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## ABSTRACT

The European Alcohol Action Plan stresses that health care systems, traditionally involved in the management of alcohol problems, must play a greater role in the detection and prevention of alcohol-related harm. Primary health care is seen as an important setting for identifying individuals at risk from heavy drinking and helping them to reduce consumption. It is also the major supporter of families and self-help groups, and acts as an advocate of public health for local communities. The book discusses strategies that can be adopted by primary health care providers in their everyday work with individuals and families, and examines the role of primary health care in providing interventions for hazardous and harmful alcohol consumption. The 14 chapters of the book cover: (1) the potential of primary health care; (2) the risk from alcohol; (3) effectiveness of brief interventions; (4) screening; (5) health education advice; (6) intervention; (7) barriers to implementation; (8) packages and protocols; (9) education and training; (10) family and friends; (11) community action; (12) alcohol policy; (13) targets; and (14) conclusion. Appendices include the "Alcohol Use Disorders Identification Test" (AUDIT) questionnaire and "Health Plan for Catalonia." (Contains 72 references.) (ND)

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# Alcohol and primary health care

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World Health Organization  
Regional Office for Europe  
Copenhagen



# Alcohol and primary health care

*by*

Peter Anderson

*Alcohol, Drugs and Tobacco Unit,  
WHO Regional Office for Europe*

WHO Regional Publications, European Series, No. 64

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# Introduction

On a European scale, drinking alcohol results in suffering and costs of enormous proportions, which have an impact on the health and welfare of men and women, children and adults, the poor and the rich, those who do the drinking and those who suffer from the drinker's behaviour (1).

Alcohol-related problems have many causes, arise in various situations, and affect different types of people. The response to these problems therefore needs to be comprehensive, involving public policy, community programmes and action at the primary health care level. Primary health care providers include a wide range of different professional groups. In this book, they are defined as doctors and nurses working in primary health care settings.

In 1980, a WHO expert committee (2) stressed the need for efficient methods to detect people consuming harmful quantities of alcohol before the health and social consequences became pronounced, and called for the development of strategies that could be applied with a minimum of time and resources in primary health care settings.

These recommendations came at a time when efforts to implement a public health approach to alcohol-related problems had been initiated in a number of countries. Other reasons for the growing interest in alcohol screening and brief intervention were: the effectiveness of various behavioural change techniques for both excessive alcohol consumption and other areas of lifestyle, the need to conserve health care resources, the appeal of early intervention as a means of preventing more severe alcohol-related problems and alcohol dependence, a recognition of the need to broaden the base or focus of definitions and approaches to alcohol problems (3), and evidence to suggest



that the burden of illness imposed on society by hazardous or harmful alcohol consumption is greater than that imposed by alcohol dependence.

In 1992, resolution EUR/RC42/R8 of the WHO Regional Committee for Europe strongly endorsed the European Alcohol Action Plan (4). It urged Member States: to review and, if necessary, reformulate their alcohol policies to ensure that they were comprehensive and broadly in line with the principles set out in the Action Plan; to ensure effective implementation of such policies in order to prevent the health risks and socioeconomic problems often associated with alcohol consumption, recognizing the importance of multisectoral action and the major role of local communities; and to develop comprehensive policies and programmes for the prevention and management of alcohol-related problems in the context of primary health care.

The European Alcohol Action Plan stresses that health care systems, traditionally involved in the management of alcohol problems, must play a greater role in the detection and prevention of alcohol-related harm. Primary health care is seen as an important setting for identifying individuals at risk from heavy drinking and helping them to reduce consumption. It is also the major supporter of families and self-help groups, and acts as an advocate of public health for local communities. A strategy based on primary health care can also complement population-based initiatives (1).

In their study of the general practitioner's role in detecting and managing alcohol problems, Thom & Tellez (5) include the following statement from one general practitioner:

One of the things I don't do is ask too many questions because I don't want to uncover a whole lot of things I can't deal with. So my technique sounds awful but it is to wait until something comes to my attention generally. I am not going hunting out problems I don't know how to treat. I could spend hours and hours every day trying to deal with it. Now if it were obvious how I could deal with it effectively then I might go looking for a few patients.

It is hoped that this book goes some way to answering the question of how the harm done by alcohol use can be prevented and managed in primary health care. Much of the book discusses strategies

and approaches that can be adopted by primary health care providers in their everyday work with individuals and families. It recognizes that primary health care providers have a public health role to play, and outlines the opportunities to participate in community action and to advocate for healthy public policy on alcohol.

The book covers the role of primary health care in providing interventions for hazardous and harmful alcohol consumption. It does not discuss the assessment or treatment of individuals with alcohol dependence or the relationship of primary health care to other treatment systems, as these have been recently discussed elsewhere (6,7).

Although the primary concern here is alcohol, an integrated approach to prevention should be encouraged, within a common strategy of health promotion. Preventive action on alcohol should be integrated with that on other lifestyle issues, such as tobacco use, diet and physical activity. Indeed, much of what is written about alcohol can be applied to other lifestyle issues.

# The Potential of Primary Health Care

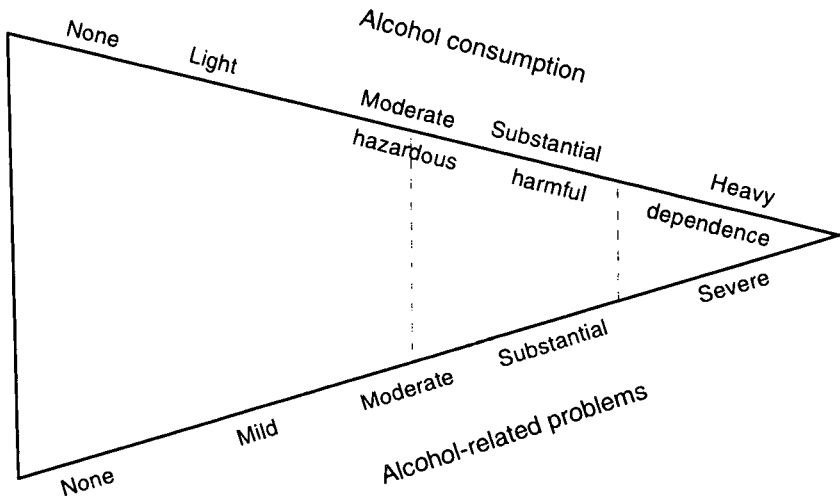
Alcohol consumption and its associated problems exist within a continuum (3). Alcohol consumption ranges from no or light consumption through to heavy consumption, and alcohol-related problems range from nil through to substantial or serious problems (Fig. 1). The concept of a continuum has led to new definitions of alcohol consumption and problems. Hazardous alcohol consumption can be defined as a level of consumption or pattern of drinking that is likely to result in harm should present drinking habits persist. Harmful alcohol consumption is that causing harm to the psychological or physical wellbeing of the individual (8,9).

Just as there is a continuum of both alcohol consumption and related problems, so there is a continuum of responses to such problems. The latter ranges from primary prevention through brief interventions to specialized treatment (Fig. 2).

The concept of a continuum has been well expressed by the Royal College of General Practitioners of the United Kingdom, in its report *Alcohol – a balanced view* (10):

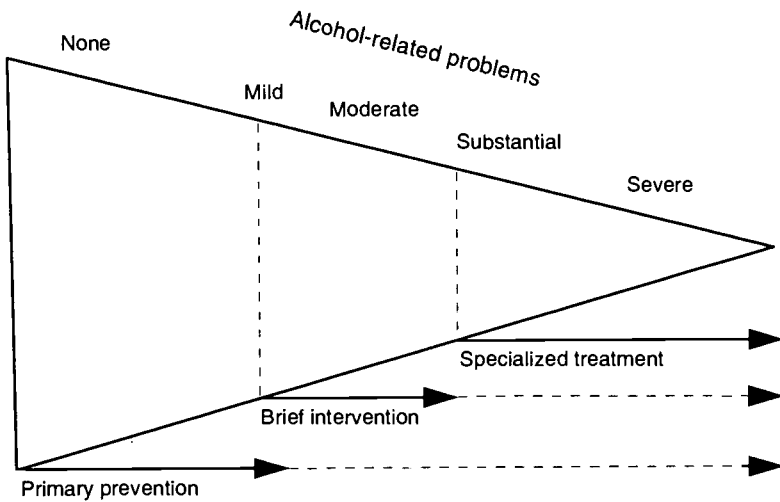
We do not subscribe to the view that alcoholism is in itself a disease. Instead the framework we offer sees everyone's drinking as spread along a continuum from harm free drinking at one end to harmful drinking at the other. An individual's drinking behaviour is learned and modified by experience; at any stage it is determined by a balance of the advantages and disadvantages, of the pleasures and the harms, of drinking. Everyone, whatever their current level of drinking, has the choice to move forward or backward along this continuum.

Fig. 1. Alcohol consumption and related problems



Source: Institute of Medicine (3). Reproduced by permission of National Academy Press, Washington, DC, USA.

Fig. 2. Alcohol-related problems and associated responses



Source: Institute of Medicine (3). Reproduced by permission of National Academy Press, Washington, DC, USA.

When reviewing the role of treatment for alcohol problems it should be recognized (3) that:

- many people with alcohol-related problems overcome them without any formal treatment;
- some people who receive formal treatment have worse drinking problems afterwards; and
- some people who are coerced into treatment fare no better than those who receive no treatment.

Current knowledge about treatment services can be summarized as follows (3).

1. There is no single approach to treatment that is effective for all people with alcohol-related problems.
2. The provision of appropriate and specific methods of treatment can substantially improve outcome.
3. Brief interventions can be quite effective, compared with no treatment, and they can be rather cost-effective, compared with more intensive treatment.
4. Treatment of other personal problems related to drinking can improve outcome in those with alcohol-related problems.
5. The aptitudes of the therapist have a large bearing on outcome.
6. Outcomes are determined in part by factors related to the treatment process and post-treatment adjustment, the characteristics of those seeking treatment, the characteristics of their problems and the interactions among these factors.
7. People who are treated for alcohol-related problems achieve outcomes that lie on a continuum, just as do their drinking behaviour and associated problems.
8. Those who significantly reduce their level of alcohol consumption or who become totally abstinent usually enjoy an improvement

in other areas of life, particularly as the period of reduced consumption becomes longer.

In other words, there is a need for a spectrum of interventions that matches the spectrum of problems (6). The specialized sector for alcohol-related problems cannot be the sole point of treatment. Furthermore, if alcohol-related problems are to be reduced significantly, their distribution in the population suggests that a principle focus for intervention should be people with mild or moderate problems.

## THE ROLE OF PRIMARY HEALTH CARE

With increased knowledge of the effectiveness of brief intervention, there has been an increasing emphasis on the role of primary health care in preventing and managing alcohol-related problems (11). Primary health care has huge potential (12).

- In many countries, primary health care is responsible for defined populations, with a high proportion of the population being registered with a named general practitioner.
- There is a high contact rate between the public and primary health care services. In a number of countries, between two thirds and three quarters of the population consult their general practitioner every year, with a consultation rate of between three and four consultations per person per year.
- Primary health care services are seen as credible sources of information, with over a half of people surveyed considering their general practitioner to be the single most important source of advice on alcohol-related matters. Increasingly, there is an expectation from the public that primary health care services will provide support and advice about lifestyle matters.
- Heavy drinkers consult their general practitioners twice as often as lighter drinkers, emphasizing the ability of opportunistic services in primary health care to target those more in need.
- Primary health care affords the opportunity of using the “teachable moment”, relating the reason why the individual is consulting the doctor to his or her alcohol consumption.

- Primary care services offer continuity of care, and up to two thirds of consultations can be for repeat visits. Repeat visits are ideal settings for implementing the process of change model (13) and for undertaking motivational interviewing (14). Studies have demonstrated both the effectiveness and cost-effectiveness of primary health care (15).

### Primary Health Care and Management of Risk

A potential framework for primary health care intervention can be built, using a model that views alcohol consumption as a risk factor for ill health. The role of the primary health care provider is determined by the level of risk of the target population (Table 1). For a population at low risk, the focus of intervention is primary prevention, and the primary health care role includes providing health education and advocacy and being a role model.

Table 1. Framework for primary health care intervention

Risk level (target population)	Intervention	Role of primary health care provider
Low (people with low consumption)	Primary prevention	Health education Advocacy Role model
Raised (people with hazardous or harmful consumption)	Brief intervention	Identification Assessment Brief counselling Follow-up
High (people dependent on alcohol)	Specialized treatment	Identification Assessment Referral Follow-up

Source: *The role of general practice settings in the prevention and management of the harm done by alcohol use* (16).

For the target population that is at higher risk because of its alcohol consumption, the focus is brief intervention, and the primary health care role is to provide identification, assessment, brief counselling and follow-up.

## The potential of primary health care

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For a target population at substantial risk by virtue of its alcohol consumption, or that has severe alcohol-related problems, the focus of intervention is specialized treatment, and the primary health care role includes identification, assessment, referral and follow-up.



# The Risk from Alcohol

There is evidence for a dose–response relationship between alcohol consumption and the risk of liver cirrhosis and cancer of the mouth, pharynx, larynx, oesophagus, liver and female breast. The relationship between alcohol consumption and cardiovascular diseases is more complex; alcohol appears to reduce the risk of coronary heart disease, despite its adverse effect on blood pressure and the association with an increased risk of stroke (*1*).

There is evidence for a dose–response relationship between alcohol consumption and the risk of family, work and social consequences, alcohol dependence, accidents, assaults, criminal behaviour, unintentional injury, violence and suicide (*1*).

## ALCOHOL AND PHYSICAL HARM

### Alcohol and Cancer

The International Agency for Research on Cancer has concluded that alcohol is causally related to cancer of the mouth, pharynx, larynx, oesophagus and liver (*17*). After controlling for potential confounders like tobacco smoking, there is a dose–response relationship in most studies that appears to hold for women as well as men. The relationship is not a straight line, but shows upward curvature at higher drinking levels.

The last few years have seen the publication of a number of studies on alcohol and breast cancer in women (*18*). Evidence is accumulating of a dose–response relationship, the risk rising relatively

slowly but steadily with increasing alcohol consumption. There is some variation in results and the relative risks are small, although similar in size to many of the established risk factors for breast cancer. The relationship holds when adjusting for some of the potentially confounding risk factors, such as body mass index and dietary fat.

### **Alcohol and Coronary Heart Disease**

Although findings are not consistent across all studies, there appears to be an L-shaped relationship between alcohol consumption and risk of coronary heart disease. Alcohol consumption in the range of less than 10 g to 50 g pure alcohol per day reduces the risk of coronary heart disease by 25–50% (1).

The negative relationship between alcohol consumption and risk of coronary heart disease is present across all age ranges for both men and women, although it appears greater for older people. Most of the reduction in risk can be achieved by consuming less than 10 g a day. The reduction in risk is not strongly dose-related: some studies have shown an increased risk at consumption levels of over 60 g a day.

The negative relationship between alcohol consumption and risk of coronary heart disease is greater when consumption is spread regularly throughout the week than when it is concentrated on one occasion during the week. It is not clear if the relationship is both long-term and short-term or only of a short-term nature; neither is it clear if the relationship is equally valid for all types of beverage.

