The alcohol trade and its effects on public health

The commercial production of alcohol occurs mainly in the industrial countries, much of the output being exported to the Third World, where the consumption of alcohol has been rising steadily for the past two decades. Policies have yet to be implemented to counter this threat.

Recent decades have witnessed considerable increases in alcohol consumption and in alcohol-related problems in all parts of the world. Since accurate consumption data are difficult to obtain for many countries, another way of charting trends is to look at information on production. The most important lesson to emerge from the accumulated research of recent years is that there is generally a positive association between trends in alcohol consumption and trends in alcohol-related problems (1). Similarly, trends in production and trends in consumption are obviously closely linked. In this article we propose to analyse the available data on the commercial production and marketing of alcoholic beverages in order to emphasize their public health relevance.

It is important to remember just how extensive is the range of health problems caused by alcohol. Not only the alcohol dependence syndrome itself but also many disabling and sometimes fatal physical and psychological conditions can be attributed either wholly or in part to excessive drinking. In addition, alcohol-related traffic accidents account for significant proportions of deaths in many countries, especially among young people. Accidents at work, in the home, and during sporting events are more frequently related to alcohol consumption than is widely recognized.

In more general terms, excessive drinking disrupts family life and can also result in violence and neglect. Another area of concern is drinking by pregnant women, which can damage the unborn child. It is therefore clear that the vulnerable group includes many more people than just the heavy drinkers.

In some developing countries, which do not have long traditions of consuming commercially produced beverages of the variety and strength available in most developed countries, alcohol-related problems may be especially serious among technicians and professionals, who are the scarcest resource, or among young people, who represent the country's investment in its future.

Dr Walsh is Professor of the National Economics of Ireland, University College, Dublin, Ireland. Mr Grant is Senior Scientist, Division of Mental Health, World Health Organization, Geneva, Switzerland.
Trends in Alcohol Production and Consumption

The most reliable indicator of rates of alcohol-related problems is to be found in patterns of alcohol consumption. Since these relate in turn to trends in alcohol production, it is essential to understand that alcohol production is an important topic from a public health perspective. Data on trends in the commercial production of beer, wine, and distilled spirits have recently been summarized in a WHO publication (2). It is on these data that this article relies, and it is therefore important to emphasize that they do not include data on domestic production. If accurate information were available on domestic production, the figures for the amounts of alcohol available would be even higher. Equally, however, increases in commercial production may be offset by decreases in domestic production, particularly when people migrate from the villages to the cities. There is thus an area of uncertainty in the interpretation of production figures that will not be resolved until more studies have been conducted on actual consumption.

Beer

Over the period 1960–80, world commercial production of beer more than doubled. At the start of this period, Europe, the USA, and Canada accounted for almost 80% of the total. Although production in these countries increased very rapidly over the two decades, by 1980 their share of world production had fallen to 70% because of the even more rapid increase in production in other regions. World commercial production per head of total population rose by 50% during this period.

Because of the wide diffusion of high levels of beer consumption, it is important to look at countries where either production or consumption data provide evidence of a large increase in beer consumption since 1960. Even though in many instances per capita consumption in such countries was still relatively modest in 1981, the rate of increase was so steep that if it were sustained for another decade it would place them at a level of beer consumption per person higher than that recorded for Norway or the Netherlands in 1960.

The appearance of many developing African, Latin American, and Asian countries in this category is a matter of very great concern. Some reported cases of particularly rapid growth in beer production or consumption have occurred in low income countries where other indicators of economic development have not matched the growth in the beer industry. This is a phenomenon which is likely to generate acute public health problems.

Wine

By contrast, world production of wine, although it has increased at varying annual rates, has kept approximate pace with population growth during the period 1948–80. Wine production still remains highly concentrated in the traditional wine growing areas of Europe and European settlement. The 10 largest producing countries accounted for 84% of world production in 1965 and 79% in 1980.

Although international trade in wine is more important than the trade in beer, developing countries do not account for a significant proportion of world wine imports. Important increases in wine consumption have occurred in several northern European countries, in North America and in Australia. In general, this reflects a diversification of drinking patterns as a new beverage is added to fairly heavy consumption of existing alcoholic beverages. The decline of wine consumption is an important trend in France, Italy and Portugal, where consumption was very high at the earlier date. In Italy, this decline has been offset by increased beer consumption, while in France and Portugal total alcohol consumption has declined.

Spirits

The data on the production of distilled spirits are less reliable than those on beer and wine,
especially in the developing countries. Between 1965 and 1980, commercial production rose by two-thirds, while production per capita rose by about one third. Three-quarters of recorded production in 1965 (and slightly more in 1980) occurred in Europe (including the USSR) and North America. Production per person rose most sharply in Europe, North America, and Japan.

There has also been a rapid growth in spirits production in Cuba, Mexico, the Philippines, and the Republic of Korea. Many of the countries that are among the world’s largest producers also rank high in terms of consumption per capita. Although there has been relatively little change in the ranking order of countries with respect to spirit consumption per person for the period 1960 to 1981, it may well be that certain African and Latin American countries have experienced rapid growth in the production and consumption of spirits, for which evidence is simply not available.

The overall picture

Drawing together the data on the production of alcoholic beverages, total and per capita, by major geographical regions, it emerges that the total commercial production of alcohol rose by almost 50% between 1965 and 1980, while production per person rose by just under 15% over this period. Two-thirds of the world’s production of alcohol at both dates occurred in Europe and North America. The fact that these are the very regions of the world where population growth was least rapid is an indication of the growing importance of international trade in alcoholic beverages.

