the combined effects of alcohol and specific toxic substances (WHO, 1980).

5. Family Support

Examination of the effects of drinking on the community may reveal that the most harmful consequences are found within the family of the heavy drinker. These repercussions may include financial hardship, family breakdown, perhaps violence and often long-term mental and physical disturbance among the children. Community support to families of identified heavy drinkers, including where feasible assistance by trained community workers, may help to avert the most severe consequences for other members of the drinker's family and may even help to alleviate his or her own situation. (See also Moser, 1980, pp. 207-211.)

6. Management of Persons Identified as Alcoholics

A great variety of provisions have been made in various countries for the management of persons identified as "alcoholics" or as suffering from the alcohol dependence syndrome. A wide range of methods of treatment have been employed, separately or in combination. So far, however, the few well designed attempts to assess the efficacy of treatment models have failed to show any clear advantage of complex and lavished management regimes compared with simpler strategies. At both community and national levels there may be opportunities for stimulating or reinforcing the support offered by self-help groups, like Alcoholics Anonymous. Increased attention has recently been given to the value of specialized detoxification centres for dealing with public drunkenness, thus providing at least temporary shelter, as well as opportunities for physical care, simple counselling and possibly social assistance to the drinker's family.

In view of the paucity of evidence of the comparative value of various treatment and management measures for the individual drinker (alcoholic), it would seem of great importance that efforts be made to examine the measures currently employed at the local level, whether or not such techniques are formally structured or labelled as treatment, in order to make a preliminary assessment of their effectiveness. It should be recognized, however, that even with little or no treatment some persons labelled as alcoholics may stop drinking completely or go back to a socially acceptable level of drinking. If it is decided that additional treatment and management measures are required, it may be advisable to initiate trial programmes with limited objectives directed at a defined population, so that the costs (in terms of manpower and time) and effectiveness (including acceptability to the community) can be estimated in stages and the findings used to modify the programmes.

7. Programmes in the Occupational Setting

Most people with alcohol problems have some kind of regular occupation. In many areas the work setting provides motivation and possibilities for identifying and attempting to reduce such problems, which often become apparent through absenteeism, illness, accidents, and lowered production and quality of work.

At the local level it may be feasible to identify the range of occupational settings and initiate discussions with key personnel, including persons who may be engaged in occupational health programmes, and, where appropriate, with representatives of labour organizations (trade unions). There may already be an awareness of alcohol problems and their repercussions in the occupational setting, or this may have to be stimulated. Consideration of how problems should be met might need to await a preliminary investigation of their extent in particular work situations and a review of existing resources and responses. Opposition to such inquiry may be encountered from several sides. Employees may fear loss of

---

1 This is the term incorporated in the International Classification of Diseases to replace "alcoholism".
jobs, perhaps in a situation of high unemployment, and trade unions may be suspicious of programmes that might run counter to the workers' interest. Managers may find dismissal of workers with problems economically preferable to seeking other solutions.

Experience is, however, now available from a number of countries demonstrating some success in countering opposition to occupational programmes and in reducing alcohol problems to the satisfaction of both workers and employers. In certain programmes, early identification, confrontation of the employee about his problems, counselling and follow-up are provided through an occupational health and social service within the specific occupational setting, although referral may be made to other community services. Elsewhere a centralized programme and referral service dealing specifically with alcohol problems may be used. Some programmes deal with these problems in a broader context of general behaviour problems affecting work performance. Information on such experience would be brought to the attention of the group established for discussion, who could relate the experience to the local situation and might wish to launch new programmes, initially on a trial basis. (See also WHO, 1980, p. 49; Moser, 1980, pp. 218-222, 233-234.)

REFERENCES


Annex 8

PROTOCOL FOR MONITORING RESPONSES TO ALCOHOL-RELATED PROBLEMS

1. Introduction

The purpose of this protocol is to assist alcohol problems teams in monitoring changes that might be introduced as part of a project on community and national responses to alcohol problems. Monitoring, in this context, simply means "keeping track" of events and activities related to attempts to improve responses. This is in contrast to evaluation which implies a more rigorous and systematic assessment of policies and programmes.

There are a number of reasons a community alcohol problems team might want to engage in monitoring activities. The most important is that such activities can be used to stimulate and guide improved responses to alcohol-related problems. Another is that monitoring can assist project teams in improving their understanding of the nature of responses to alcohol-related problems. It is also a very effective way of documenting changes for future reference and use by the participating communities and countries, as well as by others. In addition, monitoring can be used to help determine what should be evaluated more fully and perhaps how to go about doing it.

A number of issues must be considered in monitoring changes in responses to alcohol problems. These include: defining the unit of analysis; relationship of monitors to the change process; and the relationship of monitoring to the goals of planning and initiating change. These issues will be considered in the next section.

Methods that might be used to monitor change include: description of programmes; documentation of process; collation of indicators; interviews; observations; and record analysis. Each will be discussed in turn in section 3. In this annex and specific techniques will be presented. The aim is to present a series of suggestions for community alcohol teams.

2. Issues in Monitoring Responses

2.1 Defining the level of intervention

Phase I of the Community Response study was carried out in a limited area of each of the countries involved a region in Scotland, a rural village and an urban neighbourhood in Mexico, a rural area and two urban neighbourhoods in Zambia. There was and can be no claim that these areas are representative in any statistical sense of the country as a whole. In particular, the Scottish data were inadequate for a full understanding of rural areas, and the Mexican and Zambian studies did not include the small but important portion of their national populations in the middle and upper classes. In all three countries, ethnic and other cultural differences may produce quite different patterns in unstudied areas of the country.

Thus, while the Community Response study was properly seen as contributing to planning at the national level, there is need for considerable caution in extrapolating its findings nationally - and for attention to any indications in the monitoring process of failure of the remedies used to match the cultural situation in specific areas.