### **Alcohol and Stroke**

Alcohol consumption increases the risk of stroke, through an effect on haemorrhagic stroke. Low doses of alcohol may reduce the risk of non-haemorrhagic stroke, although not all studies agree (1). Because there is a dose–response relationship between alcohol consumption and blood pressure, controlling for blood pressure removes some of the effect of alcohol on risk of stroke.

### **Alcohol and Overall Mortality**

For most industrialized countries, the overall relationship between alcohol consumption and mortality from all causes is J-shaped for both sexes (1).

Taking different age groups into consideration, the relationship between alcohol consumption and mortality from all causes is linear in younger age groups, with a steeper gradient for women than men, and J-shaped in older age groups. This age-specific pattern is due to the different causes of death for the different age groups: in younger age groups accidents and poisoning are more common, while in older age groups cardiovascular diseases become the major cause of death. In industrialized countries, the age when the relationship between alcohol and mortality changes from linear to J-shaped is about 50 years. The lowest part of the J corresponds to a consumption of about 5–20 g of alcohol per day, and the cross-over is at about 30–40 g per day.

### **What Causes the Reduced Risk of Coronary Heart Disease?**

At least four arguments have been made for the suggestion that the lower risk of coronary heart disease among moderate drinkers is an artefact (*1*).

First, it has been suggested that non-drinkers include people who gave up drinking because they were unwell. Such people would be expected to have an increased rate of disease. Although both former drinkers and those who have never been drinkers have been shown to have a higher incidence of coronary heart disease than light or moderate drinkers, former drinkers have a greater risk of death from coronary heart disease than lifetime non-drinkers.

Second, it has been suggested that abstainers have a greater burden of ill health than moderate drinkers, regardless of their previous drinking status. However, the reduced risk of coronary heart disease associated with light or moderate drinking remains when those with cardiovascular illnesses or risk factors at enrollment are removed from the analysis (although not all studies have demonstrated this). Furthermore, the reduction in risk persists throughout the total length of follow-up.

Third, it has been suggested that non-drinkers are an unusual group in a society in which drinking alcohol is the norm. Both former drinkers and lifetime abstainers have characteristics that might account for the excess mortality over light or moderate drinkers. When relevant psychosocial variables (such as psychological wellbeing,

social class and social isolation) are adequately taken into account, the J-shaped relationship between alcohol consumption and total mortality is very much reduced.

Fourth, although many studies have controlled for the effect of cigarette smoking, it is clear that smoking is very much involved in the relationship between alcohol and total mortality. The J-shaped function is most pronounced for current cigarette smokers and the greatest mortality is found among non-drinkers who smoke.

If the reduced risk for coronary heart disease is real, what is the biological mechanism? The protective effect may be mediated through atherosclerotic processes, including an increase in levels of high-density lipoproteins in the blood, as well as antithrombotic effects, including a reduction in plasma fibrinogen levels and decreased platelet aggregation.

It may be that the antithrombotic effects are more important; this could explain why the protective effect can be achieved with small doses of alcohol, and the presence of the effect among older people.

## **ALCOHOL AND SOCIAL HARM**

Adverse consequences in areas of life such as friendship, health, happiness, home life, and study and employment opportunities all increase monotonically with increasing consumption. At a level of 20 g a day, Canadian data suggest that 20% of the population experience two or more adverse consequences in these life areas during a year (19). Among both men and women, the proportion with diagnosable dependence rises regularly with alcohol consumption. At a level of 20 g a day, over 10% of North American men and women are, according to the tenth revision of the International Classification of Diseases (ICD-10), alcohol-dependent (20).

## **ALCOHOL AND VIOLENT HARM**

Increased frequency of heavy drinking is associated with a higher risk of accidents and intentional violence both towards oneself and others (such as suicide, family violence and other types of violent crime,

including robbery and rape). For all these forms of harm, there is a dose–response relationship with no evidence of a threshold effect (1).

## SIZE OF THE RISK

A dose–response relationship without evidence of a threshold effect exists for a number of conditions. At levels of alcohol consumption of around 20 g a day, relative risk compared with no consumption has been estimated to be increased by 100% for cirrhosis of the liver, 20–30% for cancer of the oral cavity, pharynx and larynx, 10% for cancer of the oesophagus, 14% for cancer of the liver, 10–20% for cancer of the female breast and possibly 20% for stroke. There also appears to be a significant negative association, which is L-shaped and not dose-related, between alcohol consumption and risk of coronary heart disease. At levels of alcohol consumption of between a few grams and 40 g a day, the relative risk for coronary heart disease compared with no consumption is reduced by 25–50%. For people under 50 years of age, at consumption levels of around 20 g a day, all-cause mortality is increased by 15–20%; for people over the age of 50, 20 g a day is the point at which the increased risk of mortality rises above the lower part of the J curve. At an average consumption level of 20 g a day, 20% of people experience significant adverse consequences of drinking, 10% report dependence on alcohol, and 10% report having been assaulted by someone else who had been drinking.

## DISTRIBUTION OF RISK

In many developed countries, the drinking of a considerable proportion of the population is at hazardous or harmful levels. Throughout the WHO European Region as a whole, approximately one in three men and one in ten women are drinking over 20 g a day (21). The proportions are higher in countries where consumption is high and lower in those where it is low.

Use of alcohol is related to a number of factors, including socio-demographic, economic and regional ones (22). Consumption of alcohol is higher among men than among women, and declines with age in both sexes. Levels of drinking in young adulthood predict drinking patterns in later life. Being unmarried or becoming divorced

or widowed are associated with increased consumption. Certain employment categories, including the alcohol and hospitality industries, commercial fishing and the construction industry, are related to higher alcohol consumption. Being unemployed in the short term is related to increased consumption, whereas long-term unemployment is related to reduced consumption.

Women in the professional classes consume more alcohol than women in other social classes. Men show no obvious pattern in relation to social class, but there is a pattern related to income. For both men and women, as income increases, the proportion of the population that consumes a large amount of alcohol increases.

## Effectiveness of Brief Interventions

Brief interventions comprise an assessment of alcohol intake, information on hazardous and harmful drinking, and clear advice for the individual on reducing consumption. Brief intervention sessions are often accompanied by information booklets and details of further resources available locally. Although findings are not consistent across all studies, brief interventions have been shown to be effective in reducing alcohol consumption by over 20% in people with hazardous or harmful alcohol consumption (15).

When comparing brief interventions with specialist treatment, there is no evidence of any extra benefit of the latter (15). However, this is a general conclusion and matching treatment to the individual needs of particular subgroups of patients may improve effectiveness, although this has yet to be clearly demonstrated.

In addition, brief interventions reduce health care costs and lead to improved health (3). The costs of screening and intervention programmes are low. In the United Kingdom, for example, it has been estimated that the cost of screening to a general practitioner is £2.40 per patient screened and the cost of a brief intervention is £20. The costs of a general practitioner, including all overheads and staff costs, are £1.20 per minute. Thus, the total cost of identifying and advising a person with hazardous or harmful alcohol consumption is £40, leading to an average reduction in alcohol consumption of 24%.

## RESEARCH RESULTS

Two examples of large studies are the study on lifestyles and health by the Medical Research Council (MRC) in the United Kingdom and a WHO study.

### MRC Study on Lifestyles and Health

In the MRC study, 917 male and female heavy drinkers (defined as weekly consumption of over 350 g for men and 210 g for women) were recruited on the basis of a health screening questionnaire (23). Heavy drinkers were allocated randomly to a control group, which received an assessment interview, and to a treatment group. Those in the treatment group received 15 minutes of advice from their general practitioner on reducing their alcohol consumption. Men in the control group ( $N = 322$ ) reduced their alcohol consumption from an average of 640 g to 560 g per week at one-year follow-up. Men in the treatment group ( $N = 318$ ) reduced their consumption on average from 620 g to 440 g per week. There was a highly significant difference between the treatment and control groups ( $P < 0.001$ ) which was corroborated by significant differences in serum gamma-glutamyl transferase (GGT) levels. A treatment effect was also observed for the women, although the magnitude was less. Women in the control group ( $N = 137$ ) reduced their average consumption from 370 g to 300 g per week at one-year follow-up, while those in the treatment group ( $N = 130$ ) reduced their average consumption from 350 g to 240 g per week ( $P < 0.05$ ). There was no significant difference in GGT levels at follow-up between the treatment and control groups. The study also demonstrated that the proportion of excessive drinkers decreased in relation to the number of advice sessions they had attended with their general practitioner. For those men who only received one session, 79% remained excessive drinkers at one-year follow-up; of those who received five sessions, 41% remained excessive drinkers. The respective figures for the women were 67% and 31%.

### WHO Study

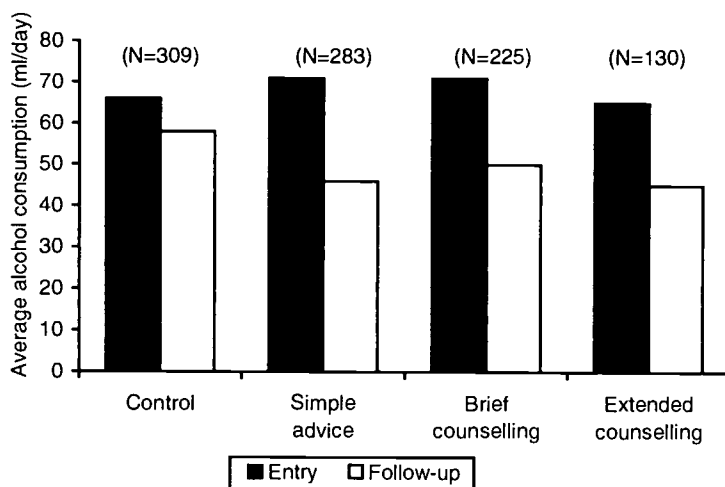
The WHO study was a cross-national multicentre clinical trial of brief intervention procedures, designed to reduce the health risks associated with hazardous alcohol use (24). In total, 1655 heavy



drinkers (1356 males and 299 females) were recruited from a combination of hospital settings, primary care clinics, work sites and educational institutions. Individuals were recruited either on the basis of their alcohol consumption (350 g per week or more for men and 225 g per week or more for women) or on the basis of their frequency of intoxication (100 g on one occasion twice a month or more for men, and 65 g or more on one occasion twice a month or more for women). Eight centres followed a core research design that consisted of randomly assigning heavy drinkers to a control group that received an assessment interview, to a simple advice group that received in addition five minutes of advice about the importance of sensible drinking or abstinence, or to a brief counselling group that in addition received a self-help manual and an extra 15 minutes of counselling. The health adviser was a nurse for 46% of patients, a psychologist for 18%, a doctor for 18% and another professional for 18%.

For the men, while the control group reduced its typical daily consumption by 10.1%, patients in the simple advice group reported a reduction of 37.8% ( $P < 0.05$ ) and those in the brief counselling group, 31.9% ( $P < 0.05$ ) (Fig. 3).

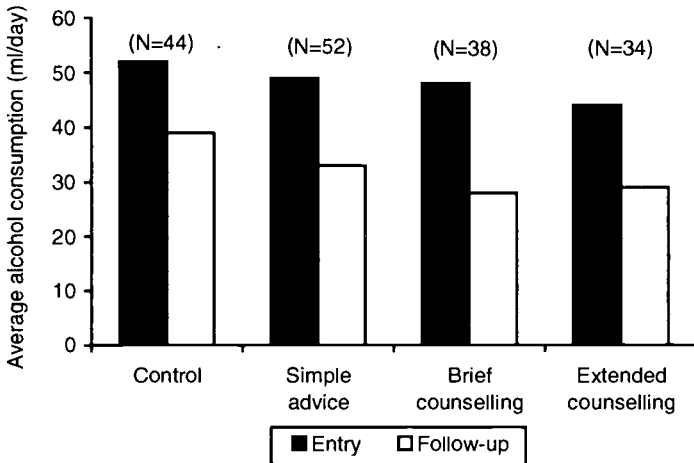
Fig. 3. Average daily consumption of pure alcohol on entry to the study and at follow-up, all centres, males



Source: Babor & Grant (24).

For the women, reductions in alcohol consumption were observed in both the control and intervention groups, with no significant differences between them (Fig. 4).

Fig 4. Average daily consumption of pure alcohol on entry to the study and at follow-up, all centres, females



Source: Barbor & Grant (24).

### Effective Components of Brief Interventions

The target of brief intervention should be the consumption of alcohol itself, and it might be useful to define *very brief* interventions as those comprising 5–10 minutes of simple advice plus a leaflet, and *brief* interventions as those comprising condensed cognitive-behavioural therapy, the use of self-help manuals, and follow-up visits (12). At present there is some, albeit not consistent, evidence to suggest a superior effect of brief as opposed to very brief interventions (25). The incorporation of the principles of the process of change model (13) and the techniques of motivational interviewing (14) may lead to improved outcomes.

Age, socioeconomic status and marital status do not appear to predict outcome. In some studies the initial level of consumption predicted outcome, with heavier drinkers reducing their alcohol consumption by a significantly greater amount at follow-up than lighter

drinkers, but this finding is not consistent and may be an effect of regression towards the mean.

In the WHO study, brief counselling worked best among those without a recent problem. Among those with a recent problem, simple advice worked best, suggesting that the effect of minimal intervention is enhanced when the patient has experienced a recent alcohol-related problem.

There is greater evidence for a treatment effect in men than in women: in a number of studies, women in the control groups reduced their consumption as much as those in the treatment groups. Further work in this area needs to be done, and it may be that gender-specific intervention strategies should be evaluated.

These studies can be difficult to interpret (26) and, because of problems with the representativeness of results, caution should be used in interpreting research findings in terms of the public health impact on the wider community (27).

# Screening

To identify patients who might benefit from brief intervention, it is necessary to screen the population by means of a questionnaire. The whole adult population should be screened, preferably by embedding alcohol-related questions within lifestyle questionnaires (22).

A screening questionnaire with high sensitivity is able to identify the majority of individuals with genuine hazardous or harmful alcohol consumption. For example, a sensitivity of 90% means that the screening questionnaire will identify as positive 90 out of 100 people known to have hazardous or harmful alcohol consumption, and will miss the other 10, who are termed “false negatives”. Specificity refers to the screening questionnaire’s ability to exclude false cases; that is, the greater its specificity, the less likely the questionnaire is to give positive results for individuals who do not in fact have hazardous or harmful alcohol consumption.

The benefits of routine screening include:

- educating drinkers about the hazards of heavy drinking;
- identifying problems before serious dependence has developed;
- motivating patients to change their drinking behaviour; and
- exposing people at risk to brief but effective interventions.

Patients tend to answer most accurately to screening instruments when:

- the interviewer is friendly and non-threatening;

- the purpose of the questions is clearly related to a diagnosis of their health status;
- the patient is alcohol- and drug-free at the time of screening;
- the information is considered confidential; and
- the questions are easy to understand.

## **RECOGNIZING HAZARDOUS ALCOHOL CONSUMPTION**

Different methods have been used to measure alcohol consumption, including quantity–frequency measurement and description of occasions (28). In the quantity–frequency questionnaire, respondents are asked about their drinking of each of three types of alcoholic beverage, namely beer, wine and spirits. For each beverage type, the usual frequency of drinking over a one-month, three-month or longer period is recorded. The usual quantity of each beverage type drunk on each occasion is also elicited (Fig. 5).