Nevertheless, some countries in other regions have also experienced very rapid rates of increase in alcohol consumption. The rate of increase in the Republic of Korea was exceptional, although Japan and Mexico also experienced very rapid growth in consumption. These three countries have now reached relatively high levels of per capita alcohol consumption. Other countries in Africa, Latin America, and Asia have already embarked on the path that leads in the same direction, although for the moment the increase may yet be confined to a single beverage (typically beer). Not enough time has yet elapsed to bring the initial low consumption level even close to the levels recorded in the very high consumption countries. What is therefore of greatest concern is the lack of any sign of a loss of momentum in their sharply increasing rates of alcohol production and consumption.

Essentially, therefore, the picture that emerges is of a continuing global increase in alcohol production and consumption. It should be borne in mind that the data on which this conclusion is based relate only to beverages produced commercially. It is at present impossible to estimate the extent of non-commercial production, which includes all forms of home manufacture of alcoholic beverages, both legal and illegal. In Norway, for example, reliable estimates indicate that 20% of total alcohol consumption derives from non-commercial sources. It is very likely that in many developing countries, the proportion may be even higher.

Since non-commercial alcoholic beverages are excluded from the official production statistics on which this report is based, the real consumption figures for some developing countries, including those with rapidly increasing rates, may actually be substantially higher than appears at first sight. It is also possible, of course, that such rapid growth rates represent a substitution of commercial for non-commercial beverages, but this is unlikely to account for the whole story, especially where the recorded growth has been exceptionally steep.

Evidence from the International Study of Al-

Accidents at work, in the home, and during sporting events are more frequently related to alcohol consumption than is widely recognized.
where both commercial and non-commercial beverages are readily available.

**Trends in Alcohol Marketing and Trade**

An important feature of the global market in alcoholic beverages during the past 20 years has been the increase in the extent to which commercial production and international trade have become concentrated among a relatively small number of commercial firms (4). It is also clear that the firms that dominate such trade are frequently transnational corporations based in developed countries but controlling assets in developing countries. This phenomenon is not, of course, unique to the alcoholic beverage market, but its relevance to the changing pattern of both domestic and international trade is certainly significant.

Although only 14 out of the 500 largest multinational corporations list “drink” as the major area of industrial activity, a considerable number of these corporations have wide-ranging interests in alcohol-related activities in developing countries, either through subsidiaries, affiliates, and associates or through direct investments (5). Of all regions of the world, it is Africa in which the largest number of countries are named as sites for such activities but Latin America, the Carribean, Asia, and the Pacific also have a growing list of such countries.

Of course, expansion by multinational corporations into new markets in developing countries is not confined to the beverage alcohol industry. Other commodities, such as motor vehicles, which also have public health implications, are being marketed with equal or even greater effect. Many of these other products merit, as does alcohol, national policies and programmes.

A particularly prominent aspect of marketing practices is that of advertising. While it is difficult to accept as representing the complete picture the disingenuous claims that the only function of advertising is to provide the battleground for competing brand loyalties, the relationship between aggregate expenditure on alcohol advertising and aggregate levels of consumption is far from clear. On the other hand, few commentators are prepared to accept that advertising does not play some part in stimulating consumer demand. This issue ceases to be of merely academic interest when, as in the case of alcohol advertising, it can be seen as playing a significant part in encouraging the adoption of unhealthy life-styles.

Equally, advertising is but one of a range of promotional activities, which also include the sponsorship of sporting and cultural events, the dissemination of brand names and logos on clothing, and the proliferation of other ephemera carrying easily identified images associated with particular beverages. The aggregate effect of all this promotional effort is very difficult to assess. This is an issue of special concern in countries that do not have a long tradition of popular advertising and where it may be that the population is somewhat more vulnerable to extravagant claims. Certainly, from a public health perspective, it is irresponsible to associate alcohol consumption with activities such as driving, operating machinery, or participating in competitive sports, because it is well known to have an adverse effect on performance and to increase accident rates. The increasing dissemination of advertising across national boundaries by means of satellite broadcasting and other long-range electronic media is beyond the control of individual national legislation and therefore provides an opportunity for its health aspects to be viewed from an international perspective.

**Implications for the Future**

The production and consumption of alcoholic beverages are increasing in virtually all regions of the world. Moreover, the growth in the production and consumption of alcoholic beverages has usually outpaced the growth in population, so that consumption of alcohol per person has been increasing on a global scale.
The growth in consumption of alcoholic beverages in some developing countries has been much more rapid than in others, and if this trend continues for another generation they will attain or exceed the present levels of per capita alcohol consumption in the developed countries. These trends are disturbing in view of the high levels of alcohol-related problems and resultant social costs that exist in developed countries where alcohol consumption per person is high and where reporting systems are reliable. The rapid growth of alcohol consumption in developing countries is likely, after some lapse of time, to be followed by a higher incidence of alcohol-related problems. These additional problems will represent a very substantial drain on scarce economic and social resources.

The growth in per capita consumption by broad geographical area or country is likely to underestimate the increase in the level of alcohol-related problems because relatively small groups of individuals usually account for a disproportionate share of the increased consumption. In developing countries, young men living in urban areas are often the first to adopt the practice of heavy drinking. A high incidence of alcohol-related problems may therefore occur among such population groups, even when national per capita alcohol consumption is still comparatively modest.

Alcoholic beverage industries (and brewing in particular) can develop at a very rapid pace in countries with no industrial tradition. Access to the technology of brewing, distilling, and wine production is now relatively easy, the capital investment required is not large, and, given a suitable agricultural base, the raw materials may be available locally in many regions of the world. The availability of alcoholic beverages is likely to continue to increase and to spread around the world, bringing concomitant increases in alcohol-related health problems and associated social costs.

The continuation of current trends in alcohol production and consumption have far-reaching public health implications. One obvious question which this raises is whether the interests of public health and the interests of economic development need conflict, or whether any opportunities exist for collabora-

tive action in favour of health. One example of such an opportunity might be beverage substitution. Since many of the same commercial groups that produce alcoholic beverages also produce soft drinks, it might be possible to devise strategies that would enable the gains from industrial development to be achieved whilst decreasing the amount of alcohol being produced for human consumption.