From the first, however, it was seen that the major thrust of the project would be at the community level. This emphasis stemmed from a preliminary understanding of the processes involved in the emergence and social handling of alcohol problems: that, whatever structural factors may have called them into existence, individual problems with alcohol were handled in

---

1 This section was drafted by Robin Room in collaboration with Irving Rootman.
the first place by family, friends, bystanders and other members of the local community, and in the second place by relatively local agencies.

As the study proceeded, this perspective turned out to have some problematic aspects. The major difficulty was in the definition of community; the appropriate frame of reference seemed to shrink or expand for each kind of social response agency. Some services and agencies are relatively locally based, serving populations of about the size sampled in the Mexican and Zambian general population surveys: emergency rooms, police stations, and ministers or priests would be examples of this in each country. But some agencies serve much wider "communities"; and the frame of "community" size can vary from country to country. Thus a social work office in Scotland served a much smaller area than the region studied, while in Zambia the closest equivalent served the whole of Lusaka. For at least one specialized agency included in the study in both Mexico and Zambia, the catchment area was the whole country.

Both in planning and in monitoring changes in "community response", then, there is a need for attention to multiple levels of aggregation. Different kinds of mechanisms for change in community response can be expected at each level. In a village or local neighbourhood, in the absence of a major social movement like the historic temperance movement, it must be expected that alcohol issues will usually be dealt with by general-purpose social agencies. The local council may set up a sub-committee, the local police may go through a training course, the local school may run a campaign on drinking, but there is neither the social energy nor the resources to sustain a specialized agency devoted to responding to alcohol problems, even if such a response seemed appropriate.

At the national level, the response may be expected to involve inter-departmental committees and perhaps specialized bodies such as voluntary groups concerned with alcohol issues or a governmental alcohol problems agency or programme.

But there are many levels between the local community and the national government, and attention will need to be paid to these often ill-defined levels of aggregation. In some ways, these intermediate levels may be the most important from the point of view of change - a city, for instance, is big enough to have the social energy and resources for sustained attention to problems, but is close enough to the problems and coherent enough to avoid the air of abstraction and wishful thinking that frequently characterize national efforts. In any case, since many of the services and agencies relevant to alcohol problems - hospitals, schools, etc. - are often organized at levels between nation and local neighbourhood, a study that aims to monitor processes of change cannot concentrate just on the local neighbourhood and the nation.

2.2 Relationship of monitors to the change process

In a classic evaluation design, the evaluation and evaluators would be clearly separated from those carrying out the programme to be evaluated. This arrangement is a general reflection of the scientific impulse to separate what is to be measured from the measuring process. But it also reflects the different qualities demanded in the programme and evaluation functions: those carrying out a programme can often be effective only when they believe in its effectiveness, while a sceptical and questioning spirit is a prime requisite of an evaluator.

In recent years, models have begun to appear of "action research" arrangements where the change agent and evaluative functions are much less separated. There are obvious advantages to such combinations, since the programme can become more attuned to the population it serves if there is direct and continuous feedback as it unfolds. The danger of course is not only of a possible loss of objectivity, but also of a failure to take time out to measure and document the process as it occurs in a way that will yield repeatable results.

Although this issue might be resolved on theoretical grounds, more often it is resolved on practical ones. For example, in the Community Response project carried out in Mexico, Scotland and Zambia, the principal collaborators were actively involved in alcohol issues at both national and local levels in their countries, and there was therefore no prospect of a cordo sanitaire between programme and evaluation even if such were desired. This means, however, that explicit forethought needs to be given to the arrangements and procedures in each site to ensure that the monitoring process is carried out to yield results that could be repeated by another investigator.
2.3 Relation of monitoring to the goals of planning and initiating change

Any monitoring or other measurement of the changes or their effects needs to take into account the nature and scope of the changes contemplated. These will determine the sampling framework of the monitoring or measurement undertaken, the nature of the items to be measured, and the orientation of the analysis. In order to illustrate this point concretely, seven common community responses to alcohol problems might be considered.

i. Coordinating committees

Perhaps the most common official response to the identification of an unsolved problem is to set up a committee of interested parties to design or coordinate a response. Such committees can be relatively continuing and permanent, or ad hoc and temporary; they can be empowered to make decisions, commissioned to produce a report, or simply designated to serve a liaison function; they can be passive reactors to events, or seek to make them. They can exist at all levels of aggregation: international; inter-departmental at a national level; between levels of government; interfunctional in local government; or be a formally constituted or voluntary group of private parties; and so on.

The mandate of such a committee can be quite strongly oriented to prevention of alcohol-related problems. In many countries, it is coming to be recognized that the frequent historical tendency to locate government concerns with alcohol production and distribution in fiscal and agricultural departments, and government concerns with alcohol problems in public health and welfare departments, means that there is very little public health and welfare input into decisions about alcohol production, commerce and taxation. An inter-departmental committee is a likely expedient for dealing with this issue. Another example would be a coordinating committee between police authorities and public health authorities about the prevention of drunken driving.

On the other hand, perhaps the most frequent role of such committees, particularly at a more local level, is to coordinate the provision of services to those identified as in need of them. "Fragmentation of services" seems to be an ever-ready diagnosis of the failures in community response, particularly in countries with a relative abundance of different health and social services and entitlements.

Whatever the mandate and composition of a committee, monitoring its functioning and outcome will have some common features. There will usually be some documentary records of its functioning: the record of its appointment or constitution, minutes of meetings, periodic reports, a final report might all exist. But not all the substantive discussions or even decisions of the committee may be recorded. To document these, it is necessary either to attend and observe committee meetings or to interview members about the processes and decisions. Even where documentation seems adequate, it will often be helpful to attend meetings to record the tone of discussion and the assumptions and purposes behind the decisions made. Where the committee is recommending or directing some action, it will be helpful to others who follow to know the rationale for and expectations from the action, so that these can eventually be compared with the actual outcome of the action.

ii. Community organizing - Change agents

A frequent prescription for change at the local level is to send in one or two "change agents" with general instructions to try to organize local people so as to reduce the rate of alcohol-related problems. Such efforts frequently use a strategy of attempting to link up the effort with local related concerns have an armamentarium of activities to get people interested and energized. Versions of the model have a long history in the proselytizing activities of churches, labour unions and political organizations. More recently, a literature in the area has grown up around such activities as International Volunteer Services and the US Peace Corps.