Although the method is widely used, there can be some difficulties with its interpretation in terms of rate of consumption. First, it is not clear how respondents interpret the questions, which seem to require the reporting of the most usual pattern of consumption rather than the overall average frequencies and quantities, which will often be greater. A second difficulty concerns possible effects of question formulation and response category. Underreporting in this instance is best allowed for by providing very high response categories.

Quantity–frequency measurements are more reliable when measuring regular drinking patterns than when describing drinking occasions. Quantity–frequency questionnaires have high test–retest reliability and substantial validity. As a screening instrument for hazardous alcohol consumption in general practice, quantity–frequency questionnaires have a sensitivity of 70% and a specificity of 76%.

A second approach to measuring alcohol consumption is the diary method, based on consumption over a number of days in the week prior to interview. The main difficulty with this approach is variability of individual consumption.



Underreporting on completed questionnaires on alcohol consumption has been studied. Respondents tend to underestimate the frequency of drinking and to overestimate the quantity consumed on a typical drinking occasion. Deliberate underreporting of alcohol consumption may also occur, because of the stigma associated with excessive alcohol use and its behavioural effects. There is some evidence that the level of reporting may increase if contact with the interviewer is reduced or eliminated. Computerized interviewing techniques, for example, have been shown to elicit higher self-reported consumption levels than personal interviews.

## **RECOGNIZING HARMFUL ALCOHOL CONSUMPTION**

### **Alcohol Use Disorders Identification Test**

WHO has developed a simple instrument to screen for people with early signs of alcohol-related problems (29): the alcohol use disorder identification test (AUDIT). The core screening instrument consists of ten simple questions (see Annex 1).

Each item is scored by checking the response category that comes closest to the patient's answer. A score of eight or more produces the highest sensitivity and is used as the cut-off point. In general, high scores on the first three items, in the absence of elevated scores on the remaining items, suggests hazardous alcohol use. Elevated scores on items 4–6 imply the presence or emergence of alcohol dependence. High scores on items 7–10 suggest harmful alcohol use.

The sensitivity has a mean value of 92%, and is higher in men than in women. The specificity has a mean value of 93%, and is higher in women than in men. Two thirds of those who score eight or above with AUDIT will experience alcohol-related problems over the following three years, compared with 10% of those with lower scores (30).

The instrument has an additional screening procedure that includes a two-question trauma history, a brief clinical examination, and a blood test.

AUDIT has the advantage of cross-national standardization, having been developed in primary health care settings in six countries. Additional advantages are that:

- it identifies hazardous and harmful alcohol use;
- it is brief, rapid and flexible;
- it is designed for primary health care workers;
- it is consistent with the ICD-10 definitions of alcohol dependence and harmful alcohol use; and
- it focuses on recent alcohol use.

### **Other Measures**

Other measures of the psychosocial consequences of drinking include the twenty-five-item Michigan Alcoholism Screening Test (MAST) and its shortened ten-item version, and the four-item CAGE questionnaire, none of which was designed for use in primary health care settings (28). CAGE is a more sensitive instrument than the MAST questionnaires for identifying individuals with drinking problems in general hospital and general practice populations. Two or more positive replies to the CAGE questionnaire are said to identify the problem drinker. Although it is reported in general hospital settings to have a high sensitivity (85%) and specificity (89%), the CAGE instrument provides less information for intervention than the longer AUDIT instrument.

### **Biological Markers**

The most commonly used biological markers of excessive alcohol consumption are mean corpuscular volume (MCV) and GGT level (22). Of these, GGT is the better predictor. Although MCV is related to alcohol consumption, a raised MCV is very unreliable as a screening instrument.

There is a positive relationship between alcohol consumption and GGT levels. Increased GGT activity in the serum can be observed after a few weeks of alcohol intake. Following reduction in drinking, serum GGT levels return to normal within 2–4 weeks. The rise of the enzyme in the serum is primarily due to hepatic enzyme induction. Nevertheless, GGT is not very good as a screening instrument. The



proportion of heavy drinkers with a raised level (more than 50 iu/l) is about 50%. The false-positive rate is between 10% and 20%. Other causes of a raised GGT include diseases of the liver, biliary tract and pancreas. The most important use of GGT is in monitoring changes in alcohol consumption.

# Health Education Advice

## ADVICE TO INDIVIDUALS

For individual drinkers at low risk, and for those below the cut-off points for intervention for hazardous alcohol consumption (see Chapter 6), the role of primary health care providers includes giving individual health advice (see Chapter 1). There are a variety of consequences of drinking and a variety of guidelines on the best advice on low-risk drinking for individuals. The following guidelines and explanatory text were developed by the Addiction Research Foundation, Toronto, following an international symposium, held in 1993 (31) and are applicable to most industrialized countries. They concern drinking patterns with a low risk of any adverse consequences of drinking. In North America, a standard drink contains about 12 g pure alcohol and in Europe about 10 g.

1. *As a general rule, people should not consume more than two standard drinks in any day.*

This limit is based on consumption levels for adult men of average build and in good health. The risk of health problems to the individual is minimal if consumption is not above this level.

2. *Lower levels are appropriate for specific groups.*

Lower limits are appropriate for some people, owing to differences in body weight, body composition and metabolism. Even one drink a day may be associated with an elevated risk of breast cancer in women. There are other circumstances, such as breastfeeding, in which drinking should be minimized, even among low-risk drinkers. Lower

limits are appropriate for inexperienced drinkers and those of low body weight.

3. *Those who currently abstain from alcohol should not begin drinking in order to reduce their risk of developing health problems.*

The exact pattern of low-risk drinking that confers the maximum reduction in coronary heart disease is not yet known. For many if not most abstainers, the risks associated with drinking would outweigh any reduction in the risk of coronary heart disease. Although there are some abstainers in whom that risk might be reduced, they should nevertheless consider alternatives such as regular light exercise and reduced dietary fat.

4. *Those who do not drink every day should not increase their consumption to reduce their risk of developing health problems.*

Any reduction in overall risk from drinking alcohol is likely to be limited to low levels of consumption. Most of the reduction in the risk of coronary heart disease may be gained from as little as one drink every other day. Although the exact pattern of drinking that reduces the risk of coronary heart disease is not yet known, it is likely that increasing consumption by occasional drinkers would in many cases increase the overall risk of adverse health effects.

5. *Those who drink more than two drinks in any day should reduce their consumption of alcohol.*

The limit of two standard drinks in any day is appropriate for individual health advice and clinical interventions aimed at reducing drinking that exceeds the low-risk maximum. Those consuming more than this are unlikely to gain any further reduction in the risk of coronary heart disease, and they incur a higher risk of a variety of adverse health and social consequences.

6. *To minimize any risk of dependence, there should be at least one day per week when no alcohol is consumed.*

Many studies have shown a relationship between daily drinking and high consumption.

7. *Those who consume alcohol should avoid drinking to intoxication.*

Drinking to intoxication greatly increases the risk of adverse health and social consequences.

8. *Pregnant women should abstain from alcohol.*

This recommendation is based on consideration of the risk of fetal alcohol syndrome (FAS) and fetal alcohol effects (FAE). A clear threshold of alcohol consumption, above which there is demonstrable and significantly elevated risk of FAS or FAE, has yet to be established. The risk of an adverse outcome of pregnancy from low-volume consumption has not been established. Some studies have found effects from “moderate” prenatal consumption, while others have not. Episodic drinking and drinking during the first trimester of pregnancy appear to be particularly risky. In one prospective study, a progressive relationship was found between level of alcohol intake during pregnancy and facial abnormalities in the newborn infant, with an effect even at the lowest level of intake. Since no safe level of consumption has been established, it would be prudent for pregnant women not to consume alcohol at all. Indeed, given the relatively higher risk involved in the first trimester of pregnancy, it would be advisable for women who are planning a pregnancy to avoid drinking.

9. *The use of alcoholic beverages is contraindicated in certain other circumstances, and for certain individuals. These individuals include those:*

- with certain psychological and physical illnesses and conditions
- taking certain medications or psychoactive drugs
- operating vehicles or machinery
- responsible for public order or safety
- who have shown a persistent inability to control their drinking
- who are legally prohibited from drinking, such as underage persons.

10. *People considering increasing their drinking for any health reason should consult their physician before doing so.*

The family doctor can identify factors for which alcohol may be contraindicated. Doctors can also identify medications that may interact with alcohol, and can provide information on alternative ways of reducing the risk of coronary heart disease.

## ADVICE TO THE PUBLIC

Health advice given by primary health care providers in clinical situations can be tailored to the individual. A different approach is required for public health education (32). The basic message, which is consistent with the advice tailored to the individual, is "less is better". Except for coronary heart disease, the epidemiological evidence can be summarized as follows: across the entire range of alcohol consumption, the lower the consumption of alcohol, the better for health.

Taking coronary heart disease into account, the conclusions must be separated for age groups. For younger people with almost no risk of coronary heart disease, the lower the consumption of alcohol, the better for health. For older people, with an increased risk of coronary heart disease, the same principle applies, except that, below about one drink every other day, most of the benefit in terms of a reduced risk of coronary heart disease is lost.

Individual advice to abstainers with a high risk of coronary heart disease should present alternative ways of reducing that risk, such as increased physical activity, changes of diet, and avoidance of tobacco smoke.

The exact age that separates younger and older groups for this purpose depends on the mortality pattern of the country in question. In many industrialized countries that age is about 50 years. Given the declining mortality rate from coronary heart disease in some countries, the age may increase.

# Intervention

The role of the primary health care provider for individuals with hazardous or harmful alcohol consumption includes the giving of personal advice on reducing consumption (see Chapter 1). This chapter discusses interventions for hazardous alcohol consumption and motivational interviewing for harmful alcohol consumption. There is some overlap, and both techniques can be used for both types of consumption.

## INTERVENTION FOR HAZARDOUS ALCOHOL CONSUMPTION

Hazardous alcohol consumption can be defined as a level of consumption or pattern of drinking that is likely to result in harm should present drinking habits persist. This means more than an average of 20 g of pure alcohol per day or more than 40 g on any one day.

When designing screening and brief intervention programmes in primary health care, however, higher levels can be taken as the cut-off point for brief interventions. Higher levels are suggested in order to be able to provide an effective service with targeted interventions within the cost and time constraints of primary health care. An appropriate level of regular consumption is 350 g of pure alcohol or more per week for men and 210 g or more per week for women, levels that have been used as the cut-off points for many of the studies testing the effectiveness of brief interventions. On average, throughout the European Region, approximately one in six men and one in twelve women will be consuming more than these levels. An appropriate cut-off point for frequency of intoxication is 100 g on one occasion twice

or more per month for men, and 65 g or more on one occasion twice or more per month for women.

Five minutes' advice is all that is needed to gain a reduction in hazardous alcohol consumption (33). Firm but friendly advice on cutting down should be given. Patients should be reassured that they are not thought to be alcoholics, but that if they go on drinking at the current rate they are at increased risk of damaging their health, and of having work and personal problems.

The types of harm that can arise from too much drinking can be explained to the patient. These include raised blood pressure, headaches, stomach upsets, anxiety and depression, sexual difficulties, overweight, sleeping problems, poor concentration, poor work performance, accidental injuries, liver disease, hangovers, cancer, irritability and financial worries.

The positive reasons for drinking less can be pointed out. These include a lower risk of accidents, high blood pressure or liver disease, a possible reduction in weight, improved concentration and a clear head, fewer hangovers, headaches and stomach upsets, sounder sleep and less tiredness generally, more energy and time for new activities, fewer arguments with friends and family, more pleasure out of sex, a new sense of being in control of life and of feeling fitter, extra money and, if trying for a baby, an improved chance of success for both men and women.

A patient's ultimate target should be no more than 40 g in any one day and no more than 140 g per week. Some people will want or need to abstain from alcohol altogether. It is important that the patient agree that the target is realistic and, for someone drinking heavily, a higher interim target might be set with a long-term aim to cut down further.

The patient should be encouraged to keep a regular drinking diary as a way of measuring progress and of sticking to new levels of alcohol consumption. If there is time, the last seven days' drinking can be reviewed, noting down each day's drinking in units of alcohol and working out the weekly total. This will help make sure

that patients understand how to use the diary, and will give them a baseline from which to assess progress.

Patients' motivation will be strengthened if it is made clear that their progress will be followed. Self-help booklets are available as a supplement to the doctor's advice. These booklets advise the patient on getting ready for cutting down on alcohol, and provide some tips on how to cut down.

The aim of the simple advice is gently to persuade the drinker to study any self-help booklets that have been provided, to consider whether a change in drinking habits is needed and to set drinking limits, which may include abstinence.

In summary, the goals for simple advice are:

- to identify any known alcohol-related problems, emphasizing the possible relationship between these problems and drinking;
- to introduce any self-help booklets and make sure that patients realize that they are in the hazardous drinking category; and
- to emphasize the idea of drinking limits, including the advisability of at least two or three days of abstinence each week.

## **INTERVENTION FOR HARMFUL ALCOHOL CONSUMPTION**

Harmful alcohol consumption is that which causes harm to the psychological or physical wellbeing of the individual (8,9). Brief motivational interviewing as developed by Rollnick et al. (34) should be offered to patients with harmful alcohol consumption. This approach, which is widely liked by doctors and nurses in general practice and which can also be used for hazardous alcohol consumption, is based on the fact that ambivalence about patients changing their alcohol consumption is a common problem in health care consultations.

Health professionals are used to speaking to patients about the need to drink less. However, since the most common form of consultation involves the delivery of medical advice controlled by the health professional, negotiations about reducing harmful drinking frequently take the form of persuasion. Although, as demonstrated by research, giving advice about reducing harmful drinking clearly works with

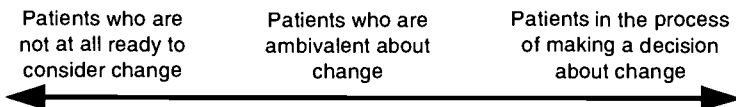


some patients, success rates could be higher. One problem with giving such advice is that many patients are not ready to change, and thus direct persuasion may push the patient into a position of defensiveness.

Ambivalence is a common and normal experience. For people with a drinking problem, there is a conflict between indulgence and restraint, each having its associated advantages and disadvantages. The intensity with which people experience this conflict varies a great deal, and appears to increase as the person approaches decision-making. The most effective way of helping patients is to explore this conflict and to encourage them to express their reasons for concern and the arguments for change.

Patients with harmful alcohol consumption are at various points on a continuum with respect to their readiness to change (Fig. 6). At one end of the continuum are those who are not at all ready to consider change. Towards the other end are those in the process of decision-making and actual change, while those between these extremes are in a state of ambivalence about their drinking. Among individuals with harmful alcohol consumption, between a quarter and a third will not be ready for change, between a quarter and a third will be ready to change, and between a third and a half will be ambivalent about changing. People can move backwards and forwards along this continuum. Helping them move forward, even if they do not reach a decision to change, let alone make a change, is an acceptable outcome of a consultation. If health professionals talk to patients as if they were further along the line than they really are, the likely outcome will be resistance. The first task of the health professional is therefore to establish the patient's degree of readiness for change, and then to select a strategy appropriate to this level of motivation.