Such strategies are only one aspect of the important process of intersectoral collaboration that is required to formulate and implement national alcohol policies. The demands of national health development and national economic development are both pressing, but a comprehensive alcohol policy can take account of both in a vigorous programme including prevention, education, treatment and management. Knowledge of the dangerous trends described in this article should enable planners to forestall some of the public health problems by taking action now.

REFERENCES

Discussion

Sally Casswell

— The brewing industry often yields great influence in poor agrarian countries

Walsh & Grant's description of the global alcohol trade reflects a growing awareness that health cannot be separated from political and economic structures. The rapid development of links between the industrial giants of the alcohol industry and the developing countries, and the concomitant increase in per capita alcohol consumption, make this publication particularly timely.

The authors point out major differences between the rates of expansion in the production of different beverages: a 50% increase per capita for beer from 1960 to 1980, while wine production has remained static and that of spirits has increased to a smaller degree. Particularly rapid increases in per capita beer consumption have occurred in many developing countries.

As a resident of the Pacific region, in many parts of which beer has become the predominant beverage, I find it interesting to consider the reasons for this phenomenon. The popular sentiment is that it is related to the climate, but different preferences elsewhere, such as that for spirits in the Caribbean region, suggest that additional or alternative explanations are necessary.

Dr Casswell is Director of the Alcohol Research Unit, School of Medicine, University of Auckland, New Zealand.

The preference for beer of the former English and German colonists in many parts of the Pacific has no doubt been important. By contrast, wine is more popular in francophone areas. Technological and agricultural difficulties have probably discouraged wine production in developing countries.

It has been suggested that differences in the extent of concentration of different beverage industries have affected the rate at which they have expanded into developing countries. The giant corporations of the brewing industry are seen as a major factor in its expansion (1), which often takes place by means of capital investment in joint ventures or wholly owned subsidiaries and by licensing the production of international brands. This picture is certainly true of Oceania. Beer production in several developing countries has been established on the basis of foreign investment, frequently from the brewing industry in developed countries. In one country the world's leading multinational beer company has an interest in the local brewery. It is a giant corporation which dominates a small domestic market and achieves most of its sales elsewhere, largely in developing countries. It has been suggested that large, powerful and resourceful corporations are an important factor pushing alcohol into developing countries at a time when the alcohol market in the industrial countries is stabilizing (1).

Walsh & Grant draw attention to the high rate of development of beer production and consumption relative to other indicators of economic growth in low-income countries. In one small and very poor Pacific country, the brewery, which is one-third owned and managed by overseas interests, is one of the two major industries.

The brewing industry is often predominant in poor agrarian countries, where it makes much of its contribution to employment. Such countries in the Pacific often depend on tourism, and national brands of beer are promoted in this context. The alcohol industry also tends to be heavily involved in the sponsorship of
entertainment and sporting events, and this is seen as useful for both tourism and the local population. Together with the import substitution achieved and the revenue gained from alcohol taxation, this factor gives the industry a powerful role in the political economy of a developing country. In turn this may influence decisions about the speed and extent of the distribution and promotion of alcohol. In one developing country in the Pacific, for example, government plans to control alcohol advertising were apparently modified once the full extent of the sponsorship role was documented (2).

The effects of the alcohol trade on public health can be mediated through governments, but the strength of mediation will depend on the difference between the revenue of the transnational corporations and the revenue of the governments themselves. The prime minister of one Pacific state in the process of establishing a government-owned local distillery accused multinational importers of attempting to strangle the new industry by dumping products on the local market (3), yet an increase in import tariffs resulted in the local producer having a virtual monopoly within a few years.

Governments of developing countries in the Pacific have become involved directly in the industry through part ownership of local production. They also collect import and excise taxes and, given that income tax is low or absent, alcohol taxes contribute very significantly to total revenue. This means that governments have a vested interest in increased alcohol sales—a further factor to consider when assessing the relationship between the alcohol trade and public health.

However, central governments are often also responsible for providing the medical and penal services which deal with alcohol-related problems. The scarcity of financial and human resources in many countries results in these services being inadequate. Furthermore, while it can be argued that the taxes paid by the heavy drinker help to provide the services he uses or makes necessary, both his quality of life and that of the people around him must be taken into account. As Walsh & Grant point out, those who can relatively easily afford to purchase alcohol are often educated members of urban communities with a heavy responsibility for their country’s development.

Given the current structure of the world alcohol trade and the apparent stabilization of sales in industrial countries, there is every likelihood of a continuing search for markets in developing countries. A rapid increase in consumption, with accompanying extensive socioeconomic and cultural change, will bring more alcohol-related problems. However, if governments see beyond the short-term gains from taxation on alcohol and investment returns, to the likely health effects of increased per capita consumption, then at least they will be in a position to implement policies on pricing, distribution, and promotion aimed at preventing expansion of the alcohol market to the point where the available resources are not adequate to handle the problems.


John Cavanagh
— Corporate power undermines public health

Between 1981 and 1983 the World Health Organization carried out studies on the influence of transnational corporations, tourism, trade, and other international factors on the output and availability of alcoholic beverages (1). An analysis was made of how increasing control by large corporations over alcohol production and trade was spreading alcohol problems in the Third World, particularly among women, young people, and other vulnerable groups. The work demonstrated that corporate power had become a key factor in undermining...
public health, and suggested that this relationship would have to be confronted as a first step towards dealing effectively with alcohol problems. Those of us working on the project knew that our conclusions were controversial, as they challenged powerful interests in a $170 billion industry. We believed that in the

interest of public health, however, it was essential for the World Health Organization to pursue the inquiry further.