A problem in the planning of such undertakings as much as in their evaluation is the specification of the exact goals of the effort. In response to local concerns and opportunities, such efforts often drift away from their original goals, or, one might say, the goals become more focused. But the process can be fairly readily documented by requiring the community organizer to keep a log-book of activities and events. Informal
interviews with others in the community can give a further understanding of processes. Outcomes can be monitored in terms of the occurrence of relevant events, and by keeping track of social statistics. A full evaluation study would, of course, involve before-and-after data measurement by survey or other means.

iii. Educational and training programmes

Most investigations of community responses to problems conclude at least in part with a recommendation for education or training programmes. These may be directed at specific professional or other populations: doctors, police, bartenders, volunteer workers, etc. or at more general populations notably schoolchildren, but also adult education groups. The technology of educational evaluation is relatively well developed. It is also usually fairly inexpensive to administer before-and-after questionnaires to a relatively captive audience. Such questionnaires should include items not only on knowledge and attitudes but also on the behavioural effects of the training or education.

Such a standard before-and-after design is actually not sufficient as a way of monitoring the process and effects of an educational programme. It is important to document the process and content of the programme — what is actually said and done by those involved in it. For programmes that "train the trainers", e.g. that train schoolteachers, it is important to get some notion of how the programme is put into effect in their regular professional activities. Even a very few informal interviews can be helpful here. In general, educational and training programmes can be justified not by how trainees fill in a questionnaire at the end of the programme but by the long-term effects on behaviour in their regular rounds of activities. However informally and non-systematically, it is important to gather information on these longer-term behavioural effects.

iv. Public information campaigns

Campaigns in the mass media or specialized media are another classic official response to the issue of dealing with alcohol problems. By their nature, such campaigns create some of their own documentation, which should be carefully identified and kept. A frequent problem with such campaigns is a lack of concordance between the initial objectives and the final slogans; the process of decision-making about the message of the campaign is frequently an interesting study in its own right.

Again, the technology for evaluation of media campaigns is well developed — although the emphasis tends to be on such surface effects as recall and repetition of the content of the campaign. It is important to gather any information possible on how the campaign was received by its target audience, and the effects of the campaign not only on knowledge and attitudes and in the short run, but also on behaviour and in the long run.

v. Changes in legal and regulatory controls

A wide variety of legal and regulatory controls have the potential for reducing alcohol-related problems. Many such controls are oriented specifically to alcohol distribution: taxes on alcohol, controls on hours or conditions of sale, controls favouring one alcoholic beverage over another, and so on. Others are oriented to the circumstances of use: drunk driving laws, prohibitions on use during working hours, etc. Still others may affect alcohol-related problems, although their orientation is not alcohol-specific: a speed-limit on driving may reduce drunk driving casualties, and so may a requirement that automobile manufacturers install airbags to protect occupants in a crash.

In the area of legal controls, it is important to pay attention not only to the relevant legislation, but also to the regulations with which the laws are implemented, and particularly to enforcement practices concerning the laws and regulations. Thus, it is not sufficient in studying the process of such controls simply to document the legislative history: it is important also to make some measurement of how they actually work in practice.

There is a well-established tradition of evaluation of laws and regulations, often referred to as "legal impact studies". Frequently in the course of enforcement of laws and regulations adequate records are kept of control actions and their outcome. It is often much more difficult to document changes in the behaviour to which the controls apply.
Possible methods here include population surveys, observational studies, informal interviews, and the use of such unobtrusive measures as monitoring the amount of litter from drinking.

vi. Encouragement of replacement

The amount and form of alcohol consumed is affected by the supply and distribution network, and by the availability of functional equivalents, or counter-attractors. For instance, alcohol may serve to quench thirst where the water is polluted; soft drinks may acquire greater status than beer as a prestige commodity; conversion of land from wine-growing to other crops may eliminate selling of surplus wine or brandy at distress prices.

One difficulty with replacement strategies, it has been remarked, is that "alcohol goes so well with many other activities". Sports programmes are often promoted as an alternative to youthful drinking, yet many sports and particularly spectator sports are culturally associated with drinking in many places. Soft drinks were originally introduced in the USA in part as a temperance measure, but about half of the soft drinks sold there now are used as mixers for alcoholic drinks.

Another kind of replacement or community organization worth special mention is religious conversion or religious revivals. One of the strongest correlates of abstention in many countries is adherence to religious groups that abjure drinking. Of course, in states where there is a separation of religion from secular authority, official involvement in such activities will be limited to monitoring and evaluating them.

Monitoring of programmes to replace alcohol by other activities or commodities means gaining a knowledge of trends not only in drinking but also in the consumption of the substitute commodity or the pursuit of the alternative behaviour. Official statistical series may sometimes be of help here; otherwise, unless there are resources for repeated population surveys, the investigator must rely on observational studies, informal interviewing, or unobtrusive measures.

vii. Provision of new services

An obvious possible conclusion from a Community Response study is that there is a "gap in services" which demands a new or reconstituted service programme or corps. Such services may be alcohol-specific (e.g. a treatment centre for alcoholism), or more general (e.g. a new hostel for homeless men, whether or not they are drinkers). Such services may be aimed at treatment or rehabilitation, in which case it will be crucial to study whether and to what extent their clients are changed by experiencing the service. Or the service may be aimed simply at the provision of material or social supports, or at punishment or control. While the aim of these latter programmes may not be to change the affected individuals, it is still relevant to observe or otherwise study whether there are such services.

