Alcohol: No Ordinary Commodity. A summary of the book

Alcohol & Public Policy Group

ABSTRACT

This article summarizes the contents of *Alcohol: No Ordinary Commodity—Research and public policy* (Babor *et al.* 2003). The first part of the book describes why alcohol is no ordinary commodity, and presents epidemiological data on the global burden of alcohol-related problems. The second part of the book reviews the scientific evidence for strategies and interventions designed to prevent or minimize alcohol-related harm: pricing and taxation, regulating the physical availability of alcohol, modifying the drinking context, drinking-driving countermeasures, regulating alcohol promotion, education and persuasion strategies and treatment services. The final section considers the policymaking process on the local, national and international levels, and provides a synthesis of evidence-based strategies and interventions from a policy perspective.

SETTING THE POLICY AGENDA

The purpose of this volume is to describe recent advances in alcohol research that have direct relevance to alcohol policy on the local, national and international levels. Alcohol policies serve the interests of public health through their impact on drinking patterns, the drinking environment and the health services available to treat problem drinkers. Public health concepts provide an important vehicle to manage the health of populations in relation to the use and misuse of beverage alcohol by helping communities and nation states to design better preventative and curative services. Alcohol policies have been implemented throughout history to minimize the effects of alcohol on the health and safety of the population but only recently have these strategies and interventions been evaluated scientifically.

NO ORDINARY COMMODITY

In many countries, the production and sale of alcoholic beverages generates profits for farmers, manufacturers, advertisers and investors. Alcohol provides employment for people in bars and restaurants, brings in foreign currency for exported beverages and generates tax revenues for the government. Alcoholic beverages are, by any reckoning, an important, economically embedded commodity. However, the benefits connected with the production, sale and use of this commodity come at an enormous cost to society. Three important mechanisms explain alcohol's ability to cause medical, psychological and social harm: (1) physical toxicity (2) intoxication and (3) dependence.

Alcohol is a toxic substance in terms of its direct and indirect effects on a wide range of body organs and systems. Paradoxically, the main cause of alcohol-related harm in the general population is alcohol intoxication. The link between intoxication and adverse consequences is clear and strong, especially for violence, traffic casualties and other injuries. Alcohol dependence has many different contributory causes including genetic vulnerability, but it is a condition that is contracted by repeated exposure to alcohol: the heavier the drinking, the greater the risk.

As illustrated in Fig. 1, the mechanisms of toxicity, intoxication and dependence are related closely to the ways in which people consume alcohol, called 'patterns of drinking'. Drinking patterns that lead to rapidly elevated blood alcohol levels result in problems associated with acute intoxication, such as accidents, injuries and violence. Similarly, drinking patterns that promote frequent and heavy alcohol consumption are associated

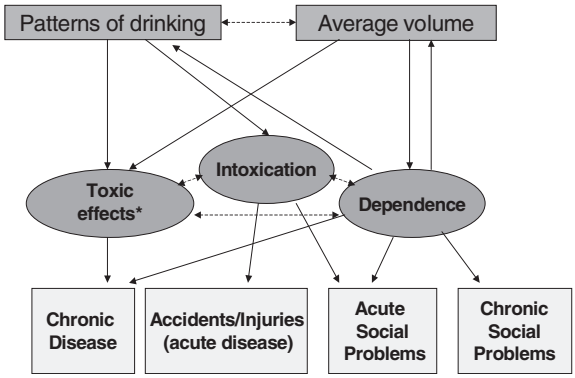

Figure 1 Why alcohol is no ordinary commodity. Relationships among alcohol consumption, mediating factors and alcohol-related consequences (reprinted with permission from Babor *et al*. 2003)

with chronic health problems such as liver cirrhosis, cardiovascular disease and depression. Finally, sustained drinking may result in alcohol dependence. Once dependence is present, it impairs a person's ability to control the frequency and amount of drinking. For these reasons, alcohol is not a run-of-the-mill consumer substance. Public health responses must be matched to this complex vision of the dangers of alcohol as they seek better ways to respond to population-level harms.