Fig. 6. The process of change



## **Brief Motivational Interviewing**

The approach developed by Rollnick et al. (34) includes the following menu of eight strategies, each of which takes 5–15 minutes to work through:

1. opening strategy: lifestyle, stress and alcohol use
2. opening strategy: health and alcohol use
3. a typical day/week session
4. the good things and the less good things
5. providing information
6. the future and the present
7. exploring concerns
8. helping with decision-making.

As the health professional moves down the menu, so the strategies require a greater readiness to change from the patient. While strategies towards the top of the menu can be used with almost all patients, those towards the bottom can only be used with the smaller number of patients who are making a decision to change. Strategies 1 and 2 are opening strategies. Strategies 3 and 4 provide a solid platform of rapport and help the health professional understand the patient's life circumstances. Further progress down the menu depends on a readiness to change. If the patient openly expresses concern about his or her drinking, strategies 7 and 8 can be used. If the patient appears unconcerned, however, strategies 5 and 6 should be used.

### *Opening strategy: lifestyle, stresses and alcohol use*

This strategy involves talking generally about the person's current lifestyle and stress levels, and then raising the subject of alcohol with an open question such as, "Where does your use of alcohol fit in?"

### *Opening strategy: health and alcohol use*

This strategy is particularly useful in general practice when the health professional thinks that alcohol use is causing health problems. A general inquiry about health is followed by a simple open question

such as, “Where does your use of alcohol fit in?” or “How does your use of alcohol affect your health?”.

### *A typical day/week/session*

The functions of this strategy are to build rapport, to help the patient talk about current behaviour in detail within a non-pathological framework and to assess in more detail the degree of readiness to change. Because the health professional makes no reference to problems or concerns, it is particularly useful for patients who seem unready to consider change. It is also a useful starting point for other more ready patients, since it helps the health professional understand the context of the behaviour in question and can produce a wealth of information relevant to assessment.

A typical day, week or drinking session is identified and the health professional begins as follows: “Can we spend the next 5–10 minutes going through this day (week, session) from beginning to end? What happened, how did you feel and where did your use of alcohol fit in? Let’s start at the beginning.”. The aim is to follow the patient through a sequence of events, focusing on both behaviour and feelings, with simple and open questions being the main input from the health professional.

### *The good things and the less good things*

This strategy helps build rapport, provides information about context, and enables an assessment of readiness to change to be made. It approaches the exploration of concerns, although it avoids using terms such as problem or concern. The patient can be asked, “What are some of the good things about your use of alcohol?” or “What do you like about your use of alcohol?”. Then the patient is asked, “What are some of the less good things about your use of alcohol?” or “What do you dislike about your use of alcohol?”. Once both questions have been answered, the health professional should summarize the good things and the less good things, saying, for example, “So, using alcohol helps you relax, you enjoy using it with friends and it helps when you are really feeling fed up. On the other hand, you say that you sometimes feel controlled by alcohol, and on Monday mornings you find it difficult to do anything at work.”.

### *Providing information*

Giving patients information is a routine task of health professionals. The way in which information is given, however, can have a crucial effect on how the patient responds and reacts. There are three phases of giving information: ensuring the readiness of the patient to receive it, providing it in a neutral and non-personal way, and seeking a reaction with an open question such as, "What do you make of this?". At the outset it is useful to seek permission from the patient to give information, using a question such as, "I wonder, would you be interested in knowing more about the effect of alcohol on health?". Information is best provided neutrally, by referring to what happens to people in general rather than to the particular patient.

### *The future and the present*

This strategy can only be used with patients who are concerned at least to some degree about their drinking. Focusing on the contrast between the patient's present circumstances and the way he or she would like to be in the future may uncover a discrepancy that can be a powerful motivating force. A useful question is, "How would you like things to be different in the future?". The health professional can then focus on the present by asking, "What is stopping you doing these things you would like to do?" and "How does your use of alcohol affect you at the moment?". This often leads directly to an exploration of concerns about alcohol use and the issue of changing drinking habits.

### *Exploring concerns*

This is the most important strategy of all, since it provides the framework for eliciting from patients their concerns about their drinking. It can only be used with patients who do have concerns, and therefore cannot be used with someone who is not considering change. After the patient has answered the opening question, "What concerns do you have about your use of alcohol?", the strategy simply involves summarizing the first concern and then asking, "What else, what other concerns do you have?" and so on until all concerns have been covered. The strategy ends with a summary that highlights not only these concerns but also the positive benefits of alcohol use expressed by the patient; this is done to bring out the contrasting elements of the patient's ambivalence.

Part of the patient's conflict involves wondering what would happen if a change in drinking were to take place. A similar strategy can therefore be constructed around concerns about changing. The opening question would be something like, "What concerns do you have about reducing your use of alcohol?"

### *Helping with decision-making*

This strategy can only be used with patients who indicate some desire to make a decision to change. Patients should not be rushed into decision-making. Options for the future should be presented, rather than a single course of action. What other patients have done in a similar situation can be described. The professional should emphasize to the patient that, "you are the best judge of what will be best for you". Information should be provided in a neutral, non-personal manner. Failure to reach a decision to change is not a failed consultation. Resolutions to change often break down; the patient should understand this and be told that future contact should take place even if things go wrong. Commitment to change is likely to fluctuate, and the health professional should expect this to happen and empathize with the patient's predicament.

This patient-centred approach to negotiating behavioural change is a new skill for many health professionals. Although it is more time consuming, a patient-centred approach is more effective than simply giving advice and, thus, will be of more benefit to the patient in the long run.

Finally, it should be repeated that the brief interventions described in this review are designed for those patients with hazardous or harmful alcohol consumption. Patients who show signs of dependence or serious physical illness as a result of their alcohol consumption will require a different approach. The goal of intervention here may be abstinence and referral to a more specialized service (6).

## Barriers to Implementation

Although most primary health care providers regard brief interventions for hazardous and harmful alcohol consumption as important, they tend to underuse them (27). Even when they do offer brief interventions, they tend to rely on techniques that are ineffective, and seldom offer more effective behavioural change techniques.

Reasons given by primary health care providers for their failure to practise more brief interventions include:

- a lack of positive reinforcement, arising from relatively low success rates with individual patients leading to potential poor uptake;
- perceived inappropriateness of asking all adult patients about alcohol consumption;
- lack of training;
- lack of time;
- inadequate financial reimbursement;
- lack of systematic strategies and protocols;
- limited availability of appropriate materials, including screening instruments; and
- minimal support from other staff.

Other barriers include a lack of familiarity with current recommendations; attitudinal problems such as lack of confidence, unrealistic expectations and mistaken beliefs about ethical issues; and lack

of basic behavioural science skills and training. Even when these barriers to implementation are accounted for, however, primary health care providers fail to undertake brief interventions as recommended. One reason for this is uncertainty as to which services should be offered.

Another possible reason for the reluctance of primary health care providers to perform brief interventions is scepticism about their clinical effectiveness. It is often unclear whether certain preventive interventions can significantly reduce morbidity or mortality from alcohol consumption. It is also unclear how to compare the relative effectiveness of different preventive services, making it difficult for busy practitioners to decide which interventions are most important during a brief patient visit. A broader concern may be that some interventions could do more harm than good.

It is important, therefore, to develop internationally agreed comprehensive recommendations on brief interventions, and to provide support and education in implementing these services.

## **OVERCOMING BARRIERS**

Some of these barriers can be overcome through appropriate professional training and continuing education, recognizing that primary health care providers regard the detection and management of hazardous and harmful alcohol consumption as important and that such activities are consistent with their holistic approach to health care.

Several randomized controlled trials have shown that compliance with disease prevention and control regimens can be improved through the use of practice-based reminder systems. Among the tools used are chart reminders and flow sheets, cues on computerized patient records, records kept by patients and various forms of performance feedback. Effectiveness can be further enhanced by appropriate client tracking systems.

Training and ongoing follow-up encourage primary health care providers to participate in health promotion activities. For example, it has been demonstrated that a recruitment strategy based on face-to-face

interviews with primary health care staff is ten times more effective than a postal recruitment strategy. Furthermore, trained practitioners are both more likely to be involved in preventive programmes and to have higher success rates than untrained practitioners. The continuing provision of support following training also leads to a higher rate of continued involvement in preventive programmes.

## Facilitators

There are a variety of ways to support health promotion programmes in primary health care. In some countries, facilitator programmes have been provided to enable and support organizational change within primary health care, including the setting up of risk management programmes, the adoption of minimum standards for screening and intervention, and the auditing of records. Facilitators have been shown to lead to an increased recording of risk factors in patients' notes. Facilitators can play a crucial role in motivating primary health care teams to practise health promotion.

In setting up the facilitator model, Rush et al. (35) made the following proposals.

- The health facilitator should be seen as a link between research and development in the field of alcohol and primary health care on the one hand, and the practitioner and other members of the health care team in the local community on the other.
- The facilitator should act as an agent for change, actively promoting and assisting the adoption of new types of behaviour or attitudes necessary for implementing the alcohol protocols and interventions among the target group.
- The facilitator should work with practitioners from the outset to establish small successes with patients, from which more positive attitudes and a stronger motivation to work with these patients can emerge.
- The role of the facilitator in direct patient counselling, which does not usually go beyond assisting with individual cases at the request of the practitioner, must be made clear in all communication strategies and materials.



- The facilitator should have a health or health education background, and should also possess strong interpersonal communication skills.
- The patient screening and intervention protocols should take a broad perspective on lifestyles, and should include both alcohol and tobacco components.
- The facilitator's work must be tailored to some extent to each medical practice; structures should be flexible enough to allow practitioners and other office staff sufficient freedom to adapt the programme to their way of working and idiosyncrasies.
- The facilitator model contains the key features of personal contact and follow-up support; the facilitator should therefore deliberately nurture the capabilities of the family practitioner and primary health care team to maintain the process of adopting the model.
- The facilitator must strive to integrate the alcohol and tobacco protocols, and any appropriate supportive resource materials, at different levels within the medical practice; this includes working with both clinical and office staff.

## Contracts

The structure of a health care system and the method of remuneration are important in determining the involvement of primary care providers in disease prevention and health promotion services.

In the implementation of its health strategy, for example, the United Kingdom recognized the importance of general practitioners' contracts and terms and conditions of service (36,37). The 1990 general practice contract and revised terms of service made it clear that health promotion and disease prevention fell within the definition of general medical services. Since 1990, as part of their terms and conditions of service, general practitioners have been required:

- to give advice, where appropriate, to a patient in connection with the patient's general health, and in particular about the significance of diet, exercise, the use of tobacco, the consumption of alcohol and the use of drugs and solvents;

- to offer patients consultations and, where appropriate, physical examination to identify or reduce the risk of disease or injury; and
- to offer patients, where appropriate, immunization against measles, mumps, rubella, pertussis, poliomyelitis, diphtheria and tetanus.

Since 1993, general practitioners have also been entitled to item-of-service pay through three health promotion programme categories, each involving a different level of pay (27). Category 1, the minimum programme, requires that the general practitioner screen for smoking habits and offer advice and other appropriate interventions to reduce smoking. Category 2, in addition to addressing smoking, requires the general practitioner to screen for raised blood pressure and to offer appropriate interventions to reduce blood pressure. Category 3, which receives the maximum remuneration, also requires the general practitioner to screen and offer advice on other lifestyles issues, including alcohol consumption, diet and physical activity.

Target-related pay has been introduced for immunization and cervical cytology smears, and could be extended to other preventive and health promotion activities. In relation to alcohol, targets could be developed for general practitioners on their interest, motivation, knowledge and skills and the prevalence of risk among patients. Furthermore, a postgraduate education allowance is paid, provided a general practitioner attends 25 days of education at two or more accredited courses in health promotion and disease prevention over a five-year period.

### **PHASE III WHO COLLABORATIVE STUDY**

Drawing on many of the elements discussed in this chapter, WHO set up the Phase III Collaborative Study to review and test methods in the primary health care setting, which have been designed to enhance the uptake of early intervention strategies for those with hazardous or harmful alcohol consumption. The Phase III study follows on from the Phase I study in which the AUDIT questionnaire (29) was developed, and the Phase II study in which the effectiveness of early brief interventions was demonstrated (24).

The Phase III study has two main objectives. The first is to examine and document the attitudes, practices and incentives among primary health care workers in relation to early intervention for hazardous and harmful alcohol use in a range of countries with established primary health care services. The second is to evaluate and document the feasibility of implementing early intervention and health promotion strategies in the primary health care setting. The research programme, which is coordinated by the Department of Psychiatry at the University of Sydney, Australia, is based on three strands of investigation.

### **Strand I**

The aim of strand I is to assess and document primary health care workers' current practices and their opinion of early intervention, prevention and treatment in established alcohol dependence, and their role in providing these interventions (38).

A systematic examination of the views of health care professionals regarding the delivery of early intervention strategies and associated activities is seen to be of fundamental importance. To implement early intervention strategies widely and successfully, it is crucial that the activities and underlying principles be acceptable to the health care professionals involved. According to diffusion theory, an essential component of successful implementation and dissemination is that any innovation be compatible with the existing role of the professional who is required to use the innovation. The professional's level of competence will significantly influence his or her ability to use new techniques. A range of appropriate research methods is used to pursue this question, including traditional quantitative survey or questionnaire methodologies and qualitative approaches such as interviews and small group discussions.

Comparisons among countries will provide important information and a firmer basis for the design of education and training programmes, intervention tools and screening instruments, and for the production of resource materials to assist health professionals. In most countries the general practitioner is likely to provide the majority of primary health care services, although in some countries this may well be the role of community nurses, social workers or others.

## Strand II

The aim of strand II is to assess and document the incentives and disincentives for early intervention, preventive medicine and treatment of alcohol dependence in primary health care settings (39).

Major issues warranting consideration include the organization of primary health care facilities in each participating country. Substantial differences occur among countries in the organizational and administrative arrangements for providing comprehensive primary health care. For instance, some countries operate a full or partial reimbursement system, or a capitation fee for each patient. In others, the services of the medical practitioner are provided through full-time salaried medical officers, or the system is based on a combination of different components. Other organizational and infrastructural issues that need to be considered in assessing incentives and disincentives include the question of whether there is a rebate scheme for screening.

An important issue is the extent to which the strategies entailed in early intervention are seen to be in competition with other elements of the health system, or to threaten aspects of the provision of health care that generate income. Time constraints within the existing primary health care system may also substantially impede the implementation of early intervention strategies. In addition, time or lack of it, frequently has a direct effect on the clinician's income.

A model has been developed that attempts to encapsulate some of the major areas influencing the probability of a clinician's intervention in a patient's alcohol problem (40). This model identifies four major factors that may influence that probability, each factor containing various components that determine its effect.

The first factor is *context*, which includes remuneration and fee structures, government regulations, professional guidelines and medico-legal precedents; the setting, such as a formal versus an informal medical setting; the availability of equipment, consumables and support services; and the time available in relation to other demands and priorities.