The classic "treatment evaluation" study involves measuring clients when they enter treatment and at intervals afterwards. Such studies have usually not been strong on measuring the client's satisfaction with the services offered, though this clearly becomes more important when the programme is seen as providing supportive services. More crucially, such studies give little inkling of the ecology of the new service - how people are attracted to use it, to what extent it duplicates or overlaps other services, whether its clients would prefer another type of service, whom it misses serving, and, most importantly from a prevention perspective, whether and to what extent the new service diminishes the overall rate of alcohol problems in its target population.

These questions require looking outside the doorway of the service and studying its relation to patterns and needs in the population at large. Such studies might include surveys, observational studies, informal interviews, and so forth. They should be complemented with studies more in the usual treatment evaluation model, documenting the process followed in the service, and following up, through interviews, record searches, or other means, what happens to the clients.
2.4 Other issues

There are a number of other issues to be considered in monitoring responses to alcohol-related problems. These include: Should one monitor implementation or impact? Should one monitor intervention or the natural course of events? Should one document or measure? Should one measure change per se or simply establish a baseline for doing so? And should monitoring be passive or active?

If unlimited resources were available, these matters would not be problematic as none of the options, with the possible exception of the last, are mutually exclusive. However, in the situation of limited resources, the advice offered would be to monitor implementation and intervention, to document, to establish a baseline for measuring change and to be relatively active in monitoring. This, however, should not preclude alcohol problems teams from considering these matters and resolving them in the manner most appropriate to their circumstances.

3. Possible Monitoring Methods

The last section mentioned in passing many of the methods that could be used for monitoring. This section will describe some of the main methods in more detail. In particular, it will present the following approaches: description of programme; documentation of process; collation of indicators; interviews; observations; and record analysis. It will also mention some other approaches and conclude with a brief discussion of research designs.

3.1 Description of programme

In monitoring it is often useful to describe the programmes, measures or situations that are implemented or occur in response to an initiative. Such descriptions can be made either by participants themselves or by observers.

The programmes and initiatives that occur in response to alcohol problems will be of different kinds and will, thus, need different monitoring techniques. It is one thing to monitor the implementation and effects of a short-term, well-defined measure such as an educational film and quite another to monitor those of, for instance, a national anti-alcoholism programme with its diversity of methods, operation and objectives. Clear descriptions become important so that the person(s) doing the monitoring can think of different monitoring approaches and methods to suit particular programmes.

According to Weiss (1972), some of the differences in programmes to bear in mind include:

<table>
<thead>
<tr>
<th>Scope:</th>
<th>The programme may cover the nation, a region, a town, a neighbourhood, a specific site (such as an agency), or scattered sites.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size:</td>
<td>It can reach a few people or thousands.</td>
</tr>
<tr>
<td>Duration:</td>
<td>It can last hours, weeks, months, years.</td>
</tr>
<tr>
<td>&quot;Clientele&quot; or type of population to be reached:</td>
<td>This could be the general public or a special group.</td>
</tr>
</tbody>
</table>

Clarity and specificity of programme input:

What the programme actually does may be precise and clear or diffuse and complicated.

Complexity and time span of goals:

Some programmes are designed to produce specific, measurable changes, others have more complex goals that are harder to define and measure.

---

1 This section was drafted by Margherita de Roumanie in collaboration with Irving Rootman and Bruce Ritson.
Traditionality of the scheme:
Will it fit in with ongoing programmes or represent a break with tradition?

Organizational framework:
New and pre-existing.

Examples of areas that should be covered in a description are:

Background and context of the programme:
What led to its establishment? What assessment of needs was done? How?

Purposes and goals: What is it designed to accomplish?

Tasks: Whom will it reach? How will it reach its target group? What does it specifically seek to change?

Staffing: Numbers; levels of responsibility; expertise required; how recruited; training received; training required.

Organization: How will the programme be run? By whom? Full-time, part-time; administrative structure.

Facilities: Space requirements; materials required.

Location: Geographical location; physical areas, i.e. office, classroom, hospital, etc.

Budget: Source of funding; total cost of programme; major cost items.

Time scale: Week? Month? Year?

Rules: How much variation does the programme allow?

Referral network: Anticipated and actual.

Records: What sort of records will be kept? By whom? Who has access to them?

Implementation: What provisions have been made for monitoring the programme? How will it look in operation?

Target community: Whom will it affect? Many or few? A defined group? The general public? A specific community?

The amount of information presented in the description will depend on the audiences for which the report has been prepared if the audience has no knowledge of the programme, its description should be much more detailed than if it is mainly for internal use.

An example of a descriptive account of a programme is that of the Community Alcohol Team described in Alcohol-related problems: a shared response in the Lothians (see Appendix 1 to this Annex). This example concerns the planners' perspective but thought should be given to other views, such as participants', clients', other community agencies', and politicians'.

Ideally, one should assemble a picture of the overt official face of an agency alongside an insight into the way it functions in practice and in the eyes of those who use it.
<table>
<thead>
<tr>
<th>Activity or Events</th>
<th>Dates</th>
<th>Person(s) responsible or involved</th>
<th>Location</th>
<th>Goals or target group</th>
<th>Outcome (decisions)</th>
<th>Contacts initiated</th>
<th>Tasks to be undertaken by those contacted</th>
<th>Tasks completed</th>
<th>Remarks (incl. antecedents, consequences, problems and related events)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liaison Committee set up</td>
<td>1.3.81</td>
<td>Chairman: Dr H. Members: (see attached form)</td>
<td>R.E.H. Room 1003</td>
<td>- Liaison with interested parties. &lt;br&gt; - Communicate decisions to community. &lt;br&gt; - Produce a monthly newsletter.</td>
<td>- Invite local M.P. to next meeting. &lt;br&gt; - M. to start newsletter</td>
<td>Chief Inspector of Police &lt;br&gt; Area Officer Social Work</td>
<td>Inform D Division. &lt;br&gt; Team meeting.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational film on alcohol</td>
<td>31.3.81</td>
<td>Dr B. and Head-teacher</td>
<td>L. Academy W.</td>
<td>Educate and inform school children on effects of alcohol.</td>
<td>Class Prefect, English teacher M. S.</td>
<td></td>
<td>Contact Education department. &lt;br&gt; Start class discussion group.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.2 Documentation of process

A programme description is usually static whereas we are often concerned with the dynamic sequence of events, keeping track of the innovative process as new responses are developed. This can be used for a number of purposes, such as making sure the programme runs on target and does not diverge too widely from its stated goals, to provide a lasting description of the programmes developed, and to provide a list of the possible causes of the programme’s effects.