ALCOHOL CONSUMPTION TRENDS AND PATTERNS OF DRINKING

Alcohol consumption varies enormously, not only among countries, but also over time and between different population groups. Variations in these drinking patterns affect rates of alcohol-related problems, and have implications for the choice of alcohol policy measures. Two aspects of alcohol consumption are of particular importance for comparisons across populations and across time. First, total alcohol consumption in a population is an important indicator of the number of individuals who are exposed to high amounts of alcohol. Adult *per capita* alcohol consumption is, to a considerable extent, related to the prevalence of heavy use, which in turn is associated with the occurrence of negative effects. Secondly, the relationship between total alcohol consumption and harm is modified by the number of drinkers in a population and by the way in which alcohol is consumed.

Recorded alcohol consumption is highest in the economically developed regions of the world. In contrast, recorded consumption is generally lower in Africa and parts of Asia, and is particularly low in Moslem states and the Indian subcontinent. Western Europe, Russia and other non-Moslem parts of the former Soviet Union now have the highest *per capita* consumption levels, but Latin American levels are not far behind.

Sales data from established market economies show a slight overall decrease in alcohol consumption in recent years, as well as converging trends in traditional high-consumption and low-consumption countries. This is particularly the case in the wine-producing countries in Europe, such as France, Italy and Portugal, where the decrease is due mainly to reductions in wine consumption. Of particular concern, however, is the increasing consumption in some of the emerging economies of the developing world, such as China and Thailand, given that drinking appears to be concentrated in a smaller fraction of the population in these countries.

There are striking gender differences in whether a person drinks, with men more likely to be drinkers and women abstainers. Among drinkers, men drink 'heavily' (i.e. to intoxication, or large quantities per occasion) much more often than women. Abstinence and infrequent drinking are more prevalent in older age groups, and frequent intoxication is more prevalent among young adults.

Most of the alcohol in a society is consumed by a relatively small minority of heavy drinkers. When alcohol consumption levels increase in a country, there tends to be an increase in the prevalence of heavy drinkers. Countries vary in the extent to which drinking to intoxication is a characteristic of the drinking pattern. They also differ in how intoxicated people become, and how people behave while intoxicated. In the southern European countries, approximately one in 10 drinking occasions lead to a state of intoxication among adolescents, whereas the majority of drinking occasions in the most northern European countries result in intoxication.

THE GLOBAL BURDEN OF ALCOHOL CONSUMPTION

According to the World Health Organization, in 2000 alcohol-related death and disability accounted for 4.0% of the global burden of disease, ranking as the fifth most detrimental risk factor of 26 examined. Alcohol accounts for about the same amount of disease as tobacco. In developed countries, alcohol was the third most detrimental risk factor, accounting for 9.2% of all burden of disease. In emerging economies such as China, alcohol was the most detrimental risk factor. Overall, injuries accounted for the largest portion of alcohol-attributable disease burden, which ranged from close to zero among females in the predominantly Moslem Eastern Mediterranean regions to more than 20% for males in Eastern Europe.

The volume of drinking is linked to most disease outcomes through specific dose–response relationships.

These relationships can at the individual level be linear (as in the case of breast cancer or suicide), accelerating (as in the case of liver cirrhosis or motor vehicle accidents) or *J*-shaped (as in the case of heart disease or all-cause mortality). Patterns of drinking also play an important role in the disease burden, being linked to coronary heart disease, motor vehicle accidents, suicide and breast cancer.

Moderate drinking has positive as well as negative health effects. It has been linked to an increased risk of cancer and other disease conditions. For coronary heart disease (CHD), studies indicate a cardioprotective effect of regular, light and moderate alcohol consumption at the level of the individual drinker. This effect applies mainly to the age group of 40 years and older, where the overwhelming majority of CHD occurs. This effect explains the lower death rate of light drinkers relative to abstainers. However, aggregate-level studies suggest that there may be no net protective effect at the population level from an increase in the level of consumption, and even a detrimental effect in societies with heavy episodic drinking patterns.

Although public discussion has often concentrated on alcohol-related problems connected with disease and other medical conditions, alcohol is also linked to consequences in the social realm, which has been called 'the forgotten dimension'. Clearly, alcohol is related to many social problems, especially violence.