The second factor is the *patient*, whose components include the patient's medical condition; whether the patient raises the problem;

demographic characteristics; personality variables; and whether the patient is cooperative or not.

The third is *patient–doctor interaction*, which comprises length of relationship, frequency of interaction, outcome of previous consultations, and similarities or differences between the patient’s personal and social characteristics and those of the doctor.

The final factor is the *doctor*, whose components include the doctor’s demographic characteristics, personality variables, knowledge relevant to detection and treatment of the condition, past experience (success or failure) in treating the condition, current possession of relevant clinical skills, and willingness to intervene.

### **Strand III**

The aim of strand III is to evaluate the feasibility of implementing strategies for early intervention in primary health care (41).

A major challenge, central to the WHO study, is to determine effective ways to influence the uptake and implementation of proven intervention strategies. The use of marketing strategies appears to hold considerable potential in this area: many of the attempts to convince primary health care workers to adopt early intervention techniques clearly involve marketing strategies. In particular, social marketing approaches are held to be suitable. Social marketing has taken some of the principles of marketing management developed in the business environment, and applied them to the marketing of social issues and causes.

The principal hypothesis being tested is that implementation strategies involving personal contact, especially if backed up by specific training sessions, will lead to significantly greater utilization of early intervention than those based only on the mailing out of early intervention materials or making contact by telephone. The three marketing strategies to be compared in promoting the uptake of the intervention package are: direct mail, with a personal letter and promotional leaflet describing the package; telemarketing, with a personal telephone call describing and discussing the package; and a personal visit to the practice, with a demonstration and description of the package. For those practices that decide to accept and use the package,

the three training and support conditions being compared in promoting the use of the package are: a control, whereby the package is simply delivered to the practice with no demonstration or discussion; no support, whereby the programme is demonstrated and set up but obtains no continuing support; and support, whereby regular support is provided through telephone contact or personal visits following the setting up and demonstration of the package.

# Packages and Protocols

Lack of packages and protocols are among the reasons given by primary health care workers for their failure to provide brief interventions for hazardous and harmful alcohol consumption. There are many examples of packages (42,43), protocols (44,45) and clinical guidelines (46,47), all of which are very similar, including the Drink-Less package designed for the Phase III WHO Collaborative Study (48).

## PACKAGES

A good example of a package is that produced for the alcohol risk assessment and intervention (ARAI) project of the College of Family Physicians of Canada (49). The package contains a resource manual for family physicians, a patient flow chart for physicians, a patient workbook for stopping or cutting down drinking and an information leaflet for patients.

## PROTOCOLS

One example of a protocol is the action plan on alcohol in primary health care of the 1993–1995 Health Plan for Catalonia (50) (see Annex 2). The aims of the action plan are:

- routine detection of excessive drinkers
- early diagnosis of alcohol-related disabilities
- brief counselling for drinkers at risk
- management techniques and referral criteria for those dependent on alcohol.

The minimum common criteria for screening and follow-up of drinkers at risk are:

- the target population
- screening procedures
- diagnostic criteria
- efficacy criteria
- intervention procedures.

The target population comprises men and women older than 15. Special attention is paid to adolescents, men aged 18–40 years, pregnant women and people with a family history of alcohol dependence. The screening procedures take account of weekly alcohol consumption, alcohol-related disabilities and the physician's clinical impression. The diagnostic criteria are a weekly alcohol consumption of over 280 g for men and 168 g for women, and any alcohol consumption in pregnant women, people under 18 years of age and those who should abstain for health reasons. The efficacy criterion is low-risk drinking or abstinence maintained for one year. The intervention procedures include brief counselling of those drinking more than the risk limits on reducing their alcohol consumption; brief abstinence-oriented treatment for those under 18 years of age, pregnant women, those who meet ICD-10 criteria for alcohol dependence, and those whose medical condition prohibits alcohol consumption; and referral to specialized centres for patients who meet referral criteria.

### **Quality Control and Audit**

Good practice requires effective organization including teamwork and communication, delegation of tasks, accurate records, effective communication with local managers, and ready access to support and resources. Effective programme management includes the provision of local information to general practitioners, the provision of specific training, the involvement of general practitioners in the planning process, and the provision of adequate support. Quality control can be addressed through medical advisory audit groups, whose task is to support the auditing of activities in primary health care, and through quality improvement groups that support improvements in quality of care.



Some possibilities for audit include the following.

1. Is alcohol consumption always recorded in grams per week? Does everyone in the medical practice have a chart handy to convert standard drinks to grams per week?
2. When are most patients asked about their drinking (for example, opportunistically, at registration health check or other health check)? How good are each of these ways in reaching the patients most likely to be drinking excessively, such as young adult men?
3. After recording consumption, is the assessment of level of risk recorded (that is lower risk, hazardous or harmful alcohol consumption, high risk of accidents through intoxication)? Over time, how many patients reduce their risk?
4. How many patients with hazardous or harmful alcohol consumption have been identified during the previous six months/one year?
5. Has each patient's readiness for change been recorded (as not ready, thinking about change, preparing to change or making changes)? Over time, how many patients move from one stage to the next?
6. How many patients are referred on to specialist agencies for counselling or detoxification?
7. How successful are these referrals; that is, what proportion of patients keep appointments made for them and continue with a course of counselling or treatment?
8. Can referral processes be improved by better contact with the agencies concerned or better discussion of the options with the patients?

The development of quality can be supported by agreeing minimum levels of competence for professional practice. In a number of countries, colleges of general practitioners have developed standards of good practice in relation to hazardous and harmful alcohol consumption. These include the Dutch College of General Practitioners (51) and the Royal College of General Practitioners of the United Kingdom (10).

# Education and Training

Changing the behaviour of primary health care providers is a complex process. Education can play a role in changing their patterns of practice. Other interventions that need to be incorporated into an overall plan include changes in reimbursement, setting minimal standards of care, providing specialist referral services and changing the expectations of patients. Changes in clinical practice require a long-term commitment by medical educators.

This chapter focuses on the educational principles and models developed by Fleming (unpublished data, 1994), which have been found effective in improving the clinical skills of doctors and nurses. The second aspect of education is the incorporation of these educational principles into courses and training activities.

## EDUCATIONAL PRINCIPLES

### Learner-centred Teaching Strategies

Learner-centred teaching strategies ask the learners to work with the workshop or course facilitators to develop learning objectives and methods that meet their expectations and needs. Methods that can be used to incorporate this teaching approach are: including the target audience in the development of course materials, asking participants at the beginning of the workshop or course to state their objectives and periodically inquiring whether the facilitator is meeting the audience's objectives, so as to evaluate the programme and adjust the course for the future.

## **Case Studies**

Case studies with which the audience is familiar are useful, particularly in working with negative attitudes commonly expressed by primary health care providers.

## **Experience-based Learning**

Experience-based learning includes sharing personal histories, role playing, active participation in group processes and small group work. Asking an audience to relate experiences provides an opportunity to focus on personal feelings, which are often important to the learning process. Role playing is critical in building skills, and allows course participants to practise techniques.

## **Longitudinal Experience**

Transferring training concepts into long-term changes in practice requires the involvement of learners both before and after the training event. Examples of successful strategies include: mailing out reading materials before the course, asking participants to complete workshops and tasks before attending the course, asking participants to develop specific workshop plans at the end of the course to implement what they have learned, and following up with phone calls or visits to support implementation and change.

## **Linkages**

Many care providers are unaware of the resources in their communities that could help patients combat hazardous or harmful alcohol consumption. Forging links with such resources and providing advice are important components of successful educational programmes.

## **Changing Practice Norms**

Teaching participants how to change their normal practices is another important component of successful educational change.

# **EDUCATIONAL AND TRAINING MODELS**

## **Continuing Medical Education**

In some countries, continuing medical education is compulsory if doctors and nurses are to retain their speciality status and licences to

practise. In other countries, it is required in order to obtain financial reimbursement. Traditionally, the predominant teaching method has been a lecture followed by a brief question and answer session. This can present new information quickly, especially if pertinent reading materials are included. The incorporation of some of the educational principles mentioned above can overcome the problems of low retention rates and minimal change in clinical practice that can result from the traditional teaching format.

### **Faculty Development Programmes**

Such programmes focus on developing the teaching and clinical skills of the trainers of primary health care providers. Training the trainers, as opposed to training individual health professionals, multiplies the number of primary health care providers who can use the skills taught in the training programmes. Obtaining a critical mass of trained trainers and developing a network of trainers are necessary for sustaining new educational activities. Training the trainers can also help change practice norms, and a trained faculty can provide the leadership to change standards of care through the use of quality assurance programmes.

### **On-site Consultation**

There are many models of on-site consultation, similar to the facilitator model discussed in Chapter 7. In terms of on-site training, the facilitator can meet with key office staff and clinicians in an attempt to identify support and resistance. A menu of prevention activities can be offered, such as screening programmes, intervention techniques, prevention messages and referral to specialized treatment programmes. The facilitator can attempt to build consensus, and ask the staff and physicians to choose a prevention activity. Barriers can be explored and implementation plans developed. At a future visit, problems and major barriers to implementation can be discussed. Long-term maintenance plans can be discussed, and a staff member can be selected to champion the prevention programme.

### **Systems Approach**

Doctors can be taught how to work to change in medical curricula and to establish standards of good practice. The systems approach to training can also be used to help primary health care providers expand their view on

health promotion programmes in their community, and to help them carry out preventive activities in their practices.

## **TRAINING COURSE ON HELPING PEOPLE CHANGE**

A course for trainers that has been specifically designed to incorporate many of the principles of education is “Helping people change”, prepared by the Health Education Authority’s National Unit for Health Promotion in Primary Health Care in England (52). Its objectives for primary health care professionals are:

- to explain the concept of risk management in health promotion;
- to explain the process of change and the types of intervention that are appropriate at each stage; and
- to apply these principles to make brief health promotion interventions on smoking, alcohol use, eating and physical activity.

The training programme, which has been adapted and translated into Russian, contains a core module of 12 one-hour sessions and 4 topic modules each of 4 one-hour sessions covering smoking, alcohol, eating and physical activity. The theoretical basis for behavioural change is Prochaska & DiClemente’s model of the process of change (13), and the skills for behavioural change are based on motivational interviewing (14). The methodology is participatory skills training, and the core module covers the topics of understanding the change process, raising the issue, thinking about change, preparing to change, making changes, maintaining changes and preventing relapse. The alcohol module applies the principles of the core module and covers the topics of getting the facts straight, screening, recognizing which patients benefit from brief interventions and undertaking brief interventions.

A training manual includes detailed instructions on course delivery, visual aids and handouts for the participants. The course material is backed up by a series of booklets for professionals and patients covering the four topics.

## **COMPETENCIES AND TRAINING RECOMMENDATIONS**

### **Competencies**

A WHO Working Group (16) listed the following 12 competencies needed for the successful management of potential or established

alcohol-related problems. Primary health care doctors and teams should have:

- a knowledge of the prevalence of hazardous and harmful alcohol consumption and related physical, psychological and social problems;
- a knowledge and appreciation of the effects of patients' alcohol problems on their partners and families;
- an awareness of the patient's personal attitudes to alcohol;
- the ability to identify the various physical, psychological and social indications of a drinking problem;
- the ability to communicate accurate information on alcohol and alcohol-related problems, in an appropriate context, to patients and their relatives;
- the ability to distinguish between low-risk, hazardous, harmful and dependent levels of alcohol consumption;
- the ability to manage the physical consequences and complications of acute intoxication;
- the ability to take an accurate drinking history;
- the ability to recognize signs of alcohol-related disease;
- the ability to interpret laboratory tests accurately;
- the ability to choose an appropriate management plan (brief intervention or referral to appropriate colleagues or clinics); and
- the ability to direct and manage the detoxification of patients at home.

The action plan on alcohol in primary health care of the 1993–1995 Health Plan for Catalonia (50) proposes that the alcohol education programmes for primary health care workers should allow professionals:

- to know when and how to ask about alcohol consumption;
- to be familiar with standard drink units;
- to know how to use AUDIT;
- to classify patients according to their risk of developing alcohol-related problems;
- to manage the patients who do not have alcohol dependence; and

- to refer patients with alcohol dependence to specialized centres.

## Training

The WHO Working Group (16) made the following recommendations on education and training in alcohol and alcohol-related problems, for adoption by medical colleges or faculties of general practice within the Region.

1. Education and training should develop in primary health care doctors the knowledge, skills and attitudes needed to deal with alcohol use and alcohol-related problems.
2. Teaching on alcohol and alcohol-related problems should be included in medical education for general practice at all levels: undergraduate education, postgraduate training for general practice, and continuing medical education.
3. At the undergraduate level, such teaching should be coordinated by academic departments of general practice and/or public health, where they exist.
4. Education and training programmes should impart:
  - an understanding of the behavioural and social determinants of alcohol use and alcohol-related problems;
  - a knowledge of the medical, psychological and social consequences of alcohol use, and their diagnosis and management;
  - an understanding of the roles of the individual, the family, the community, the medical and related professions, and the government in dealing with alcohol-related problems; and
  - a knowledge of the principles and methods of health promotion, disease prevention and screening.
5. A multidisciplinary approach should be advocated at all levels of education.
6. Doctors should gain an understanding of the need for intersectoral collaboration in the prevention and management of alcohol-related problems.
7. Education and training programmes should be based on current research findings.

## Family and Friends

In any one year, some 12% of men and 4% of women will be dependent on alcohol. At consumption levels of 20 g pure alcohol a day, 20% of men and women experience harm from their own drinking in two or more areas of life such as family, friends and work.

The harm done by alcohol use affects not only the drinker but those surrounding the drinker. Finnish data suggest that almost half the population is close to someone who is drinking too much, most often a relative for women and a work colleague or friend for men (53). One quarter of the population (30% of women and 16% of men) had been personally affected by someone else's drinking.

The family and friends of people with alcohol-related problems are important for two reasons. First, they are important in their own right as people who risk coming to stress-related physical or psychological harm. Alcohol-related problems in a relative or friend are one of the most common stressful situations reported. There are similarities in the ways that families cope with the problems of alcohol dependence in a family member and the ways they cope with other chronic stressful circumstances, such as physical illness, disability, unemployment and poverty. Second, family members in particular have frequently been considered as supporting the treatment of relatives with drinking problems.

### EMPOWERING FAMILY MEMBERS AND FRIENDS

WHO has a project on coping with alcohol problems in the family (54). The philosophy of this project is that, when someone is using



alcohol excessively, his or her close relatives suffer from chronic stress that can lead to physical or psychological ill health. Relatives are highly involved in and aware of what is going on, and some ways of coping are better than others for reducing their risk of ill health. Some of the ways in which relatives cope are also better than others in having a desirable influence on the alcohol consumption of a family member or friend, and these will depend on the relative's circumstances. Primary health care workers can help relatives find ways of coping that reduce the risks to their own health, while helping to reduce excessive alcohol use in a family member or friend.

Orford (54) has described four things that a primary health care provider can do to help a relative or friend cope with a person who is drinking excessively.