This might be done in a number of ways. One practical way would be for project team members and if possible participants in programmes to keep a logbook or diary of relevant events.

A model of a completed log-book page is shown in Fig. 4. Such a diary could be kept every day or once a week and could be used to prepare monthly reports either for the project team (if kept by an agency) or for the community or some outside body (if kept by the project team). It could be backed up or supplemented by reference material including newspaper and magazine clippings, meeting minutes, descriptions of agency or community plans and individual contact cards.

A model of a contact card is presented in Fig. 5. Such a card could be small enough to be carried in the pocket and be completed by project team members and people from participating programmes on every contact considered to be relevant to the programme immediately following the contact. The information could later be transferred to the log-book if appropriate.

FIG. 5. MODEL CONTACT CARD

| Agency or Organisation | ......................................................... |
| Name of Person Making Contact | .......................................................... |
| Name of Person Contacted | ........................................................... |
| Title/Position | .......................................................... |
| Agency | .............................................................. |
| Purpose of Contact (Describe) | .......................................................... |
| Action Taken as a Result (Describe) | .......................................................... |
| Follow-up Action Required in Future (Describe) | .......................................................... |
| Comments (e.g. Antecedents, Consequences, Related Events, Problems and their resolution, etc.) | .......................................................... |

These models are only intended as suggestions and could be improved or discarded as required.
<table>
<thead>
<tr>
<th>WHO Guide Section</th>
<th>Data Required</th>
<th>Source (or possible source)</th>
<th>Data Collected</th>
<th>Needs Updating</th>
<th>Updated to</th>
<th>Written up</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In addition to documenting the process by log-books and contact cards, it could be done by using the other approaches discussed in the rest of this section, particularly record analysis, observations, and interviews and questionnaires. With regard to the latter, it might be useful to interview people involved in programmes and ask them to complete brief questionnaires about developments on a regular basis.

3.3 Collation of indicators

Monitoring can often be carried out by collation and study of existing indicators of change such as police statistics, mortality and morbidity statistics, court, welfare, and social security statistics, and employment and insurance claims records. Sometimes agencies can be persuaded to make changes in their recording on aggregate procedures to increase the relevance of the statistics. In addition, unobtrusive measures of indirect indicators may be useful (e.g. number of alcohol bottles thrown away).

A lot of this ground has been covered in the check list designed for the collection of background information drafted during Phase I of the Community Response project and is discussed in Annex 1.

Like the collection of background information, these indicators need to be easily collected and relevant to the particular community in which the programme or programmes are operating. A difficulty is that very few data are actually available for small areas, such as neighbourhoods - most is collected nationally or for substantial administrative areas. An additional problem is that even at a smaller community level, local agencies have different catchment areas and collecting agency statistics may not give a very accurate statistical picture of the community under study.

A good discussion of the shortcomings and advantages involved in the use of official statistics as indicators of change is contained in a book by Weiss (1972, pp. 54-59). Fig. 6 is an example of a chart that could be used for keeping a record of the information already gathered and still to be obtained.

Additional statistics could be obtained from local agencies. For example, changes in the number of people making inquiries at different agencies could be monitored. In Lothian, for example, there may be changes in the level of inquiries at the Edinburgh and District Council on Alcoholism, or inquiries related to alcohol made at the Samaritans as a result of a new initiative and these changes could be recorded.

3.4 Interviews and questionnaires

Formal and informal interviews and questionnaires can be used to monitor changes over time. Samples of the general population, clients of services, and staff can be interviewed on their attitudes and behaviour before and after programme participation. In this regard, it is possible that some of the instruments already developed for the general population, agency and client interviews during Phase I of the Community Response project could be shortened and adapted for this method of monitoring (see Annexes 2, 4 and 5).

An example of this approach to monitoring is contained in Responding to drinking problems by Shaw, et al. (1978), in which an evaluative study of Community Alcohol Team training courses is described. Various agents were questioned before and after each course on their knowledge of alcohol problems, their techniques in dealing with drinkers, feelings about rights and responsibilities in responding to alcohol problems, their anxieties in working with drinkers and their sense of professional self-esteem in responding to drinking problems in comparison to their self-esteem generally.

The classical evaluation study involves randomly allocating clients to different programmes and then conducting follow-up interviews over a period of time. This is a costly approach which contrasts with the more "boot strap" operation employed by many action researchers but it is often the only means of arriving at a definitive answer to questions about the effectiveness of new developments. A recent example of this approach is given by Orford & Edwards (1978), and Ritson & Chick (1981) are using a similar evaluation strategy based on the clinical service in Lothian.
When resources and time are very limited, interviews may have to be focused on certain key individuals within the programme and the community. Short surveys using postcards and telephone or shopping centre interviews might also be considered.

3.5 Observations

Observations can also be made formally and informally in an effort to monitor change. Although limited to the observable, in addition to monitoring change they can also help in understanding it.

Observational approaches are discussed in Annex 3.

In addition, a do-it-yourself, cookbook type of approach referring to educational programmes is contained in a programme evaluation kit (Morris, 1978) developed at the Center for the Study of Evaluation, UCLA (California, USA), and the style, method and content of Chapter 5 of Volume 4 may be of some general use and interest, particularly in giving some ideas on what a detailed description of how to do an observational study might look like. Finally, for an imaginative book on various methods of collecting data that does not involve asking anybody anything, see Webb et al. (1966).