This, unfortunately, did not happen, and instead the study of Walsh & Grant was produced. Regrettably, they do not draw any conclusions as to the factors behind the large increases noted in alcoholic beverage production, consumption, and trade in most parts of the world. This will undoubtedly make their study highly acceptable to some governments and to transnational corporations.

Both Walsh & Grant and Cavanagh & Clairmonte (2) report the following trends:
— beer production and consumption has grown enormously over the past two decades, especially in the Third World;
— for wine there has been a far slower increase, and even a decline in certain areas;
— for spirits there have been increases in some areas and stagnation in others.

Cavanagh & Clairmonte suggested that one factor behind these trends was differing degrees of corporate concentration and marketing power. For beer, where the greatest degree of concentration occurs, one would expect growth and expansion into the Third World through licenses, subsidiaries, etc., to be more pronounced than for wine and spirits. The wine trade is still relatively fragmented, and here one would expect less expansion; and in spirits, where concentration is of an intermediate order, one would expect the results to reflect this position.

This, in fact, was observed in both studies. Thus corporate power has a major bearing on public health, and further work in this direction is therefore essential.

The one facet of the corporate universe that Walsh & Grant address is the $2 billion expenditure on advertising. They conclude, weakly, that the aggregate effect of the promotional effort is very difficult to assess, and offer no prescription for tackling the question.

Cavanagh & Clairmonte, however, take a different stand. According to them, such a massive advertising barrage becomes the launching pad for new alcohol categories and brands, thereby generating new tastes, opening up new markets, and assisting transnational alcohol corporations to compete much more effectively for the consumer’s disposable income. Taking advantage of consumer heterogeneity, the corporations expand and annex markets by product differentiation and brand proliferation. Two groups that have proved particularly vulnerable, in health terms, to these techniques have been women and young people. It is in this context that public utterances by several of the corporations on the merits of drinking in moderation should be scrutinized. Even if these statements are made in good faith, the multi-billion dollar advertising outlays seem unlikely to encourage moderation in drinking. What is at issue for the transnational corporation is the maximization of sales and profits.

By largely avoiding the complex institutional factors that shape the global alcohol market, Walsh & Grant are able to conclude with words that will soothe corporate executives everywhere: “One obvious question…is whether the interests of public health and…economic development need conflict, or whether any opportunities exist for collaborative action…” From our perspective the answer to this question is clearly no.

The public, particularly the poorer majorities in developing countries who so often fall victim to corporate abuses, deserve much more from the World Health Organization, which should be the world’s uncompromising leader in the pursuit of public health. In a world of
unequal power relations, change for the better inevitably entails controversy and challenge. The World Health Organization’s alcohol programme has begun to address those relations and their impact on public health. This work deserves to be continued.


Aleck C. Crichton

— Alcohol abuse cannot be eliminated by economic or legal repression

The International Federation of Wines and Spirits, which represents the wine and spirits industries of 23 countries, fully supports the goal of health for all. It is therefore in favor of sensible attempts to reduce the misuse of alcohol and encourages moderation in its use. But communities should decide on their own action, suitable to their needs, resources, and sociocultural situations.

Regrettably, Walsh & Grant do not mention the social and cultural norms and patterns that govern drinking practices in Third World countries. Nor do they refer to the extensive research literature refuting the notion that it is possible to prevent the abuse of alcohol by legalistic restrictions. As Keller has remarked (1), history produces no instance in which repressive laws have ever succeeded in suppressing drinking problems.

The authors attempt to include as many different types of drinking situations and practices in the “problem” category as possible. This approach stigmatizes any and all forms of drinking.

Their data cover commercially produced alcohol but not illegal production. Illegal produ-

duction, a direct consequence of control measures such as excessive taxation, could have been taken into account. The authors note that in Norway an estimated 20% of production is in the home, suggesting that the country’s severe measures aimed at controlling availability have failed.

The authors admit that the advertising picture is not clear in so far as aggregate expenditure for advertising versus aggregate consumption is concerned. Yet they say that advertising encourages the adoption of unhealthy life-styles, without offering any evidence.

It is baselessly asserted that growth in consumption invariably leads to more alcohol-related problems. But complex variables such as the reasons for drinking need to be considered in this connection.

The Walsh & Grant presentation offers unsubstantiated approaches to many Third World nations who are in the growth and development stage. It overlooks vital factors such as beliefs and behavior, education and awareness, and life-styles. This is of particular importance in developing countries, which often have heterogeneous populations, each with its own culture and ethnic and religious values.

The paper might have drawn on the experience of producers of alcoholic beverages, who cannot manipulate people to become consumers or to adopt new drinking patterns and increase individual consumption. Walsh & Grant ascribe to advertisers a magic they do not possess. The marketing of alcoholic bever-

ages is constrained by social trends and consumer preferences (1). Walsh & Grant apparently feel that producers create the market when in fact they service it.

The authors also omit to consider the availability of facilities for communicating bal-

---

Mr Crichton is President of the International Federation of Wines and Spirits (FIVS), Paris, France. His comments represent the views of the Federation.
Taxed alcohol is only a fraction of the total amount of alcohol produced in the world, but it is the principal source of data about the legal production of alcohol. As the authors say, increases in commercial production may be offset by decreases in domestic production, both licit and illicit. There is no reliable method for estimating the amounts of alcohol produced legally in homes for personal use and illegally for commercial purposes with a view to tax avoidance.

In some countries a large proportion of the alcohol consumed probably never gets into tax records. One cannot extrapolate trends in consumption from data on taxed alcohol. The authors acknowledge this but seem to discount its importance. As they say, non-commercial alcoholic beverages are excluded from the official production statistics on which their report is based, and the real consumption figures could be substantially higher or lower than those given. Without data on illegal and non-commercial production, one can only guess.