In summary, alcohol accounts for a significant disease burden worldwide and is related to many negative social consequences.

STRATEGIES AND INTERVENTIONS TO REDUCE ALCOHOL-RELATED HARM

The differences among countries in *per capita* consumption, patterns of drinking and alcohol-related problems suggest that alcohol policies may have to be tailored to fit the needs of each society. Alcohol policy is defined broadly as any purposeful effort or authoritative decision on the part of governments or non-government groups to minimize or prevent alcohol-related consequences. Policies may involve the implementation of a specific strategy with regard to alcohol problems (e.g. increase alcohol taxes), or the allocation of resources that reflect priorities with regard to prevention or treatment efforts. Policies that increase harm unintentionally are also examined in this book, thus providing insight into the public health risks associated with ill-advised policy decisions.

PRICING AND TAXATION

Evidence suggests that alcohol prices have an effect on the level of alcohol consumption. Consumers of alcoholic beverages increase their drinking when prices are lowered, and decrease their consumption when prices rise. Heavy or problem drinkers appear to be no exception to this rule. Moreover, economic studies demonstrate that increased alcoholic beverage taxes and prices are related to reductions in alcohol-related problems.

Despite these findings, the real price of alcoholic beverages has decreased in many countries over the last 50 years, even as many other alcohol control measures have been liberalized or abandoned completely. A major reason for the price decline has been the failure of governments to increase tax levels in accordance with inflation. Alcohol taxes are thus an attractive instrument of alcohol policy because they can be used both to generate direct revenue and to reduce alcohol-related harm. The most important downside to raising alcohol taxes is the possibility of smuggling or illegal in-country alcohol production. The net effects of taxation and price increases, however, are to reduce alcohol use and related problems.

REGULATING THE PHYSICAL AVAILABILITY OF ALCOHOL

The physical availability of alcoholic beverages refers to the accessibility or convenience of obtaining and consuming these products. Most countries have restrictions on who may buy and sell alcohol, primarily because of social concerns about health, safety and public order. Experience has shown that extreme restrictions on alcohol availability, such as the banning of all alcohol sales (i.e. total prohibition), can lower drinking and reduce alcohol problems. Yet these restrictions often have adverse side effects, such as the criminality associated with illicit markets.

Research on limiting alcohol availability demonstrates that reductions in the hours and days of sale, numbers of alcohol outlets and restrictions on access to alcohol are associated with reductions in both alcohol use and alcohol-related problems. Laws that raise the minimum legal purchasing age reduce alcohol sales and problems among young drinkers. Regulations directed toward commercial vendors of alcohol who sell to minors and ignore other restrictions can also be effective, provided the system has the power to suspend or revoke a licence in the case of selling infractions. The evidence suggests that making available and promoting beverages of low alcohol content can be an effective strategy. Such a strategy has the potential to reduce the level of absolute alcohol consumed and associated intoxication and impairment.

One means to regulate alcohol availability in a comprehensive way is through government-owned alcohol

outlets. There is strong evidence that off-premise monopoly systems limit alcohol consumption and alcohol-related problems, and that elimination of government off-premise monopolies can increase total alcohol consumption.

In general, changes in availability can have large effects in nations or communities where there is popular support for these measures. The cost of restricting the physical availability of alcohol is cheap relative to the costs of health consequences related to drinking, especially heavy drinking. The most notable adverse effects of availability restrictions include increases in informal market activities (e.g. home production, illegal imports). Nevertheless, informal market activities are generally not sufficient to replace formal production and have not produced equivalent levels of alcohol-related problems.

MODIFYING THE DRINKING CONTEXT

Many prevention measures seek to limit drinking in the contexts or environments where alcohol is typically sold and consumed. The most effective options involve enforcement of serving regulations and the legal liability of bar staff and owners for the actions of those they serve. Responsible Beverage Service (RBS) programmes focus on attitudes, knowledge, skills and practices of people involved in serving alcoholic beverages on licensed premises. If supported by actual changes in the serving policies of licensed establishments and reinforced by local police, RBS training can reduce heavy consumption and high risk drinking. Beyond programs aimed at serving practices, there is increasing evidence that staff training in techniques for managing problem behavior can reduce aggression and violence in licensed premises.