### **Listen Non-judgementally**

The relative or friend should be encouraged to talk about the circumstances he or she is facing at home, and to respond in a non-judgemental and reassuring way. This should be done in private, and confidentiality should be respected. Sufficient time should be given to such relatives to tell their own story, to express the distress that they may be feeling, and to feel that they have been responded to in an understanding way.

The following topics can be covered: the effects of excessive alcohol use on the person who is drinking and on other members of the family, how the drinker has attempted to cope with his or her drinking, and the support that other family members have received, their state of health and wellbeing and their needs and expectations.

### **Provide Information**

Information is one of the main types of support that people in stressful circumstances find useful, and good information is one of the main things that family members want, even though professionals give it a relatively low priority.

### **Counsel Non-directively about Ways of Coping**

A non-directive approach is required that explores alternative ways of managing potentially stressful events and circumstances in the family. Family members and friends should be allowed to generate alternative

solutions and to try out different approaches, subsequently making a more informed choice of coping methods. Relatives and friends tend to cope with problems in a number of ways, for example, through emotion, tolerance, inactivity, avoidance, control, confrontation, support for the drinker and independence (54). In general, it seems that the majority of relatives find tolerance and inactivity to be unhelpful and confrontation to be helpful.

### **Help Strengthen Social Support and Joint Problem Solving in the Family**

This involves such things as encouraging the person who is drinking excessively to undergo treatment, enlisting the help of other members of the family and friends, attempting to improve communication and problem solving within the whole family, and identifying additional sources of support both inside and outside the family.

## **THE FAMILY AS HEALTH-PROMOTING AGENT**

The family, no matter how loosely defined, is where lifestyle patterns are initiated, maintained and altered over time. It is in the context of the family that attitudes and behaviour regarding alcohol use are often learned and maintained. It is the most basic consumer unit for purchases, products and services that influence health status. It is a major source of stress and social support. The family therefore offers the main opportunity for changes in lifestyle. However, the family should not be expected to assume these responsibilities in isolation. Families need the support of communities in achieving and maintaining good health, particularly in deprived areas.

## Community Action

It is increasingly recognized that the preventive approaches that hold the greatest promise are community-based and community-wide, and focus on both individual behaviour and environmental influences (55). Effective strategies are those that are designed to influence not only the individual but the social norms of the broader environment in which people live and work. Social norms are shaped by a variety of institutions, including educational and legislative bodies and the media. To encourage and sustain health-promoting practices, the community should be actively engaged in creating an environment that supports individual action. As other books in this series show, the active involvement of many sectors within a community (schools, worksites, local government, business, health care and voluntary agencies) increases the potential for sustained behavioural change and positive health benefits (56–58).

Individual intervention is insufficient by itself to provide a broad positive approach to preventing alcohol-related problems. Community-based activity aims to change lifestyles through a combined approach, influencing not only personal health behaviour but also the general health environment. It would seem legitimate for primary health care to seek to influence the health environment, while at the same time promoting appropriate personal health behaviour.

The WHO studies that have been carried out on community response to harmful alcohol use have identified many opportunities at the community and municipal levels for primary health care providers to be involved in community action projects (59). The challenge is for primary health care providers to look beyond the confines of the

one-to-one consultation, or even of family care, and to accept that their role is to work with others to enable the community as a whole to reduce alcohol-related problems.

At present, many education and training curricula for primary health care providers neglect community-based prevention. Continuing professional education should specifically deal with the management of community action projects and with skills, especially those required for collaborating with other professions and for dealing with the problems of implementing community action programmes.

## **HEALTH PROMOTION AND DISEASE PREVENTION**

One approach to thinking about health promotion and disease prevention comes from the Ottawa Charter for Health Promotion (60), which defines health promotion as “the process of enabling people to increase control over the determinants of health and to improve their health”. This definition has been linked to five strategies for promoting health: building healthy public policies, creating supportive environments, strengthening community action, developing personal skills and reorienting health services towards primary health care, health promotion and disease prevention.

Community programmes may encompass any or all of these approaches (61). For example, healthy public policies are those that serve to make the healthy choices the easy choices, by establishing environmental conditions supportive of positive health behaviour. Local action to control and reduce alcohol consumption can be seen as an instance of healthy public policy.

Individuals act within social, physical, political and economic environments that may support or impede efforts to improve health. People can undertake their own projects for environmental change or be a significant part of the planning process.

Community action probably holds the greatest potential for an enabling approach. It emphasizes self-help groups, community projects and neighbourhood and community development, all of which can be under the control of the communities themselves.

From an operational standpoint, health promotion can be defined as the combination of educational, organizational, economic and environmental support for action conducive to health. To deal effectively with their own health promotion needs and activities, people need information and skills together with the financial, professional and organizational resources to use their knowledge and skills.

## **The Community**

A community can be defined as a geographical or interest group, consisting of relatively small non-institutional aggregations of people linked together for a common goal or purpose. The most effective vehicle for health promotion activity, whether it be directed at policy, environmental change or personal skills development, is the human group, a coalition with all its aspects of social support and organizational power. Community groups can set priorities in health promotion, run programmes, advise public officials and help each other in a wide variety of ways. As the Ottawa Charter (60) states:

Health promotion works through concrete and effective action in setting priorities, making decisions, planning strategies and implementing them to achieve better health. At the heart of this process is the empowerment of communities, their ownership and control of their own endeavours and destinies.

In the context of primary health care, the term community is usually used to describe a geographical unit served by the primary health care team. It can also be applied to communities of interest within the practice population, such as younger people or people with alcohol-related disabilities.

## **Community-based Change**

While much of what has been published about community projects focuses on the results of intervention for risk factors and on channels of effective delivery (such as schools), it is increasingly recognized that the success of population-based interventions depends on the effective application of the theory and principles of the community organization. The active involvement of the community, its leaders and its organizations is a necessary ingredient for successful population-wide strategies. Comprehensive community health approaches typically combine the principles of community organization and citizen

involvement with tested strategies for changing lifestyles and/or local policy. Community-based approaches arise from the pooling of theory from many disciplines, ranging from biomedicine to communication.

Three themes unify these different views about the process of community-based social and behavioural change (62). The first is the emphasis on powerful social forces influencing individual behaviour. The idea is that behaviour is formed and influenced by the dominant culture, as experienced in social relations in the community. Communities shape the behaviour of individuals both symbolically and tangibly, transmitting values and norms.

A second theme is that communities themselves may be mobilized to act as agents of social and behavioural change. Communities give legitimacy to the values and norms of desirable behaviour, and make the social and physical environments more conducive to desirable personal behaviour.

The third theme is that early and sustained participation by community members and leaders is necessary for the realization of community ownership and programme maintenance.

The community health promotion approach, when supplemented by clinical or individual approaches, has the following advantages.

1. The burden of alcohol-related harm cuts across most sectors of the community. The causes are complex, and rooted for the most part in cultural phenomena.
2. Community approaches influence people's social environment and aims to change the norms, values and policies surrounding their behaviour.
3. Community approaches are better integrated, since interventions are built into existing community structures.
4. Community approaches are better placed to ensure long-term change, because society proscribes certain types of behaviour and local ownership generates continuing responsibility.

5. Community approaches are generally more comprehensive, and ensure better allocation and coordination of scarce health care resources.
6. Community approaches reflect shared responsibility for health and augment an individual's capacity for change.

### **A Systems Approach to Community Change**

Many health strategies have based their approach on identifying a finite number of lifestyle areas – such as smoking, alcohol, diet and physical activity – that have been shown to be limited to the major causes of disease and disability in society. These behavioural risk factors can be quantified at an individual level and specifically targeted at that level for strategic planning.

An alternative approach is a systems view, taking account of the social, economic, political, institutional, cultural, legislative, industrial and physical environments in which behaviour takes place. Interventions aimed at changing the behaviour of individuals are inadequate because the system is a more powerful and persuasive determinant of behaviour and of health than decisions made by individuals. A focus on individual behaviour allows authorities to evade the responsibility for social change. It also tends to lead to a brand of health promotion most suitable for the middle class and to victim blaming, wherein ill health resulting from a faulty lifestyle (such as excessive alcohol consumption) is seen as the responsibility of the individual rather than the result of the social conditions under which the individual lives.

The increasing focus on the community in health promotion is due, in part, to a growing recognition that behaviour is greatly influenced by the environment in which people live. Community values and norms have a significant impact on shaping an individual's attitudes and behaviour. Rather than emphasizing change by individuals, the community approach argues that permanent, large-scale behavioural change is best achieved by changing community norms about health-related behaviour. Communities can be organized and changed to support healthier lifestyles. Such change would be translated into a reduction in individual health risk behaviour and, in turn, to a reduction in morbidity and mortality.

## UNDERTAKING A COMMUNITY PROJECT

### Overall Project Planning

Community organization is a planned process, stimulating a community to use its own social structures and any available resources (internal or external) to accomplish goals, decided primarily by community representatives and consistent with local values. Purposive interventions for social change are organized by individuals, groups or organizations from within the community to attain and then sustain improvements and/or new opportunities.

Several major public health demonstration projects to prevent lifestyle-related ill health have successfully employed community strategies, and components of community organization can be identified in all of these.

There are five stages to organizing a community project (61).

#### *Stage 1: community analysis*

1. Define the community. The geographical or other boundaries of the project should be determined.
2. Collect data. Community analysis involves the collection and analysis of a variety of data to provide a comprehensive community profile.
3. Assess the community's capacity to support change.
4. Assess the community's barriers in terms of existing or potential factors that hinder or create resistance to change.
5. Assess readiness to change.
6. Synthesize data and set priorities.

#### *Stage 2: design and initiation*

1. Establish a core planning group and select a local organizer or coordinator.
2. Choose an organizational structure including, as appropriate, an advisory board, a council or panel, a coalition, a lead agency, an informal network, and grassroots or advocacy movements.



3. Identify, select and recruit representatives of all major community institutions and groups, including the commercial, voluntary, political, minority, recreational, medical, public health and media sectors.
4. Define the project's mission and goal. The mission statement provides the project with its purpose and vision. It should concisely and briefly communicate what is to be achieved. In addition, reasonable and measurable goals and objectives are essential.
5. Clarify the roles and responsibilities of the board members, staff and volunteers.
6. Provide training and recognition. Since active citizen involvement in decision-making, planning and implementation is desired, skills-oriented training is often essential.

### *Stage 3: implementation*

1. Generate broad citizen participation, continuing to reach out to people and encouraging their support.
2. Develop a sequential work plan. Developing a practical plan of work will include both short-term problem solving and long-term planning.
3. Use comprehensive integrated strategies. A comprehensive and coordinated effort, using multiple strategies and with a wide potential to influence community norms, is necessary.
4. Integrate community values into the programmes, materials and messages. The programme must use the community's terms and views.

### *Stage 4: programme maintenance and consolidation*

1. Integrate intervention activities into community networks, to create a broad context for the adoption and maintenance of health-promoting behaviour and norms.
2. Establish a positive organizational culture. A positive climate is critical in promoting and maintaining successful projects.
3. Establish a continuing recruitment plan. Turnover of volunteers and even of paid staff is to be expected in long-term projects.

4. Disseminate results. Giving information on project activities and early results of their evaluation increases visibility and community acceptance and involvement.

*Stage 5: dissemination and reassessment*

1. Update the community analysis, which involves looking for changes in leadership, resources and organizational relationships in the community.
2. Assess the effectiveness of interventions and programmes. An evaluation plan that includes the continuing monitoring of programmes and activities can allow periodic review of the status and progress of each activity.
3. Chart future directions and modifications. The process of planning future directions is often a formal one that includes revising and rewriting goals and objectives to reflect the updated community analysis and programme evaluations.
4. Summarize and disseminate results. The continuation of a project depends partly on maintaining high visibility through effective communication with key groups within the community.

**INVOLVING PRIMARY HEALTH CARE**

**Building Partnerships and Promoting Intersectoral Work**

Community projects are likely to be more successful when alliances or partnerships are made with other individuals or organizations. Potential partners for intersectoral work include:

- local and municipal authorities
- the media
- other health care providers and institutions
- educational institutions
- government agencies
- financial and commercial organizations
- labour organizations
- religious groups

- voluntary and non-statutory organizations
- self-help groups
- patient groups.

Intersectoral work with officers of the municipal authorities is particularly important. Council and committee meetings are open to the public. Joint projects can be undertaken with many departments, including the health and recreational departments. A joint project with the recreational department could determine how best it could work with local general practitioners to provide available and affordable access to recreational facilities.

### **The Media**

The mass media, including the local and national print media, radio and television, are important partners in community-based projects (62). Television is particularly important, since it occupies a large proportion of many people's free time and is their major source of information and entertainment.

In recent years it has come to be appreciated that the measurable effects of short-term educational efforts through the mass media are likely to be small, unless accompanied by environmental changes. Educational efforts are considered more likely to be effective when supplementing changes in the social environment, rather than having a direct short-term impact on individuals.

It does seem that messages aimed at the individual may have a more general effect on public health, including maintaining support among the population for public health policies. Thus, an alternative role for health promotion in the mass media is to support policy initiatives as part of a media advocacy process. Media advocacy has been described as the strategic use of the mass media for advancing social or public policy initiatives. The mass media are effective in setting the public agenda and stimulating public discussion.

### **Opinion Leaders**

In all communities there are opinion leaders, both formal and informal. They are important as potential advocates for community change and as potential role models.

Formal opinion leaders include those who are such because of their position, including:

- elected representatives (councillors and members of parliament)
- church leaders
- business leaders
- leaders of employer and employee organizations
- people who chair statutory and non-statutory organizations
- media editors
- magistrates and leaders of law and order services.

Informal opinion leaders include those who are regarded by the community as influencing local opinion or having an impact on the local environment. These might include people active in political, advocacy or campaign groups; shopkeepers, newsagents, publicans or café owners; individuals active in self-help or community groups; and youth leaders.

### **Health Centres**

The cumulative effect of individual advice will have an impact on the prevalence of disease and raise awareness of health promotion initiatives. Individual interventions by general practitioners are currently well below their full potential. It is likely that overall impact will be increased by supporting general practitioners in their activities and continuing to cover issues in the media.

Nevertheless, many other opportunities exist for health promotion activities in health centres and other primary health care settings. These include:

- programmes targeted at segments of the population, such as young people, housing estates or ethnic groups;
- health campaigns;
- the practice as a health-promoting institution for its employees and clients;
- patient participation groups;

- self-help groups;
- classes for physical activity, stress management, cookery, etc.;
- outreach classes and groups;
- community groups to determine need;
- programmes to ensure the availability of and access to health promotion services and activities; and
- local multidisciplinary and intersectoral work.

## **WHO DEMONSTRATION AND EVALUATION PROJECT**

The Lahti project is a WHO collaborative demonstration project for a comprehensive community programme to prevent the harm done by alcohol use (63). The project site is the city of Lahti in Finland. The project relies largely on the work of local professionals and includes work in developing local alcohol policy discussions, education and information, health care intervention for heavy drinkers, youth work and self-help for heavy drinkers and their families. The impact of the project has been assessed by formative, process and outcome research.

The prevention work was designed according to the following principles:

- prevention work was done within the existing resources and networks in the city;
- the goal was to influence the community as a whole, as well as individuals;
- alcohol problems and the resources to reduce them were seen as part of the everyday life of the citizens; and
- the style of work was open discussion without any rigid plans for goals or methods.