It is surely obvious that one cannot make a categorical statement that there has been a considerable increase in alcohol consumption in all parts of the world. Between 1965 and 1980, legal production of alcohol rose by 50% but production per person rose less than 15%. It is impossible to estimate changes in the illegal production of alcohol, and so categorical statements about increases or decreases in alcohol consumption cannot be firmly based. In the USA, over the past several years, the production of taxed alcohol has fallen by nearly 10%. It is impossible to know what changes have occurred with regard to untaxed alcohol. With a little yeast and sugar anyone can make alcohol.

The prevalence of alcohol-related problems at any time is almost as hard to assess as the real consumption of alcohol. Cirrhosis rates have risen in some countries and fallen in others, but these figures are not now considered very reliable. As more roads are built in developing countries, more alcohol-related traffic accidents will surely occur. One cannot judge the number of alcohol-related problems by the number of people receiving treatment for alcoholism. In the USA, the treatment of alcoholism has become big business. As treatment
facilities multiply, so do patients. Conversely, when there were few or no facilities, there were few or no patients.

Not only are current data unreliable but comparisons with the past are virtually impossible because, until recently, there were hardly any data on alcohol consumption and alcohol-related problems. The assertion that the consumption of alcohol per person has been increasing on a global scale cannot be supported.

In the USA there has been a dramatic decrease in taxed alcohol consumption since the pre-Civil War period, although in recent years the decline has been relatively slight (7). The annual per capita consumption is now around 11 liters, whereas in 1810 it was about 26 liters.

The statement that alcohol consumption is positively associated with alcohol-related problems seems self-evidently true. However, depending on the definition of alcohol consumption, the statement may be misleading. As a group, more Jews drink than gentiles but fewer Jews have alcohol-related problems. On the other hand, a person who drinks a liter of whisky a day is probably doomed to have problems. In colonial times, the tavern was the center of social life, and presumably people in taverns drank, yet not a single alcohol-related automobile fatality was recorded during that epoch; in other words, figures can be deceptive.

The comment in the paper about rapid increases of alcohol production in Japan and the Republic of Korea illustrates the fallacy of assuming a positive relationship between production and alcohol-related problems. The Republic of Korea has an alcoholism problem at least equal to that in the USA, whereas the available data suggest that increased production in Japan has not been matched by a comparable increase in alcoholism.

The proposition that new drinking customs tend to supplement traditional ones rather than replace them ignores certain evidence. For example, in the USA, white beverages have in recent times replaced brown ones.

Walsh & Grant end with a suggestion for combating the alleged increase in consump-
tion: promote soft drinks. It won’t work. Berton Roueché (2) explains why:

“The basic needs of the human race ... are food, clothing, and shelter. To that fundamental trinity most modern authorities would add ... security and love. There are, however, many other needs whose satisfaction ... can seldom be comfortably denied. One of these ... is an occasional release from the intolerable clutch of reality”. Soft drinks have their merits, but releasing people from the clutch of reality is not one of them.


Samuel W. Hynd
— An impending global catastrophe

Walsh & Grant take too mild a view of what must be recognized as an impending global catastrophe. We need something hard-hitting that will shock not only health professionals but the entire world community into action. Alcohol is destroying millions more than the famine in the Sahel, and in some countries the numbers of known alcoholics equals the population of the largest cities.

We seem to fear the sensitivities of the vested interests that influence governments, or the accusation of being intolerant, the loss of support from certain organizations for health programmes, and the loss of taxation revenue from alcohol production and consumption.

Dr Hynd is Chairman of the National Council on Smoking, Alcohol and Drug Dependence, Manzini, Swaziland.
Newspapers and magazines give scant coverage to the alcohol-related problems eating at the heart of every country, because they need the advertising revenues received from multinational and national liquor producers.

Few politicians and health professionals seem willing to speak out on the true effects of increased alcohol consumption. Little is made of the fact that alcohol is a drug which seems to be socially acceptable, whereas cocaine, heroin, and other drugs cause so much anxiety in our communities. Some industrial countries are greatly concerned about the threat of increasing importation and use of the drugs, but at the same time openly encourage the production and exportation of the most used and abused drug, ethyl alcohol. Interestingly, however, alcohol now threatens the sport of football, and its sale in the vicinity of soccer matches is already restricted in some places.

At a time when many commercial and industrial concerns are going bankrupt, the alcohol trade is booming. Thus in Swaziland some companies are collapsing or pulling out, yet the only brewery is increasing its productive capacity in response to growing demand. It brings in good profits to one of our national investment funds and no one would dare touch such a lucrative enterprise when all else seems to be falling apart, no matter what the consequences for society. Between 1973 and 1982, the number of bottle store licences increased from 36 to 103, and that of ordinary bar licences increased from 7 to 24, with devastating consequences on all age groups, from schoolchildren to old people. The per capita consumption is about 20 litres per annum.

Developing countries are in danger from the excess capacity for alcohol production in the industrial world. The producers must find markets for the vast quantities not swallowed by their own consumers. Europe and North America have increased commercial beer production at a frightening pace over the past two decades.

With Europe awash in wine, the producing countries need to find new outlets. It is probable that the millions of people in the Third World will be encouraged to adopt the wine-drinking habit.

Walsh & Grant point to the difficulty of determining domestic brewing capacity, but in the Third World we are well aware that this is often the major production source. There is little information on consumption, and so there is no picture of the true situation. For our women, beer-brewing is a major source of income; it keeps the family in food, pays school fees, and buys clothes. One hears about the goodness in traditional beers, but they contain all kinds of noxious additives.

Advertising plays an important part in boosting consumption. In Third World countries, the national press, radio and television need the revenue from tobacco and alcohol advertising. The message is that to be a he-man, a girl-catching male, you need tobacco and alcohol. This is a winning formula, as is support for sports whose requirements cannot be met by national budgets.