Community mobilization has been used to raise public awareness of problems associated with on-premise drinking, develop specific solutions to problems and pressure bar owners to recognize that they have a responsibility to the community in terms of such bar-related issues as noise level and patron behaviour. Community mobilization can be highly successful at reducing aggression and other problems related to drinking in licensed premises, but the long-term sustainability of these efforts remains to be demonstrated.

Other approaches include general safety measures that have particular relevance to intoxicated people and modifying the potential behaviour of bystanders or victims. Research shows that the adoption and enforcement of policies to make licensed premises safer are associated with lower levels of intoxication and problems. A number of communities, most notably in Australia, have implemented voluntary codes of practice among local bar owners to limit the major risk factors for violence and other alcohol-related problems.

DRINKING-DRIVING COUNTERMEASURES

Traditionally, law enforcement directed at drinking-driving has been designed to catch offenders, on the assumption that such practices will prevent or deter people from driving after drinking. Punishment for a drinking-driving conviction has been increased typically either by changing the maximum penalties or by introducing mandatory minimum penalties. There is limited evidence to support the positive impact of these laws. 'Celerity', or swiftness of punishment, is related to the proximity of punishment to the drinking-driving event. The one punishment that seems to have a consistent impact on drinking-driving offences is administrative licence suspension. Licence loss can be effective for both alcohol-involved and non-alcohol-involved accidents.

One strategy for increasing certainty of apprehension and punishment is to increase the frequency and visibility of drinking-driving enforcement. The traditional way of producing a higher perceived probability of apprehension is simply to intensify police enforcement through such measures as sobriety or selective checkpoints. A more effective approach is through random breath testing. Motorists are stopped at random by police and required to take a preliminary breath test, even if they are in no way suspected of having committed an offence or been involved in an accident. The evidence is quite strong that highly visible, non-selective testing can have a sustained effect in reducing drinking-driving and the associated crashes, injuries and deaths.

Combined with enforcement, national and state laws lowering the legal limit of the driver's blood alcohol concentration (BAC) have been a successful way to reduce drinking-driving. The evidence indicates that setting a reasonably low level of BAC (e.g. 0.08) significantly reduces alcohol-related driving fatalities.

Treatment programmes have also been used in many countries to provide a therapeutic or educational alternative to punishment. Evidence from some countries supports the effectiveness of comprehensive treatment including counselling or therapy plus licence suspension in reducing recidivism. Successful programmes are well structured, go beyond information provision to address alcohol abuse, are conducted for more than 10 weeks and have rules of attendance enforced by a court.

Another approach for high-risk repeat offenders is to use ignition interlock devices that prevent a vehicle from being started until the driver passes a breath test. These devices have been very effective for many alcohol-impaired drivers, but have not been tested widely in countries other than Canada and the United States.

In general, young drivers (adolescents between 16 and 20 years of age) are at higher risk for traffic accidents, especially alcohol-involved crashes, as a result of their limited driving experience and their tendency to experiment with heavy or binge drinking. Traditional countermeasures such as driver training and school-based education programmes are either ineffective or have yielded mixed results. One effective measure is the use of graduated licensing for novice drivers, which limits the time and other conditions of driving during the first few years of licensing.

In summary, the evidence suggests that drinking-driving countermeasures consistently produce long-term problem reductions of between 5% and 30%. Deterrence-based approaches, using innovations such as random breath testing, yield few arrests but substantial accident reductions. The persistent delinquency of some impaired drivers and their consistent contribution to the fatality statistics should not detract from the enormous achievements of recent decades.

REGULATING ALCOHOL PROMOTION

The marketing of alcohol is a global industry. Alcohol brands are advertised through television, radio and print, point-of-sale promotions and the internet. Exposure to repeated high-level alcohol promotion inculcates pro-drinking attitudes and increases the likelihood of heavier drinking. Alcohol advertising predisposes minors to drinking well before legal age of purchase. Indeed, advertising has been found to promote and reinforce perceptions of drinking as positive, glamorous and relatively risk-free.