3.6 Record analysis

This is a look behind the statistics, an analysis of the content of the indicators referred to in section 3.3. Existing records could be used and a special record keeping system could be established. Content analysis, which is essentially a technique for reducing qualitative data to quantitative terms can be used, or a more anecdotal approach could be employed, depending on the audience and the type of records available. Documents to be studied include:

i. The minutes of meetings;
ii. Correspondence;
iii. Newspapers, periodicals and journals as well as radio and television broadcasts;
iv. Personal diaries, specially commissioned;
v. Public records, agency records (hospital, family doctors, social work, etc.).

In the case of police records, for example, their content could be examined in order to see the frequency with which alcohol was mentioned, in what contexts or if particular individuals mentioned or noted it significantly more often than others. Sometimes what is not said is just as revealing as what is.

Agency staff could be asked to add a page to their records for, say, a particular period of time, on which they would record any information pertinent to alcohol.

Confidentiality will obviously be a critical issue in the analysis of records and must be clarified before embarking on the project.

Some useful references for content analysis are: Duverger (1964); Goode & Hatt (1952); and Holski (1968).

These matters are discussed further in Annexes 1 and 6.

3.7 Other approaches

In addition to those already mentioned, other approaches to monitoring change that might be considered include:

1. Client satisfaction studies: to analyse the opinions, attitudes and reactions clients express about the services received from a programme, through questionnaires, personal interviews, telephone interviews and the like.

2. Case studies: particular cases - individuals, an agency, a particular group or even the programme itself - are closely examined. The programme is thus placed in the context of the many other things that happen to the persons, agency or group under study.
3. Cost-benefit analysis: this is more in the tradition of evaluation research than monitoring. Essentially, it aims at identifying the costs and the benefits of a programme, (tangible and intangible, direct and indirect); an attempt is then made to assign a monetary value to the benefits. The ratio of benefits to costs is an indication of the return that the community is getting from its investment in the programme. Of course, in many social programmes it is virtually impossible to quantify the expected benefits - in these cases, cost-effectiveness analysis can be used to determine the most appropriate programme alternative for achieving a given non-quantifiable outcome.

The following references may be useful for identifying and developing such approaches: Filstead, 1978; Filstead, 1981; Little, 1976; Morris, 1978; Posavac & Carey, 1980; Reichardt & Cook, 1979; Rossi et al., 1979; and Weiss, 1972.

Whatever the approaches to monitoring used, it is useful to have a clear outline of the methods and procedures to be employed. Fig. 7 is an example of a chart that could be used (taken from Morris (1978) Vol. I, Evaluators handbook, p. 57).

### FIG. 7. MONITORING CHART

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument to be administered</td>
<td>Activity to be monitored</td>
<td>Dates of administration</td>
<td>Sites to be examined</td>
<td>Subjects of measurement</td>
</tr>
</tbody>
</table>

3.8 Design

It is perhaps helpful to review the research designs within which these and other approaches might be included. Methods include experimental, quasi-experimental and non-experimental designs. These methods are described in Chapter 4 of Weiss (1972) and Vol. 3 of Morris (1978).

The experimental design uses experimental and control groups: in summary, units (people, agencies, towns, etc.) are randomly allocated to either the experimental or the control group, the relevant criterion variables are measured before the programme starts and after it ends and the differences are computed.

Quasi-experimental design: Campbell & Stanley's (1966) work has been the most influential here. Unlike experimental designs that protect against most of the threats to internal validity, quasi-experimental designs leave one or several of them uncontrolled.

The "time series" design is a quasi-experiment involving a series of measurements at periodic intervals before the programme begins, continuing until after it ends. This enables one to see whether the measures just before and after the programme are a continuation of previous trends or indicate a change.
"Multiple time series" is a design in which the evaluator takes periodic measures over the same time span of a similar group or institution to the experimental one, in order to protect against any confounding effects such as an unstable pattern of traffic accidents.

Another design is the non-equivalent control group in which there is no random allocation to control and experimental groups, but available individuals or groups with similar characteristics are used as controls, or comparison groups. Before-and-after measures are made for both groups and results are compared.

Campbell & Stanley include another design, the "patched-up design" which adds specific controls, one after the other, to rule out different sources of confusion.

Non-experimental designs: Three of the most common are the before-and-after study of a single programme or project (it need not be limited to pre-test and post-test measures; measurements can be taken of participants as they move through the programme); the after-only study of programme participants; and the after-only study of participants with a non-random control group (or comparison group). The shortcoming of these methods is that they do not control for rival explanations, i.e. the possibility that observed changes were caused by something other than the programme.

4. Conclusion

This protocol has presented a number of methods and suggestions for monitoring responses to alcohol-related problems. It is recognized that resources and circumstances may preclude use of all of the methods to the fullest extent. In some cases, it may be possible to use only one of the methods in perhaps keeping a log-book. However, it is important to stress the desirability of monitoring as a way of improving community responses to alcohol problems.

It should also be stressed that this protocol is not intended to inhibit alcohol problems teams from developing new approaches. In fact, it is hoped that they will do so and that on the basis of their experiences, it will be possible to revise the protocol so that it may be more useful to others.