It is remarkable that, with all the information about the harmfulness of alcohol, the situation is worsening. The impact of the health sector is minuscule in comparison with that of the giants of the alcohol trade.

World health forum has far fewer readers than the popular press or international magazines. The resolutions of the World Health Assembly make few headlines in the mass media. Somehow, somewhere, we need a breakthrough to the front pages. Just as a few motivated people in the last century were able to convince the world that slavery was wrong, we must press on in the belief that the world community will finally come to realize that it is marching towards an alcoholic holocaust.
Robert Kendell

— Current production trends have far-reaching public health implications

A visitor from Mars would probably be very puzzled by the difference in attitudes to international trade in alcoholic beverages on the one hand and opiates and cannabis on the other. A long series of international agreements, dating back to the Hague Convention of 1912, has attempted to prevent trading in the latter substances, except under close governmental supervision. International trade in alcoholic beverages, however, is not subject to any controls, or even monitored, despite the fact that alcohol is a drug of dependence, a carcinogen and toxic to most of the tissues of the human body. United Nations agencies employ over 80 people to monitor compliance with the international conventions governing the opiates and cannabis and to curb trafficking in these substances, but employ only one person with specific responsibility for the effects of alcohol on public health. Yet the ill effects of alcohol abuse in the world are almost certainly greater than those of heroin and opium, and many times greater than those of cannabis.

Part of the explanation for this curious state of affairs is that it is characteristic of human societies to have a favourite intoxicant whose use is sanctioned and whose ill effects are, as far as possible, glossed over, while the intoxicants used by other cultures are regarded with distrust and alarm, and their use forbidden (7). Alcohol happens to be the preferred intoxicant of Europeans and Americans of European descent, and their customs, prejudices, and economic interests, rather than those of India, China, and the Moslem world, determined the policies of the League of Nations and the United Nations. However, heroin is far more addictive than alcohol, and if it were as widely used the ill effects would undoubtedly be even more devastating. Furthermore, it is only in the last decade that attention has turned to alcohol itself, rather than the putative psycho-

logical or metabolic defects of alcoholics, and that it has become clear that the incidence of the ill effects of alcohol rises and falls predictably with changes in per capita consumption. Finally, it is only in the last 25 years that international trade in alcoholic beverages has become quantitatively significant. Before 1960 it was largely confined to transfers of wines and spirits between a small number of industrial countries and their expatriate communities.

The situation which Walsh & Grant have documented is very different, and they are quite right to emphasize that current trends in alcohol production and consumption have far-reaching public health implications. The construction of large breweries, often by transnational corporations, in many African and other Third World countries has resulted in increases in alcohol consumption of several hundred per cent in the space of 10 or 20 years. The resulting per capita consumption may still be modest by European or North American standards but there is no sign yet of an approaching plateau. Furthermore, a high proportion of the output of the new breweries is being drunk by the young educated city dwellers who are so vital to the future economic development and administration of these countries. The situation in some Third World cities is now similar to that in London in the first half of the 18th century, depicted so vividly in Hogarth’s Gin Lane engraving. Societies undergoing rapid industrialization and social change are suddenly exposed to a new and relatively cheap intoxicant for which there are no cultural norms and few legal controls, with disastrous results. The attractions of commercial beer are heightened in many African countries by memories of colonial legislation banning the sale of alcohol to native peoples, on top of which there are the blandishments of the advertisers. So far it has been the social ill effects—the drunken brawls and the road traffic accidents—which have been most obvious and disruptive. But, as Walsh & Grant point out, this is because many of the medical ill effects, e.g., cirrhosis, will only become apparent after 20 years or more of heavy drinking. Even so, the adverse effects are already sufficiently alarming in several African and Latin American countries for their health ministries to have taken a major part in promoting the

R. E. Kendell is Professor of Psychiatry in the University of Edinburgh, Scotland.
World Health Assembly resolutions of 1979 and 1983 recognizing that alcohol problems rank among the world's major public health problems and expressing concern about increasing consumption, especially in countries and population groups where its use was not previously widespread.

The increasing international trade in alcoholic beverages has also been responsible to a significant degree for rising consumption in Europe and North America. German and Italian wines are exported to the United Kingdom and the Nordic countries, Scotch whisky is exported to the United States and Japan, and French and Spanish wines are exported to the United States and Canada, and in each case these new imported drinks are consumed in addition to the traditional beverages of the countries concerned. Although world production of wine has grown less than that of beer and spirits in the last 20 years, there is serious wine overproduction in some areas. The Common Agricultural Policy of the European Economic Community poses particular problems, because the Community undertakes to buy surplus production from farmers at guaranteed prices and therefore gives them no incentive to replace unwanted grapevines with other crops. Falling domestic wine consumption in France and rising output in Italy and the Federal Republic of Germany have created a situation in which the Community's wine surplus is growing at 2.5–3.0 billion litres a year, and is now large enough to fill 2400 Olympic swimming pools. The existence of this surplus leads to considerable pressure on the northern countries of the Community to drink more. Last year, for example, the United Kingdom was ordered by the European Court to lower its excise duty on wines, with the result that the rate of increase in UK wine consumption accelerated. The Community seems to have no mechanism for considering the public health implications of its surplus wine production. Wine is regarded as an agricultural product to be produced and traded like any other foodstuff. When new trade agreements are in prospect, ministries of agriculture and economics, not ministries of health, are consulted.

It has not been easy to convince governments that the effects of rising alcohol consumption on the health of their own peoples is as important as the politically more obvious role of alcoholic beverages as a source of employment, taxation revenue, and electoral contentment. It will be harder still to convince them that the health of other nations also needs to be considered. Indeed, more than one government has already identified a rising export trade as the solution to the problem caused by a combination of rising domestic production and static or falling domestic consumption. For some countries, e.g., the United Kingdom and France, exports of alcoholic beverages are already a significant proportion of total overseas trade. United Kingdom exports of alcoholic beverages were worth £881 million in 1980, almost 2% of the country's export trade.