Legislation restricting alcohol advertising is a well-established precaution used by governments throughout the world, despite opposition from the alcoholic beverage industry. Some bans are partial, applying only to spirits, to certain hours of television viewing or to state-owned media. These bans often operate alongside codes of self-regulation that govern permitted forms of alcohol advertising. Although many countries have restricted alcohol advertising to various degrees, the evaluation findings suggest that while the restrictions have not achieved a major reduction in drinking and related harms in the short term, countries with greater restrictions on advertising have less drinking and fewer alcohol-related problems.

Despite industry claims that they adhere to codes of responsible advertising, the detrimental influences of marketing practices are not addressed adequately by industry self-regulation. Self-regulation tends to be fragile and largely ineffective. These codes may work best where the media, advertising and alcohol industries are all involved, and an independent body has powers to approve or veto advertisements, rule on complaints and impose sanctions. Few countries currently have all of these components.

EDUCATION AND PERSUASION STRATEGIES

School-based alcohol education programmes have been found to increase knowledge and change attitudes toward alcohol and other substances, but actual substance use remains unaffected. Approaches that address values clarification, self-esteem, general social skills and 'alternative' approaches that provide activities inconsistent with alcohol use (e.g. sports) are equally ineffective. Many contemporary school-based programmes include both resistance skills training and normative education, which attempts to correct adolescents' tendency to overestimate the number of their peers who drink. Scientific evaluations of these programmes have produced mixed results with generally modest effects that are short-lived unless accompanied by ongoing booster sessions. Some programmes include both individual-level education and family or community-level interventions. Evaluations suggest that even these comprehensive programmes may not be sufficient to delay the initiation of drinking, or to sustain a small reduction in drinking beyond the operation of the programme.

Public service announcements (PSAs) are messages prepared by non-governmental organizations, health agencies and media organizations that deal with responsible drinking, the hazards of drinking-driving and related topics. Despite their good intentions, PSAs are an ineffective antidote to the high-quality pro-drinking messages that appear much more frequently as paid advertisements in the mass media.

Counter-advertising involves disseminating information about a product, its effects and the industry that promotes it in order to decrease its appeal and use. Tactics include health-warning labels on product packaging, such as those that explain that alcohol may cause birth defects when consumed during pregnancy. Although a significant proportion of the population reports seeing these warning labels, research indicates that exposure produces no change in drinking behaviour *per se*.

In sum, the impact of education and persuasion programmes tends to be small, at best. When positive effects are found, they do not persist.

TREATMENT AND EARLY INTERVENTION SERVICES

In addition to its value in the reduction of human suffering, treatment can be considered as a form of prevention.

Treatment for alcohol problems typically involves a set of services, ranging from diagnostic assessment to therapeutic interventions and continuing care. Researchers have identified more than 40 therapeutic approaches, called treatment modalities, which have been evaluated by means of randomized clinical trials. These modalities are delivered in a variety of settings, including freestanding residential facilities, psychiatric and general hospital settings, out-patient programmes and primary health care.

There is no consistent evidence that intensive in-patient treatment provides more benefit than less intensive out-patient treatment, although residential treatment may be indicated for patients who: (1) are highly resistant to treatment; (2) have few financial resources; (3) come from environments that are not conducive to recovery; and (4) have more serious, coexisting medical or psychiatric conditions. Regarding specific treatment modalities, the weight of evidence suggests that behavioural treatments are likely to be more effective than insight-orientated therapies. Recent research also indicates that Twelve-Step Facilitation, which is based on the principles of Alcoholics Anonymous (AA), is as effective as more theory-based therapies. In general, when patients enter treatment, exposure to any treatment is associated with significant reductions in alcohol use and related problems, regardless of the type of intervention used.

Interest on the part of the pharmaceutical industry in medications to treat alcohol dependence has increased in the past decade, and several compounds are now available in the United States and Europe. In the 1990s naltrexone, an opioid antagonist, became available for medical management of alcohol dependence, following positive studies showing incremental benefits of psychotherapy combined with this medication. Acamprosate (calcium acetylhomotaurinate), an amino acid derivative, has also shown positive effects in the prevention of relapse.