REFERENCES


Vol. 1. Evaluator's Handbook
Vol. 2. How to deal with goals and objectives
Vol. 3. How to design a program evaluation
Vol. 4. How to measure program implementation
Vol. 5. How to measure attitudes
Vol. 6. How to measure achievement
Vol. 7. How to calculate statistics
Vol. 8. How to present an evaluation report


ADDITIONAL BIBLIOGRAPHY


COMMUNITY ALCOHOL TEAM *

We know that individuals with alcohol-related problems commonly attend front line agents such as GPs, social workers, hospitals, CAB, with these problems, but the alcohol component can often be overlooked or ignored. Alcohol misuse is also a common cause of absenteeism and accidents at work. Alcohol counselling linked to occupation seems a particularly effective technique for identification and treatment. (Scottish Council on Alcoholism, 1977). It has been shown that professionals such as hospital casualty staff, general practitioners, (Wilkins, 1974) and general psychiatrists often dislike treating alcoholics. (Meadonald, et al). In Lothian, Bell and Rae commented (1978) “Non-specialising agencies were noticeably lacking in confidence with regard not only to dealing with alcoholics, but in identifying the problem and in treating clients in the early stages”, and they feel very pessimistic about their prognosis. The reasons for this pessimism have recently been explored further by Cartwright et al. (1975). Their research demonstrated amongst social workers, nurses, doctors, councilors and a number of other professions that they felt insecure in responding to clients with alcohol-related problems, feeling:

(i) that they lack the knowledge of alcohol and its related problems;
(ii) that they lack the techniques to translate whatever knowledge they do possess into practical action --- such techniques are fundamentally about the specialist area of counselling the alcoholic;
(iii) pessimistic about being able to achieve any particular effect on the drinker or his family;
(iv) a general lack of confidence in their own abilities in this field and often appear anxious at the thought of working with drinking clients.

From the available evidence, it would appear that the insecure person deals with the problems created by the drinking client especially by avoidance behaviour. Hence they fail to recognise those drinkers who are on their caseloads. If confronted by a drinker, they tend to try to make referrals, often inappropriately, and finally their therapeutic responses tend to be negative.

Cartwright (1978) concluded that certain requirements were necessary for community agents to function effectively with alcoholics and they were:

(i) Information about alcohol problems.
(ii) Techniques for working with drinkers.
(iii) Support and supervision.
(iv) Clear definition of their role and contribution to the management of a case.

1 Community Alcohol Team

The Community Alcohol Team (CAT) would be developed in an attempt to confront these problems. Their aim would be to help primary health care teams, area social work teams, voluntary agencies and similar front line agencies, to recognise and deal more effectively with alcohol-related problems when they arise. These seem more realistic than creating a cadre of alcohol specialists large enough to cope with such a widespread problem. Even if such a growth was feasible, they would be less effective than the front line staff who are more better placed to intervene at an early stage than can ever be the case with a specialist service. This strategy would also minimise some of the problems of stigmatisation and labelling which can arise when referral to a specific “alcoholism” service occurs.

2 Task of Community Alcohol Team

The concept of a Community Alcohol Team has been developed in an attempt to meet some of these requirements. This team would identify significant community agencies who wished to work in this way and offer them a service containing the following components:

2.1 Giving information to front-line workers (Social Workers, General Practitioners, Health Visitors, Clergy, Voluntary Agencies, Personnel Departments, Guidance Teachers, Police) whom people are likely to contact for assistance, directly or indirectly, for alcohol related problems. This information would be aimed at enabling the detection of alcohol related problems and would therefore increase the potential for early intervention and prevention of these problems.

2.2 Provision of information on referral to existing agencies specialising in, or other generic agencies which can offer assistance with, alcohol related problems. This implies the development of close contact and good working relationships between the staff of those agencies and the CAT.

2.3 Support and consultation to front-line agents to enable them to deal appropriately with alcohol related problems at a local level.

2.4 Acceptance of some referrals for treatment or preferably working along with front-line agents on specific cases.

2.5 Co-ordination of alcohol-related services in the area, both specialist and general to ensure that the various agencies are aware of each other’s contribution and to ensure they develop a co-ordinated approach to the problem (differs from 2.2 above).

2.6 Help provide new ways of tackling alcohol related problems.

3 Personneld
The CAT would contain professional workers from a variety of different backgrounds, such as social work, psychiatry, nursing and psychology. The staff would require to carry the following knowledge and expertise:

3.1 Knowledge and experience of work in the community, and knowledge of, or skills in acquiring knowledge of, local and wider resources.

3.2 Knowledge and experience in informing and training professionals in caring agencies and other groups (e.g. teaching, industry).

3.3 Knowledge and experience of working with alcohol related problems.

3.4 Experience of providing support and consultation for professionals.

3.5 Experience of and commitment to working in an interdisciplinary team.

3.6 The team should be acceptable to the agencies concerned and have a proven understanding of their way of working.

4 Relationship with other agencies
The CAT would develop a realistic package acceptable to the agencies involved — the more intensive part of its activities would be time limited in the first instance. It should be emphasised that the programme would involve a two way learning process with CAT developing an understanding of the agencies' techniques and skills and sharing its experience of alcohol-related problems.

5 Time-Scale
The CAT would work intensively in one community for a limited period of time, for instance, two years. By then it should have a clear picture of the nature of alcohol related problems in that area and the front line professionals there would have established familiarity and confidence in identifying and dealing with these problems. At this point the CAT would partially withdraw from that area and move to another and so on. It is assured that the original area would continue to receive help from CAT but on a much reduced scale. The CAT will of course develop experience and expertise during the first pilot project, which it can use to be more efficient in future interventions. The model developed would also require to be tailored to meet the unique needs of each community.

6 Implementation of the CAT Concept
We favour a single multi-disciplinary team utilising four full time (equivalent) workers. Two members would work full time in the project. They would have particular responsibility for getting to know the area and identifying its needs. The other two full time equivalent posts would involve other professionals on a part-time basis.

6.1 It is premature to specify the profession of each team member as we wish to avoid restricting the membership unduly at this stage. It is most essential that they bring the required qualities outlined in Section 11.3 and can couple these with a capacity to be innovative and work in a team. As the part-time workers will have commitments elsewhere, it is anticipated that they be able to forge links with the other services from which they operate. It is important that the CAT members should be accepted by and be open to regular contact with the other specialist agencies currently working with alcoholics. These links will overcome dangers of isolation which the CAT might experience. Shared appointments, for instance, within the Unit for the Treatment of Alcoholism would facilitate a feeling of involvement of their staff in this development.