The transnational corporations that have played a prominent part in the development of this trade may be even harder to influence than governments. Certainly the behaviour of the great corporations of the tobacco industry over the last 25 years provides few grounds for optimism. None the less, it is vital that the World Health Organization should draw attention to the steadily increasing production of and trade in alcoholic beverages and insist, as Walsh & Grant have done, that these are activities with inevitable public health implications that will have to be faced both by governments and by the world's alcohol industries; the latter will only do so reluctantly, and in response to sustained pressure from WHO and their own Ministries of Health.


Elizabeth Quamina

— The Walsh & Grant analysis is borne out by trends in Trinidad and Tobago

The basic stimulus to alcohol production is public demand. In the article under review, only three stages in the economic cycle are

Dr Quamina is Chief Medical Officer in the Ministry of Health and Environment, Port of Spain, Trinidad and Tobago.
considered: marketing, production, and consumption. Many mechanisms can be employed with a view to bringing about a downturn in either consumption or production, but the key to success is the achievement of changed attitudes and practices with respect to the drinking of alcohol. This objective, which involves motivating the individual and society, must not be neglected in favour of more easily administered measures.

In the English-speaking Caribbean region there are very few restrictions on the sale and use of alcoholic beverages. Public expressions of concern at the tragic consequences of excessive alcohol consumption, rather than disapproval of the habit itself, have become increasingly frequent. The reports of the Caribbean Conference of Ministers Responsible for Health are replete with resolutions expressing concern about alcohol-related problems but always stop short of recommending government intervention that would have a direct effect on production and consumption.

Most Caribbean islands produce a wide variety of rums from sugar cane for both home consumption and export. In Trinidad and Tobago, rum is widely considered to be a product of national importance. Indeed, it might be said to be a symbol of national identity (1). In the 1985 Trinidad and Tobago budget, which seeks to deal with the declining economic situation caused by the drop in oil revenues, alcohol is indicated as a potential source of additional revenue. The excise duty and alcoholic beverage tax is raised by 50%, for an expected yield from both alcohol and tobacco of US$ 12.5 million; purchase tax on alcohol is increased by 50%, so that the expected yield from alcohol and tobacco is now $ 20 million; and the liquor licences required by distillers, brewers, and retailers of spirits and wines will yield $ 1 million. Thus the taxes on alcohol production and consumption will make a modest but valuable contribution to total revenue.

As elsewhere in the Third World, consumer demand for alcoholic beverages other than the traditional rum has resulted in the creation of new industry in the Caribbean countries, producing a variety of beers, stouts, and spirits. This has provided employment both directly and indirectly. At a time of rising unemployment no government action that might severely curtail production can be anticipated. The increased cost of alcoholic beverages due to the new taxes is not designed to have a marked effect on consumption nor to reduce local alcohol production. The first impact is likely to be on the more expensive imported beverages, and this will help to conserve foreign exchange, but it is not expected that there will be much effect on the total amount of alcohol consumed. Over the last 25 years, beer and rum production has increased faster than the population. Between 1958 and 1967, local beer production increased by 75%, imports fell by nearly 88%, and there was an overall increase of 44% in the quantity of beer available for home consumption, whereas the population increased by only 30%. In the period 1973–82, the amount of beer for home consumption increased by 42%, while the population grew by only about 15%. The average amount of rum available for home consumption in the period 1958–67 was 3 028 000 proof litres per year. For 1973–82 the corresponding figure was 7 585 140 proof litres per year.

A survey of adults aged 24 and over in Tobago (2) revealed that alcohol consumption patterns were similar to those in Jamaica (3). In Tobago the highest consumption was in the 25–34 age group for both sexes. Current drinking, defined as any alcohol consumption in the previous year, was reported by 86.5% of males and 68.9% of females. Heavy and very heavy drinking (13–42 and 43 or more drinks weekly, respectively) were noted in 31.8% of males and 1.7% of females.

In Trinidad a consumption of 10 litres of absolute alcohol per person aged 15 years and over per year has been reported (4); alcoholism and other alcohol-related problems bore a constant relationship to consumption and were in turn linked to the ratio between the price of beverage alcohol and disposable income. Beaubrun (3) demonstrated a close relationship between the number of road accidents in
Trinidad and Tobago and the price of alcohol as a fraction of disposable income. Beaubrun & Mahey (4) estimated that at least 70% of road accidents in Trinidad were attributable to alcohol, and considered that the capacity to purchase liquor was the main factor determining the number of accidents.

Prasad (5) showed that 47% of all male admissions to medical wards in Trinidad and Tobago were alcohol-related. The cost to the health service of alcohol-related disease and accidental injuries seems likely to be at least equal to the Government’s revenue from alcohol. At a seminar in 1981 on domestic violence, alcohol was reported as having been a frequent precipitating factor in the physical abuse of wives and offspring.

Alcohol was recently cited as causing losses in productivity. This demonstrates a change in drinking patterns from those described by Yawney (7) almost twenty years ago when she referred to the absence of drinking during work. The present attitude towards alcohol is one of permissiveness; social mobility and the status symbol of the business lunch and cocktail party play their part, and the custom of eating out in establishments licensed to sell alcoholic beverages has increased.

The alcohol producers of the developed world are aggressively promoting their products in the Third World. Manufacturers in Trinidad and Tobago have copied their marketing techniques. Some sales agencies market both therapeutic drugs and certain brands of alcohol, a combination used to advantage when encouraging health personnel to attend lectures on new therapeutic products.