The project was divided into independent modules. In addition to the topics mentioned above, these included interviews with key people, influencing the alcohol supply, server responsibility, and the role of the family. While these areas of work were independent, they were

linked through media campaigns and local events. The project has demonstrated that a community activity lasting only a few years can achieve changes in the perception of alcohol problems, changes in people's knowledge about alcohol, system-level changes in the organization, scope and methods of prevention work, and changes in the community's response to alcohol-related problems with new forms of secondary prevention and care.

# Alcohol Policy

The health care and public health professions have a long tradition of advocating a healthy public policy on alcohol (10,64–66). Without the implementation of an effective alcohol policy, activities such as brief interventions in primary health care will be rendered null and void. Through their professional associations and other avenues, primary health care professionals are in a strong position to advocate a healthy public policy on alcohol.

The analysis of the relationship between the individual's drinking and individual risk discussed in Chapter 3 establishes the basis for the relationship between the level of drinking in the general population and the prevalence of alcohol-related problems in society.

There is a significant relationship between the level of alcohol consumption in the population and overall mortality from liver cirrhosis, alcoholic psychosis, alcoholism, pancreatitis, certain cancers and all causes. There is a positive relationship between overall consumption and suicide, traffic fatalities and violence. The overall level of a population's drinking is significantly related to the level of alcohol-related problems, to the extent that a 10% decrease in consumption per head would lead to a 15% decrease in alcohol-related mortality in males and a 5% decrease in fatal accidents, suicides and homicides in the whole population (67).

## ELEMENTS OF ALCOHOL POLICY

Edwards et al. have outlined the elements of effective alcohol policy (1).

An alcohol policy should not be limited to “alcoholism”, to the alcohol addict or to extreme physical illness, but should take into account both alcohol-related problems and alcohol dependence. It should give high priority to acute problems and accidents as well as to chronic pathologies. It should deal with social and psychological as well as physical problems. It should deal with small and common problems as well as major and less common consequences. Policy must be concerned with the adverse impact of drinking on the family and other people, as well as that on the drinker. Policy must address drink–driving and other aspects of alcohol-related crime.

Policy must take into account the total drinking population as defining the scope for public health action. Society’s overall drinking problems will only be dealt with effectively through understanding and influencing the total dynamic system that comprises society’s drinking; effective policies cannot be constructed by concentrating on small sections of the continuum, or by trying to manipulate extremes of behaviour.

Preventive measures that influence drinkers in general will also have an effect on heavier drinkers. The drinking population behaves as one system rather than as several different parts. An increase or decrease in overall consumption results in changes across the spectrum of drinking, including heavy drinkers.

Many alcohol-related problems are widely distributed in the drinking population, rather than being concentrated only among heavy drinkers. Policies aimed at a wider section of a population, with less individual risk but many collective problems, can often produce greater public health benefit than those that focus on a smaller population at higher individual risk.

The overall strategy for alcohol policy must be to create an environment that helps people to make healthy choices, and renders unhealthy choices more difficult or expensive. Any measures that potentially increase the availability of alcohol within a country (whether as a result of trade agreements, reduction in the real price of beverages, or the reduction or elimination of restrictions on retail access) should therefore be judged in terms of public health and public safety in addition to any other consideration.



## **Taxation of Alcohol**

Taxation of alcohol is an effective mechanism for reducing alcohol-related problems. There is abundant evidence that a population's alcohol consumption is linked to cost, with increases in price leading to decreases in consumption and vice versa (68). Through the relationship between consumption on the one hand and individual and population problems on the other, the taxation of alcohol is a public health lever of wide potential effectiveness.

The exact relationship between the price of alcohol and the level of alcohol consumption depends on the population, the beverage type and when it was studied. As a rough generalization, a 10% increase in price leads to about a 5% reduction in beer consumption, a 7.5% decrease in wine consumption and a 10% decrease in spirits consumption. There is some evidence of a disproportionate effect on heavier drinkers, because an increase in price leads to a greater reduction in mortality from liver cirrhosis than in alcohol consumption.

## **Availability of Alcohol**

Environmental measures that influence physical access to alcohol can make a significant contribution to the prevention of alcohol-related problems. Such measures include a minimum legal drinking age, restrictions on the hours or days of sale, and policies on the number, type or location of sales outlets (69).

In non-wine-growing countries, when wine stores are opened or wine retail monopolies eliminated, wine consumption increases. Increases in the availability of spirits, for consumption either on or off the premises, increase consumption. Making beer available from grocery stores rather than retail monopolies results in large increases in alcohol consumption. Increases in the density of outlets and in the number of hours and days of sale all lead to increases in consumption. Raising the minimum drinking age leads to a reduction in road traffic fatalities. Responsible service, server training programmes and a greater legal liability on servers of alcohol all lead to reductions in the number of road traffic accidents involving alcohol.

## **Drinking and Driving**

Drink–driving countermeasures are effective if vigorously enforced and given a high public profile. Deterrence and the strict enforcement of drink–driving laws are of fundamental importance. Other measures include server training, and making the person or premises that supplies a drink to an intoxicated patron legally liable for the consequences.

## **Advertising Restrictions**

There is some evidence that restrictions on advertising lead to reduced alcohol consumption and alcohol-related harm (62). Within stable and saturated markets, the main role of advertisements is to ensure that new consumers replace old ones and that educational messages do not reduce alcohol consumption. Contemporary advertisements communicate more about the meaning and desirability of the products and about the social contexts in which the products are used than about the products themselves. Alcohol advertising portrays alcohol consumption as a safe and problem-free practice, de-emphasizing the potential health risks and negative consequences. Through its messages, alcohol advertising maintains the social desirability of drinking, plays down the risk of alcohol use to individuals and public health, and contradicts prevention objectives. These indirect effects alone are sufficient to justify the need to control the volume and content of alcohol advertising.

## **A Comprehensive Policy**

A comprehensive policy that will support the role of primary health care providers in preventing and managing the harm done by alcohol use is one that: makes use of taxation and control of physical access, supports drink–driving countermeasures, and invests broadly in treatment and particularly in primary care. Educational strategies and restrictions on advertising should be added to ensure long-term benefits. Public education campaigns and comprehensive community action programmes can increase awareness, and thus public support for other environmental policies.

## Targets

One of the philosophies underpinning the 38 targets of the WHO European policy for health for all maintains that effective public health policy needs clear objectives and targets, and that the attainment of or progress towards those targets should be monitored and evaluated. The monitoring and evaluation should give feedback to the political decision-makers, administrators and everyone who is responsible for implementing the policy. These people need the information to develop, update or restructure the policy and its components, as well as to assess the ways in which it is implemented.

Target 17 (70) states that:

By the year 2000, the health-damaging consumption of dependence-producing substances such as alcohol, tobacco and psychoactive drugs should have been significantly reduced in all Member States.

The subtext continues:

This target can be achieved if well balanced policies and programmes in regard to the consumption and production of these substances are implemented at all levels and in different sectors to: ...

- reduce alcohol consumption by 25%, with particular attention to reducing harmful use ...

Different countries have adopted their own targets for action on alcohol. For example, the strategy for England (71) sets a target of reducing the proportion of men consuming more than 21 units of alcohol per week from 28% to 18%, and the proportion of women consuming more than 14 units per week from 11% to 7% by the year 2005. The

Health Plan for Catalonia (50) sets a target of reducing to 4.5% the proportion of the general population aged 15–65 years consuming more than 75 ml pure alcohol per day (see Annex 2).

Target 28 of the European health for all policy addresses primary health care (70):

By the year 2000, primary health care in all Member States should meet the basic health needs of the population by providing a wide range of health-promotive, curative, rehabilitative and supportive services and by actively supporting self-help activities of individuals, families and groups.

The subtext continues:

This target can be achieved if Member States:

- promote and provide preventive and curative health services, including diagnosis, treatment, care and rehabilitation, through locally organized delivery systems;
- provide community groups with technical, financial, information and other forms of support and make them active partners in the development of primary health care;
- remove all financial, physical and cultural barriers to the use of primary health care;
- strengthen active outreach to the community and cooperation with other sectors to achieve effective use of health services;
- ensure adequate numbers of appropriately qualified family health physicians and nurses for the primary health care services;
- organize primary care in such a way as to achieve integration of services based on teamwork among health care providers;
- ensure effective patient referral and the mutual provision of technical support by all levels of care.

## STANDARDS, TARGETS AND INDICATORS

A WHO Working Group (16) proposed an outline of standards and targets (Table 2). Potential indicators (72) include:

- the proportion of health care staff who have received basic education in prevention and management;

## Alcohol and primary health care

**Table 2. Suggested standards and targets to be met by primary health care practitioners (PHCPs) in relation to the prevention and management of alcohol-related harm.**

Questions and targets	Interest and motivation of the PHCP	Knowledge, skills and behaviour of the PHCP	Prevalence of risk to patients
Individual-level questions and targets	<p>1. Is the PHCP interested in undertaking risk assessment with his or her patients?</p> <p>2. If the PHCP had the opportunity, would he or she be interested in improving his or her work concerning patients' use of alcohol?</p>	<p>1. Does the PHCP routinely assess patients' risk concerning alcohol?</p> <p>2. Case scenario assessment of the PHCP's ability to diagnose alcohol-related problems</p>	<p>1. Does the PHCP record risk levels (low, hazardous/harmful, dependent) for all patients?</p>
Local-level targets	<p>1. Measure the percentage of PHCPs answering yes, perhaps or no to questions 1 and 2 above</p>	<p>1. Measure the percentage of PHCPs answering yes, perhaps or no to question 1 above</p> <p>2. Measure performance in case scenario</p>	<p>1. Estimate the percentages of all the PHCP's patients at each risk level</p>
National-level targets	<p>1. Calculate the percentage of PHCPs in the country who answer yes, perhaps or no to questions 1 and 2 above</p> <p>2. Establish whether PHCP organizations have policy statements on alcohol and on the WHO European Alcohol Action Plan</p>	<p>1. Where possible, estimate the percentage of PHCPs who specialize in treating alcohol-related problems</p> <p>2. Establish the availability of mandatory or optional alcohol education in medical training</p> <p>3. Establish the percentage of PHCPs who routinely assess patients</p>	<p>1. Estimate consumption per head</p> <p>2. Establish national databases on mortality, morbidity, traffic accidents and liver cirrhosis</p> <p>3. Establish the percentage of the population at risk</p>
European-level targets	<p>1. Establish the number of countries that support the WHO Action Plan</p> <p>2. Establish the percentage of PHCP organizations with a policy statement on alcohol</p>	<p>1. Establish the percentage of European countries with mandatory or optional alcohol education in medical training</p>	<p>1. Establish European databases on consumption per head and on mortality/morbidity statistics</p>

*Source: The role of general practice settings in the prevention and management of the harm done by alcohol use (16).*

## Targets

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- the proportion of health care staff who have acquired an agreed minimum of skills to provide prevention and management services;
- the proportion of primary health care units that offer preventive services in relation to alcohol; and
- the proportion of the population covered.

## Conclusion

Through its availability, access and coverage, primary health care has the potential to reduce the risk from hazardous and harmful alcohol consumption.

A basis for the primary health care response is the concept of alcohol as a risk factor for ill health. There is a dose–response relationship between alcohol consumption and a wide range of physical, social and violent harm. There are significant increases in risk at consumption levels of 20 g of pure alcohol a day. Although alcohol reduces the risk of coronary heart disease, this is only relevant to the population over 50 years of age, and most of this reduction can be achieved by consuming less than 10 g of alcohol every other day.

A significant proportion of the population is at risk, with one third of men and one in ten women consuming more than 20 g of pure alcohol a day. Levels of drinking in young adulthood predict levels of drinking later in life.

On average, brief interventions reduce alcohol consumption by over 20%, at low cost. For patients to benefit from brief interventions, the adult population should be screened using quantity–frequency questionnaires of alcohol consumption or AUDIT (see Annex 1).

Health education advice to low-risk drinkers should be that, whatever the level of consumption, the less consumed the better. For those over the age of 50 years consuming less than 10 g pure alcohol every other day, the potential benefit from a reduced risk of coronary heart disease is lost. Nevertheless, current abstainers should not start to drink in order to reduce their risk of developing health problems.

For hazardous and harmful alcohol consumption, only 5–10 minutes of advice is needed in order to provide information, to advise on reduced consumption, and to provide the patient with relevant literature. Motivational interviewing helps patients who are ambivalent about changing their drinking habits.

Those who facilitate organizational change can help to overcome some of the barriers faced by primary health care in providing brief interventions. Such change should be supported by contractual arrangements and remuneration systems for health promotion and disease prevention.

Packages and protocols should be made available to primary health care providers to help them undertake effective brief interventions. The provision of skills training is essential in order to increase the practice of these interventions. A train-the-trainers approach ensures high coverage of training. Training should be backed up by recommendations endorsed by professional associations.

Alcohol is a common cause of stress and distress in the family. Primary health care providers can help family members and friends of drinkers to prevent the harmful consequences of their drinking to the family.

The family setting is important for health promotion, but only when supported by the community. The preventive approaches that hold the greatest promise are community based, and focus on both individual behaviour and environmental influences.

There are many opportunities for primary health care providers to take an interest in the health environment and seek to influence it. Primary health care interventions are rendered null and void if not supported by the implementation of an effective alcohol policy. Policies that effectively reduce the harm done by alcohol use are those that make use of taxation, control of physical access to alcohol and restrictions on advertising.

Primary health care action needs to be supported by effective health strategies and targets, with monitoring and evaluation systems.



# References

1. EDWARDS, G. ET AL. *Alcohol policy and the public good*. Oxford, Oxford University Press, 1994.
2. *Problems related to alcohol consumption*. Report of a WHO Expert Committee. Geneva, World Health Organization, 1980 (WHO Technical Report Series, No. 650).
3. INSTITUTE OF MEDICINE. *Broadening the base of treatment for alcohol problems*. Washington, DC, National Academy Press, 1990.
4. *European Alcohol Action Plan*. Copenhagen, WHO Regional Office for Europe, 1993 (document ICP/ADA 035).
5. THOM, B. & TELLEZ, C. A difficult business: detecting and managing alcohol problems in general practice. *British journal of addiction*, **81**: 405–418 (1986).
6. HEATHER, N. *Treatment approaches to alcohol*. Copenhagen, WHO Regional Office for Europe, 1995 (WHO Regional Publications, European Series, No. 65).
7. MAKELA, K., ED. *Alcoholics Anonymous as a mutual-help movement: a study in eight societies*. Madison, Wisconsin University Press (in press).
8. *The ICD-10 classification of mental and behavioural disorders*. Geneva, World Health Organization, 1992.
9. *Lexicon of alcohol and drug terms*. Geneva, World Health Organization, 1994.
10. *Alcohol – a balanced view*. London, Royal College of General Practitioners, 1986.
11. BABOR, T. ET AL. Alcohol related problems in the primary health care setting: a review of early intervention strategies. *British journal of addiction*, **81**: 23–46 (1986).
12. RICHMOND, R. & ANDERSON, P. Research in general practice for smokers and drinkers in Australia and the UK: I. Interpretation of the results. *Addiction*, **89**: 35–40 (1994).
13. PROCHASKA, J.O. & DICLEMENTE, C.C. *The transtheoretical approach*. Homewood, IL, Dow Jones–Irwin, 1984.