Although mutual help societies composed of recovering alcoholics are not considered to be formal treatment, they are often used as inexpensive substitutes, alternatives and adjuncts to treatment. Mutual help groups based on the Twelve Steps of AA have proliferated throughout the world. Research suggests that AA itself can have an incremental effect when combined with formal treatment, and that AA attendance alone may be better than no intervention at all.

In contrast to treatment provided in specialized settings, brief interventions consist of one to three sessions of counselling or advice delivered in general medical settings. The cumulative evidence of randomized controlled trials (conducted in a variety of settings) indicates that clinically significant changes in drinking behaviour and related problems can follow from brief interventions with non-alcoholic heavy drinkers.

THE INTERNATIONAL CONTEXT OF ALCOHOL POLICY

In a world of increasing trade globalisation, national and local alcohol policies, predicated on the extraordinary nature of alcohol, have come under pressure increasingly at the international level. The last 50 years have seen a convergence in alcohol policies in Europe. There have also been converging trends with regard to taxing alcoholic beverages, although excise duties are still clearly lowest in wine-producing countries and highest among the Nordic countries, Ireland and the United Kingdom. In North America, there has been a gradual decline in alcohol control in most jurisdictions in recent decades, with more dramatic changes such as privatization of alcohol retail sales. Alcohol taxes have not been raised to match inflation. In contrast, there have been extensive education and law enforcement efforts to control drinking-driving.

Similar developments have taken place in other parts of the world. For instance, the collapse of the communist system in the former Soviet Union and Eastern Europe has meant that alcohol control, especially the control of alcohol availability, has lost much of its effect in these countries. On the other hand, in the 1990s, under the impetus of the European Alcohol Action Plan, many Eastern European countries adopted national alcohol programmes or participated in projects aimed at strengthening local alcohol control.

In many developed countries, general alcohol policies affecting the whole population and orientated to the collective good have been weakened or dismantled, often under pressure from the 'structural adjustment' programmes of international development agencies. Policies remaining from the past have been gradually eroded (e.g. privatization of monopolies, erosion of taxes by inflation, extension of closing hours). At the same time, however, popular concern about alcohol-related problems has risen, although it has found only fitful political expression. In many countries there has been an increase in educational programmes, despite research on their lack of effect, along with some interventions to curtail drinking-driving.

One factor behind the weakening of national and local alcohol policies has been the impact of international trade agreements and common markets. To the extent that alcohol is considered to be an ordinary commodity, these agreements and treaties often become severe obstacles for conducting purposeful and efficient alcohol control policies.

THE POLICY ARENA

Who makes alcohol policy? The answer differs among countries and between different levels of government within countries. Within each jurisdiction of the policy arena, there is an interplay of different interest groups.

A national level legislative and regulatory framework is essential to the promotion of effective measures to curtail alcohol-related problems. Federal and national laws often establish the legislative mandate for prevention and treatment policies.

In many nations there is a vacuum in advocacy for the public interest, leaving members of non-governmental organizations as the most likely candidates to represent the public. These have occasionally involved interest groups representing victims of alcohol-related harm, such as Mothers Against Drunk Driving. More recently, alcohol issues have increasingly become the concern of health professionals.

The mass media can have a significant influence on the policy debate at the national and local levels, given their dominant role in contemporary culture. Media coverage influences whether policymakers perceive a problem and how salient that problem is. This is an 'agenda-setting' function.

Groups involved in for-profit production and sales are often key players in policy debates. Supported by free market values and concepts, the alcoholic beverage industry has become increasingly involved in the policy arena in order to protect its commercial interests. In some countries, the industry is the dominant non-governmental presence at the policymaking table. Although the alcoholic beverage industry is not monolithic in terms of its motives, power or operations, its commercial interests often come into conflict with public health measures.

An appreciation of the various players in the alcohol policy arena can heighten our understanding of the following fundamental conclusion: alcohol policy is often the product of competing interests, values and ideologies. The process of alcohol policy creation needs to be better understood, more transparent and more responsive to the needs of the citizens who are the end consumers of emerging policies.