Local and transnational producers support sporting events and cultural competitions providing prizes for winners of calypso competitions as well as for stalls at religious fundraising bazaars.

There is no code of advertising for alcoholic beverages. However, there is a ban on advertising alcohol on television before 7 p.m.

In conclusion, the trends in alcohol production and consumption and their health consequences in Trinidad and Tobago appear to follow the patterns described by Walsh & Grant. These trends might be counteracted by making alcohol less readily available and by reducing demand through a combination of education and the vigorous promotion of alternatives to alcoholic beverages, especially at social gatherings and in eating establishments.


M. J. Waterson

— Advertising cannot be blamed for alcohol abuse

Walsh & Grant stress that alcohol consumption has been rising steadily for the past two decades but do not mention that in many countries alcohol consumption was extremely low after the Second World War in comparison with earlier periods. The rise in consumption can be viewed as a return to earlier levels rather than as a startling aberration. In some countries the recent increase still leaves per capita consumption at fairly modest levels compared with that before the Second World War.

The authors also refer to a positive association between trends in alcohol consumption and alcohol-related problems but do not make clear that this is a broad generalization covering many contradictory facts. Data used to link alcohol consumption and alcohol problems are

Mr Waterson is the Research Director of the Advertising Association, London, England.
always far from perfect. For example, production data are often imperfect because they do not include figures on the illegal production of alcohol and because in many countries commercially produced alcohol is supplanting native beverages such as palm wine. With regard to alcohol problems, many of the present data are not comparable with earlier data because of increasing care in the collection of information, the categorization of disorders, and the attribution of road accidents and other factors to alcohol. Furthermore, many of the data also stem from small-scale self-reporting surveys which should not be used as firm evidence.

The paper fails to mention that some studies have reached conclusions of a rather different nature to theirs. For example, a comprehensive survey was undertaken recently by a government department in the United Kingdom (1), and it was concluded that the data tended to contradict the view that an increase in per capita consumption must result in an increase in the number of heavy drinkers.

Walsh & Grant say that the claim that the function of advertising is to provide the battleground for competing brand loyalties is disingenuous. Yet, in developed countries at least, advertising is clearly aimed at promoting individual brands. Of course, it is quite possible that advertising, particularly in developing countries or in new markets, will sometimes stimulate total market growth by accident or design. However, most evidence from advertising bans, market research, and econometric studies suggests that in large mature markets, e.g., the total market for alcoholic drinks in the United Kingdom, advertising is most unlikely to have more than a minuscule effect on total consumption (2). It should be pointed out that studies done on the effects of advertising, mainly by researchers independent of the drink or advertising industries, generally use superior data and techniques to those used to provide evidence of a link between alcohol consumption and alcohol problems and are hence more valid.

If Walsh & Grant are convinced by the statistical evidence of an association between alcohol consumption and alcohol problems, then it is extremely difficult to see why they are not similarly convinced by the evidence suggesting a lack of association between alcohol advertising and consumption. If they are unconvinced simply because they have no evidence about advertising effects in developing countries, their paper is seriously defective in not making this clear.

Walsh & Grant say that few commentators are prepared to accept that advertising does not play some part in stimulating consumer demand. Yet they do not make clear that the commentators they are referring to are, in almost all cases, not experts on advertising. In the technical literature and the advertising profession, the preponderant view is that advertising has different impacts at different market levels. The evidence suggests that, if other conditions are right, advertising may make a large impact on an individual brand of lager. If it does, this will probably be at the expense of at least one other brand. Lager advertising as a whole may increase sales of all lager brands, but, if it does, other kinds of beer will probably suffer reduced sales. As one moves up the scale of market aggregation the chance of finding an advertising effect diminishes. The bigger the market under consideration, the greater the stability encountered and the less likelihood there is of an advertising effect. Hence, the totality of beer advertising is unlikely to increase overall beer sales, but if it does this will probably be at the expense of wine or spirits. The totality of alcoholic drink advertising is extremely unlikely to increase overall sales of all alcoholic drinks.

Most advertising is designed to increase brand share, not market size. Were advertising sufficiently powerful to have a major impact on
same direction (3), could be manipulated to protect advertising expenditure.

The suggestion that alcohol advertising plays a significant part in encouraging the adoption of unhealthy life-styles seems fundamentally unsound. There is no evidence to back up this claim, and a great deal suggesting it is not valid.

Finally, Walsh & Grant look at the implications of increasing alcohol consumption and conclude that knowledge of the dangerous trends described should enable planners to forestall some of the public health problems. This implies that it is possible to influence trends in alcohol abuse by controlling advertising expenditure and other factors. However, a great deal of evidence exists that unemployment, broken homes, stress, physical damage, and genetic and psychological factors are linked to alcohol abuse (4), and that illegal soft drug abuse, clearly not the result of advertising, is already a huge problem in many advanced countries despite many attempts by governments to stop distribution. No reasonable evidence exists that links advertising and alcohol abuse.

In the light of this, the suggestion that planners can diminish alcohol abuse through control of the advertising of alcoholic drinks is extremely unlikely to bear fruit. Indeed, it could well exacerbate matters by leading health authorities into action that could lull them into a mistaken sense of achievement and use up resources that would otherwise be available for tackling real problems.

1. Tuck, M. Alcoholism and social policy: are we on the right lines? London, Her Majesty’s Stationery Office, 1980 (Home Office Research Study No. 65).

---

**Government action cuts smoking**

*Sharp increases in taxes and duties on both imported and home-grown tobacco have contributed to a notable decline in cigarette sales in Malaysia. Other action by the authorities included a ban on cigarette advertising on television, radio, and billboards; smoking has also been prohibited in all government offices. At the same time, anti-smoking campaigns have been organized by consumer associations, schools, and youth organizations. The Action on Smoking and Health Committee of the Malaysian Medical Association also participated.*