14. MILLER, W.R. & ROLLNICK, S. *Motivational interviewing: preparing people to change addictive behaviour*. New York, Guilford Press, 1991.
15. *Brief interventions and alcohol use*. Leeds, Nuffield Institute for Health, 1993 (Effective Health Care Bulletin, No. 7).
16. *The role of general practice settings in the prevention and management of the harm done by alcohol use*. Report on a WHO meeting. Copenhagen, WHO Regional Office for Europe, 1992 (document EUR/ICP/ADA 038).
17. *Alcohol drinking*. Lyon, International Agency for Research on Cancer, 1988 (IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, No. 44).
18. ROSENBERG, L. ET AL. Alcohol consumption and risk of breast cancer: a review of the epidemiological evidence. *Epidemiological reviews*, **15**: 133–144 (1993).
19. ROOM, R. ET AL. The risk of harm to oneself from drinking, Canada 1989. *Addiction*, **90**: 499–513 (1995).
20. MIDANIK, L. Alcohol consumption and consequences of drinking in general population surveys. In: Holder, H. & Edwards, G., ed. *The scientific rationale for alcohol policy*. Oxford, Oxford University Press, 1995.
21. *Profiles of alcohol in the Member States of the European Region of the World Health Organization*. Copenhagen, WHO Regional Office for Europe, 1995 (document ICP/ALDT 94 02/MT09/BD 4).
22. ANDERSON, P. *Management of drinking problems*. Copenhagen, WHO Regional Office for Europe, 1991.
23. WALLACE, P.J. ET AL. Randomised controlled trial of general practitioner intervention in patients with excessive alcohol consumption. *British medical journal*, **297**: 663–668 (1988).
24. BABOR, T. & GRANT, M., ED. *Project on identification and management of alcohol-related problems. Report on phase II: a randomized clinical trial of brief interventions in primary health care*. Geneva, World Health Organization, 1992 (document WHO/PSA/91.5).
25. RICHMOND, R. ET AL. Controlled evaluation of a general practice based brief intervention for excessive drinking. *Addiction*, **90**: 119–132 (1995).
26. RICHMOND, R. & ANDERSON, P. Research in general practice for smokers and drinkers in Australia and the UK. II. Representativeness of the results. *Addiction*, **89**: 41–48 (1994).

27. RICHMOND, R. & ANDERSON, P. Research in general practice for smokers and drinkers in Australia and the UK. III. Dissemination of interventions. *Addiction*, **89**: 49–62 (1994).
28. ANDERSON, P. Self-administered questionnaires for diagnosis of alcohol abuse. In: Watson, R.R., ed. *Diagnosis of alcohol abuse*. Boca Raton, FL, CRC Press, 1989.
29. BABOR, T.F. ET AL. *The alcohol use disorders identification test*. Geneva, World Health Organization, 1989 (document WHO/PSA/92.4).
30. CONIGRAVE, K.M. ET AL. Predictive capacity of the “AUDIT” questionnaire for alcohol-related harm. *Addiction* (in press).
31. *Moderate drinking and health. Report of an International Symposium, Toronto, Ontario, 29 April – 1 May 1993*. Toronto, Addiction Research Foundation, 1994.
32. *Population levels of alcohol consumption*. Report of a WHO Working Group. Copenhagen, WHO Regional Office for Europe, 1994 (document EUR/ICP/ADA 035).
33. BIEN, T.H. ET AL. Brief interventions for alcohol problems: a review. *Addiction*, **88**: 315–335 (1993).
34. ROLLNICK, S. ET AL. Negotiating behaviour change in medical settings: the development of brief motivational interviewing. *Journal of mental health*, **1**: 25–37 (1992).
35. RUSH, B.R. ET AL. Substance abuse facilitator model: health promotion training for family physicians. *Addiction* (in press).
36. *General practice in the National Health Service: the 1990 contract*. London, H.M. Stationery Office, 1989.
37. *Terms of service for doctors in general practice*. London, Department of Health, 1990.
38. *Phase III WHO Collaborative Study. Procedures manual strand I*. Sydney, NSW, University of Sydney, 1994.
39. *Phase III WHO Collaborative Study. Procedures manual strand II*. Sydney, NSW, University of Sydney, 1994.
40. ROCHE, A.M. & RICHARD, G.P. Doctors’ willingness to intervene in patients’ drug and alcohol problems. *Social science and medicine*, **33**: 1053–1061 (1991).
41. *Phase III WHO Collaborative Study. Procedures manual strand III*. Sydney, NSW, University of Sydney, 1995.
42. *Cut down on drinking pack*. London, Health Education Authority, 1991.

43. *Screening and brief intervention package*. Rockville, MD, National Institute on Alcohol Abuse and Alcoholism, 1995.
44. *Alcohol risk assessment and intervention in primary care*. Plinus Maior Society, 1995.
45. DÖBRÖSSY, L. *Prevention in primary care. Recommendations for promoting good practice*. Copenhagen, WHO Regional Office for Europe, 1994 (document EUR/ICP/CIND 94 01/PB01).
46. FOWLER, G. ET AL., ED. *Prevention in general practice*. 2nd ed. Oxford, Oxford Medical Publications, 1993.
47. *Guide to clinical preventive services. Report of the US Preventive Services Task Force*. Baltimore, Williams and Wilkins, 1989.
48. *Drink-Less*. Sydney, NSW, University of Sydney, 1994.
49. *Alcohol risk assessment and intervention (ARAI) package*. Ontario, College of Family Physicians of Canada, 1994.
50. *Health Plan for Catalonia 1993–1995*. Barcelona, Generalitat de Catalunya, 1993.
51. *NHG standard on problematic alcohol consumption*. Amsterdam, Dutch College of General Practitioners, 1993.
52. *Helping people change*. London, Health Education Authority, 1994.
53. HOLMILA, M. Excessive drinking and significant others. *Drug and alcohol review*, **13**: 431–436 (1994).
54. ORFORD, J. Empowering family and friends: a new approach to the secondary prevention of addiction. *Drug and alcohol review*, **13**: 417–429 (1994).
55. GIESBRECHT, N. ET AL., ED. *Research, action and the community: experiences in the prevention of alcohol and other drug problems*. Washington, DC, US Department of Health and Human Services, 1990 (OSAP Prevention Monograph, No. 4).
56. RITSON, B. *Community and municipal action on alcohol*. Copenhagen, WHO Regional Office for Europe, 1995 (WHO Regional Publications, European Series, No. 63).
57. ANDERSON, K. *Young people and alcohol, drugs and tobacco*. Copenhagen, WHO Regional Office for Europe, 1995 (WHO Regional Publications, European Series, No. 66).
58. HENDERSON, M. ET AL. *Alcohol and the workplace*. Copenhagen, WHO Regional Office for Europe, 1995 (WHO Regional Publications, European Series, No. 67).
59. HANNIBAL, J.U. ET AL. *Alcohol and the community. Report on an international collaborative study on community response to*

- alcohol-related problems*. Copenhagen, WHO Regional Office for Europe (document, in press).
60. Ottawa Charter for Health Promotion. *Health promotion*, 1(4): iii-v (1986).
  61. BRACHT, N. *Health promotion at the community level*. Newbury Park, CA, Sage Publications, 1990.
  62. MONTONEN, M. *Alcohol and the media*. Copenhagen, WHO Regional Office for Europe, 1995 (WHO Regional Publications, European Series, No. 62).
  63. HOLMILA, M. *The Lahti community project*. Copenhagen, WHO Regional Office for Europe, 1994 (document ICP/ALDT 94 02/MT11/WP 5).
  64. ROYAL COLLEGE OF PHYSICIANS. *A great and growing evil – the medical consequences of alcohol abuse*. Report of a working party. London, Tavistock, 1987.
  65. ROYAL COLLEGE OF PSYCHIATRISTS. *Alcohol – our favourite drug*. London, Tavistock, 1986.
  66. ROYAL COLLEGE OF PHYSICIANS. *Alcohol and the public health*. Basingstoke, Macmillan Education, 1991.
  67. HOLDER, H.D. ET AL. Potential consequences from possible changes to Nordic retail alcohol monopolies resulting from European Union membership. *Addiction* (in press).
  68. LEHTO, J. *The economics of alcohol policy*. Copenhagen, WHO Regional Office for Europe, 1995 (WHO Regional Publications, European Series, No. 61).
  69. LEHTO, J. *Approaches to alcohol control policy*. Copenhagen, WHO Regional Office for Europe, 1995 (WHO Regional Publications, European Series, No. 60).
  70. *Health for all targets: the health policy for Europe*. Copenhagen, WHO Regional Office for Europe, 1993 (European Health for All Series, No. 4).
  71. *The health of the nation. A strategy for health in England*. London, H.M. Stationery Office, 1992.
  72. ANDERSON, P. & LEHTO, J. *Evaluation and monitoring of action on alcohol*. Copenhagen, WHO Regional Office for Europe, 1995 (WHO Regional Publications, European Series, No. 59).

# The AUDIT Questionnaire

Circle the number that comes closest to the patient's answer.

**1. How often do you have a drink containing alcohol?**

- (0) Never      (1) Monthly or less      (2) Two to four times a month      (3) Two to three times a week      (4) Four or more times a week

**2.<sup>a</sup> How many drinks containing alcohol do you have on a typical day when you are drinking?  
(code number of standard drinks)**

- (0) 1 or 2      (1) 3 or 4      (2) 5 or 6      (3) 7 or 8      (4) 10 or more

**3. How often do you have six or more drinks on one occasion?**

- (0) Never      (1) Less than monthly      (2) Monthly      (3) Weekly      (4) Daily or almost daily

**4. How often during the last year have you found that you were not able to stop drinking once you had started?**

- (0) Never      (1) Less than monthly      (2) Monthly      (3) Weekly      (4) Daily or almost daily

**5. How often during the last year have you failed to do what was normally expected from you because of drinking?**

- (0) Never      (1) Less than monthly      (2) Monthly      (3) Weekly      (4) Daily or almost daily

**6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?**

- (0) Never      (1) Less than monthly      (2) Monthly      (3) Weekly      (4) Daily or almost daily

**7. How often during the last year have you had a feeling of guilt or remorse after drinking?**

- (0) Never      (1) Less than monthly      (2) Monthly      (3) Weekly      (4) Daily or almost daily

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The AUDIT Questionnaire (contd)

**8. How often during the last year have you been unable to remember what happened the night before because you had been drinking?**

- (0) Never      (1) Less than monthly      (2) Monthly      (3) Weekly      (4) Daily or almost daily

**9. Have you or someone else been injured as a result of your drinking?**

- (0) No      (2) Yes, but not in the last year      (4) Yes, during the last year

**10. Has a relative or friend or a doctor or other health worker been concerned about your drinking or suggested you cut down?**

- (0) No      (2) Yes, but not in the last year      (4) Yes, during the last year

<sup>a</sup>In determining the response categories it has been assumed that one "drink" contains 10 g alcohol. In countries where the alcohol content of a standard drink differs by more than 25% from 10 g, the response category should be modified accordingly.

Record sum of individual item scores here \_\_\_\_\_.

Source: Babor, T.F. et al. (29).

# Health Plan for Catalonia

The 1993–1995 Health Plan for Catalonia (50) includes an action plan on alcohol, the aims of which are:

- to provide information and health education;
- to strengthen the information system on excessive alcohol consumption and disseminate the findings;
- to encourage working methods, with the participation of professionals, to adopt criteria for the prevention, detection, control and follow-up of hazardous and harmful alcohol consumption, and to put them into operation;
- to develop continuing education for primary health care professionals;
- to coordinate between the primary health care level, specialist organizations and other community resources; and
- to detect hazardous and harmful alcohol consumption through medical records and routine registers in primary health care practices.

The operational targets of the Plan are as follows:

**A49.** By 1995, the percentage of the population aware of the harmful effects of excessive alcohol consumption should be increased to 85%.

**A50.** By 1994, the minimum common criteria for Catalonia for the prevention (individual and community), detection, control and follow-up of hazardous and harmful alcohol consumption at the level of primary health care will have been established, while encouraging working methods that allow agreement to be reached between professionals.

**A52.** By 1995, health regions will have formulated a protocol for preventing and detecting excessive consumption of alcohol and associated problems that will include the minimum common criteria for Catalonia.



**A53.** By the end of the lifetime of the Health Plan, 90% of professionals in the health regions will have information about the adopted protocol.

**A54.** In 1994 and subsequent years the health regions, in accordance with the feasibility criteria, will promote the gradual spread of use of the protocol for preventing and detecting the excessive consumption of alcohol and associated problems.

**A55.** By the end of the lifetime of the Health Plan, the Basic Health Areas that have been up and running for more than one year shall have agreed upon and adopted the protocol for the prevention and detection of excessive alcohol consumption and associated problems.

**A56.** By the end of the lifetime of the Health Plan, the Basic Health Areas that have been up and running for more than three years shall have recorded the alcohol consumption for more than 60% of the medical histories of the adult population (according to the criteria established in the protocol, excluding people who have visited the surgery less than three times in the previous two years).

**A57.** By the end of the lifetime of the Health Plan, 90% of detected drinkers will have received educational counselling to reduce alcohol consumption.

**A58.** In 1993 and subsequent years, the health regions will have established coordination strategies between the primary health care level and other care levels, as well as intersectoral bodies, about excessive alcohol consumption.

**A59.** In 1993 and subsequent years, the health regions will ensure that all providers guarantee that continuing education programmes for primary health care professionals include activities aimed at improving knowledge, attitudes and skills to care for the health problems stemming from alcohol consumption, as well as the prevention of excessive consumption.

Setting concrete targets for alcohol action is an important step in creating consensus on and political support for the basic aims of public health alcohol policy (72). It also helps to link alcohol policy with the overall health strategy at the local, national and international levels. Action on alcohol contributes to the attainment of many health targets, and should be linked to the development of health policy as stated in the WHO European targets for health for all (70).



# EUROPEAN ALCOHOL ACTION PLAN

On a European scale, drinking alcohol results in suffering and costs of enormous proportions, which have an impact on the health and welfare of men and women, children and adults, rich and poor, those who do the drinking and those who bear the consequences of the drinker's behaviour. Alcohol-related problems have many causes, arise in various situations, and affect different types of people. The response to these problems therefore needs to be comprehensive, involving public policy, community programmes and action at the primary health care level.

The WHO European Alcohol Action Plan stresses that health care systems, traditionally involved in managing alcohol problems, must play a greater role in the detection and prevention of alcohol-related harm. Primary health care is seen as an important setting for identifying those at risk from heavy drinking and helping them to reduce their consumption. It is also the major supporter of families and self-help groups, and acts as an advocate of public health for local communities.

This book goes some way to answering the question of how the harm done by alcohol use can be prevented and managed in primary health care. It discusses strategies and approaches that can be adopted by primary health care providers in their everyday work with individuals and families, and outlines the possibilities for them to participate in community action and to advocate for healthy public policy on alcohol.

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