ALCOHOL POLICIES: A CONSUMER'S GUIDE

The difference between good and bad alcohol policy is not an abstraction, but very often a matter of life and death. Research has the capacity to indicate which strategies are likely to succeed in their public health intentions, and which are likely to be less effective or even useless, diversionary and a waste of resources. Building on previous work in this area, we rated 32 policy options reviewed in previous chapters of the book according to four major criteria: (1) evidence of effectiveness; (2) strength of research support; (3) extent of testing across diverse countries and cultures; and (4) relative cost in terms of time, resources and money.

In general, effectiveness is strong for the regulation of physical availability and the use of alcohol taxes. Given the broad reach of these strategies, and the relatively low expense of implementing them, the expected impact of these measures on public health is relatively high. Most drinking-driving countermeasures received high ratings on effectiveness as well. Not only is there good research support for these programmes, but they also seem to be applicable in most countries and are relatively inexpensive to implement and sustain.

In contrast, the expected impact is low for school-based education and for public service messages about drinking. Although the reach of educational programmes is thought to be excellent (because of the availability of captive audiences in schools), the population impact of these programmes is poor. Similarly, while feasibility is good, cost–effectiveness and cost–benefit are poor.

Treatment and early intervention strategies have, at best, medium effectiveness. At the population level, their impact is limited, because specialized treatment for alcohol problems can benefit only the relatively small fraction of the population who come to treatment. While treatment provision is an obligation of a humane society, its effect on the actual drinking problem rates of the population at large is necessarily limited.

Strategies directed at altering the drinking context are applicable primarily to on-premise drinking in bars and restaurants, which limits somewhat their public health significance. In most developed countries, only a minority of drinking is conducted on-premise, although frequently this drinking is trouble-prone. One recurring theme in this literature is the importance of enforcement.

The following 10 policy options stand out as 'best practices': minimum legal purchase age, government monopoly of retail sales, restrictions on hours or days of sale, outlet density restrictions, alcohol taxes, sobriety check-points, lowered BAC limits, administrative licence suspension, graduated licensing for novice drivers and brief interventions for hazardous drinkers.

Alcohol policies can be effective at both the community level and the national level. Within each of these levels, policies can be targeted at the general population, at high-risk drinkers and at people already experiencing alcohol-related problems. Alcohol policies rarely operate independently or in isolation from other measures. Complementary system strategies that seek to restructure the total drinking environment are more likely to be effective

than single strategies. Full-spectrum interventions are needed to achieve the greatest population impact.

In sum, opportunities for evidence-based alcohol policies that serve the public good are more available than ever before. However, policies to address alcohol-related problems are informed too seldom by science, and there are still too many instances of policy vacuums filled by unevaluated or ineffective strategies and interventions. Because alcohol is no ordinary commodity, the public has a right to expect a more enlightened approach to alcohol policy.

NOTE ON AUTHORSHIP

The Alcohol and Public Policy Group consists of Thomas Babor, Raul Caetano, Sally Casswell, Griffith Edwards, Norman Giesbrecht, Kathryn Graham, Joel Grube, Paul Gruenewald, Linda Hill, Harold Holder, Ross Homel, Esa Österberg, Jürgen Rehm, Robin Room and Ingeborg Rossow.

The writing of this book was sponsored in part by the World Health Organization (WHO Regional Office for Europe and Geneva Headquarters) and the Society for the Study of Addiction. The findings and conclusions represent the consensus views of its 15 authors, none of whom received either direct or indirect support for their participation from any of the sponsoring organizations or any other organization that might represent a conflict of interest.

REFERENCE

Babor, T. F., Caetano, R., Casswell, S., Edwards, G., Giesbrecht, N., Graham, K., Grube, J., Gruenewald, P., Hill, L., Holder, H., Homel, R., Österberg, E., Rehm, J., Room, R. & Rossow, I. (2003) *Alcohol: No Ordinary Commodity—Research and Public Policy*. Oxford and London: Oxford University Press.