6.2 The staff would require secretarial and administrative support in order to be fully effective. In addition, to ensure the proper functioning of the project as a whole one of the full time and professional posts should be designated Co-ordinator, and carry an overall responsibility for ensuring that the work undertaken by the project was in accordance with its general aims and was, as far as possible, effective in achieving these.

6.3 To facilitate this work the Community Alcohol Team would require to draw on a wide range of resources to enable it to fulfill its task and the degree to which any or all of these would be involved at any one time would depend on the type of work being undertaken by the CAT and on the setting in which it was operating. Appropriate resource groups would include MRC units, Health Educators, Police.

The Edinburgh District Council on Alcoholism would be very happy to supply an attachment of experienced voluntary counsellors to the full time team. The extent of the commitment in practice, will of course, depend upon the size of the team of voluntary counsellors which Edinburgh District Council on Alcoholism is able to develop together with the size of their workload. They would see the particular value of their contributions as being—

(a) that they would be received as "ordinary" people without the label which sometimes causes people to avoid professionals while still having considerable skills; and

(b) their particular expertise in counselling families.
7 Target Community

It is proposed that the CAT should operate in the Leith Area. This area has a population of 55,515 (1971 Census figures) and offers a wide social mix from the solid comfort of Tronry to the high incidence of deprivation in Central and other parts of the area. There are a number of minority ethnic groups, mainly Asians, who live in harmony with their neighbours while still retaining their culture and traditions.

Focusing on a specific geographical area of Leithian such as Leith, the pilot project could offer a service to the social work area team, one (or more) of the large group practices in the area, industry (possibly selecting one of the larger breweries or whisky bonds), voluntary organisations, and a secondary school where the focus might be on the guidance staff. This last area is included because of the preventative early intervention role of a CAT and guidance teachers may pick up developing problems related to alcohol both in the pupils themselves and indirectly in their families, and should therefore be in a position to recognise these and deal with them appropriately when they arise.

7.1 There is a fair identified incidence of alcohol related problems in the area evidenced by general knowledge of the area and of clients in the Social Work Department and from information supplied to the area social work team by General Practitioners and Health Visitors.

7.2 The problem is not confined to any particular sector but is clearly more apparent in the socially deprived areas that provide sub-standard housing and throw up multiple problems of unemployment, delinquency and family malfunctioning.

7.3 The dockyard attracts a large population of single homeless men who are accommodated in sub-standard housing or derelict property and there are some who sleep rough in the dockyard area. The majority of these men have alcohol problems.

7.4 The Talbot Centre, near the bottom of Leith Walk offers an evening facility for the single homeless and a new lodging house owned by the District Authority with some 97 beds is now open.

7.5 There is a hostel at the dockyard gates providing accommodation for over 100 people, including drifting single people and families, many of whom have multiple problems.

7.6 The Social Work Team is centrally based and has a full complement of staff. There is no health centre, but there are a number of GP practices, one of which has a social work attachment. There are also many active community groups and voluntary and statutory agencies (CAB, Community Education and the Social and Community Development Programme). There are also hospital facilities.

7.7 Traditionally Leith has a reputation for heavy drinking, and there is a high incidence of public houses and a large alcohol industry. It would therefore present itself as a viable area on which to base an experimental CAT project.

8 Location

The Team would spend most of their time working alongside other agencies, but it is essential that they have their own offices. Preferably these would not be closely linked with another service, and an ideal property might be within an existing office complex in Central Leith.
Annex 9

PROJECT COLLABORATORS

Principal Investigators:

G. Calderón Narváez, Medical Director, "San Rafael" Clinic, Community Mental Health Centre, Tlápan, Mexico*

C. Campillo-Serrano, Chief, Social Sciences Department, Mexican Institute of Psychiatry, Mexico City, Mexico***

A. Haworth, University of Zambia, Department of Psychiatry, Lusaka, Zambia***

M. Mwanalushi, University of Zambia, School of Humanities and Social Sciences, Lusaka, Zambia*

E. B. Ritson, Department of Psychiatry, University of Edinburgh, Edinburgh, Scotland***

R. Serpell, Director, Institute for African Studies, University of Zambia, Lusaka, Zambia***

Research Associates:

Mexican Institute of Psychiatry, Mexico City, Mexico

S. López**
M.E. Medina-Mora***
G. Natera**
C. Orozco**
E. Rojas**
C. Suárez de Ulloa*

University of Edinburgh, Department of Psychiatry, Edinburgh, Scotland

S. Kendrick*
M. de Roumanie***

Institute for African Studies, University of Zambia, Lusaka, Zambia

P. Freund**
K. Kalumba**
T. Muchenje**
E. Ngoma***
J. Nyrienda**
D. Todd*

Alcohol Research Group, Institute of Epidemiological and Behavioral Medicine, Berkeley, CA, USA

R. Roizen*

* Participated in Phase I only (September 1976 - July 1981).
** Participated in Phase II only (October 1979 - March 1983).
*** Participated in both Phases.
Advisory Group:

G. Edwards, Honorary Director, Addiction Research Unit, Institute of Psychiatry, University of London, London, England***

D.V. Hawks, Director, Western Australia Alcohol and Drug Authority, West Perth, Australia*** (Project Manager during Phase I)

R. Jessor, Director, Institute of Behavioral Science, University of Colorado, Boulder, CO, USA***

R. Room, Director, Social Research Group, School of Public Health, University of California, Berkeley, CA, USA***

Project Manager:

I. Rootman, Chief, Health Promotion Studies Unit, Health Promotion Directorate, Health and Welfare Canada, Ottawa, Canada***

Project Coordinators:

J. Moser, Division of Mental Health, World Health Organization, Geneva, Switzerland***

J. Ording, Division of Mental Health, World Health Organization, Geneva, Switzerland**

NIAAA Project Officer:

L. H. Towle, Chief, International and Intergovernmental Affairs, National Institute on Alcohol Abuse and Alcoholism, Rockville, MD, USA***