Alcohol and Alcoholism

Alcohol in the Third World: a chance to avoid a miserable trap

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When 17 million children a year die of malnutrition in the Third World¹ and about 12 million cases of malaria are reported each year to the World Health Organisation,² the problems caused by alcohol in the Third World may seem very small beer. So they are in relation to these problems, but two factors make alcohol-related questions well worth considering. Firstly, the admittedly poor evidence available suggests that the consumption of alcohol and with it many associated social, health, and economic problems are increasing rapidly in the Third World.³⁻⁵ Secondly, and more crucially, much evidence suggests that many alcohol problems can be prevented by administrative and political measures.⁵⁻⁷ In other words, if Third World governments wake up to the threat of alcohol problems they may be able to avoid them without huge expenditure of time, money, and effort. Malnutrition and malaria are much less easy to prevent.

The developed world and the WHO undoubtedly have a part to play in helping Third World countries to avoid the misery caused by alcohol that is now seen in abundance in richer countries. The role will not be to preach, patronise, or direct but to make available the large amount of evidence accumulated in developed countries on the causes and the prevention of alcohol problems. WHO has, indeed, been doing this for some time, and next year it will be holding a large international conference on alcohol in the Third World.

Extent of alcohol problems

As might be expected, statistics on alcohol consumption and alcohol problems are often either not available from Third World countries or they are of poor quality. Collecting statistics is an advanced and expensive activity. Nevertheless, some statistics have been collected for the WHO.³⁻⁵ In addition, Professor Griffith Edwards of the Addiction Research Unit in London wrote to many psychiatrists around the world asking about alcohol problems in their countries. Some of the information he received along with a short review of published accounts has been published.⁴

Alcohol epidemiology is always difficult, but there are particular problems in Third World countries. Illicit production, for instance—which counts for little in most developed countries—is important. (The names of the “local brews” make hypnotic reading: *chang’aa* and *busaa* come from Kenya; *ogogoro* and *burukutu* from Nigeria; *chibuku*, *mbamba*, *solopi*, *mbote*, and *sikokiann* from Zambia; *guaro contrabando* from Costa Rica; *chicha*, *cocuy*, and *guaropo fuerte* from Venezuela; *aragi* and *marisa* from the Sudan; and *sur*, *lugri*, *chang*, *chami*, *rurba*, *soma*, *boja*, *zu*, *channa*, and *sugda* from India. Not surprisingly,

the country with the toughest controls on alcohol has the richest vocabulary for illicit beverages.) A second problem is that the death rate from cirrhosis, which seems to be the best measure of alcohol-related problems in developed countries, is a much poorer measure in Third World countries, where other causes of cirrhosis apart from alcohol are so much commoner. Then, as in the developed world, all figures that give a prevalence of “alcoholism” must be taken with a pinch of salt as widely divergent definitions of alcoholism are used. Finally, although figures on how much alcohol contributes to accidents are often quoted, few Third World countries have equipment to test routinely blood alcohol concentrations.

With all these provisos in mind I want to consider some of the information that is available; most of it is taken from information compiled for the WHO.³ Firstly, however, world and continental production of alcohol is worth considering (table).⁵ Between 1962 and 1972 recorded world production of

World and continental production of wine, beer, and spirit in 1960 and 1972

	Production in millions of litres	
	1960	1972
Wine		
World	24 251	28 897
Africa	2 268	1 604
Asia	72	173
South and Central America	2 421	3 042
Beer		
World	40 750	68 559
Africa	738	2 121
Asia	1 271	4 528
South and Central America	4 091	5 036
Spirit		
World	1 637	2 630
Africa	29	49
Asia	240	362
South and Central America	198	321

Source: WHO.⁵

wine increased by 19%, of spirits by 61%, and of beer by 68%. The production of beer increased by 187% in Africa, and that of spirits by 51% in Asia and by 62% in South America.

Figures on alcohol production and consumption tend always to be better than those for alcohol-related problems, but the evidence that the two go closely together is good.⁸

AFRICA

Beer imports in Nigeria (a country that exports oil) increased from 1.3m l in 1970 to 132m l in 1976. No good figures were available on alcohol problems. Kenya is reported to have seen an increase in both alcohol consumption and admissions for alcoholism, but no exact statistics are available. The Kenya

Brewery, however, increased its earnings by 33% from 1978 to 1979. In Zambia the production of alcohol has risen and fallen without any clearly discernible pattern; arrests for drunkenness more than quadrupled, however, between 1968 and 1973—from 3000 to 12 500. In Mauritius between 1972 and 1976 the production of rum was doubled and that of beer increased by 64%.

SOUTH AND CENTRAL AMERICA

Argentines consume a great deal of wine, most of which they produce themselves, and in 1977 the mortality rate from cirrhosis was 18.1 per 100 000 (compared with about 4 in England and Wales and about 17 in France in the mid 1970s). About 10–15% of all general hospital admissions and 30% of all psychiatric admissions were for patients with alcohol-related problems.

Costa Rica increased its beer production from 9m l in 1961 to 48m l in 1976, and wine production trebled between 1977 and 1978, while spirit production increased by 9%. Illicit production is important in Costa Rica, and in one area there was one illicit still for every 2.7 houses. About 5% of the population of 2.05m were classified as “abnormal drinkers,” and patients discharged from hospital with the diagnosis of alcoholism rose from 1874 in 1976 to 5135 in 1978. In 1977 20 577 of the 34 935 arrests for public disorder were for drunkenness.

Adult alcohol consumption per head in Mexico in 1972 was estimated to be 4.9 l of 100% alcohol, and two surveys found that about 12–18% of the population were “excessive drinkers.” In 1974 the mortality from cirrhosis was 19.3 per 100 000. In 1977 some 51% of violent injuries were associated with alcohol, and absenteeism was estimated to cost \$US 100m a year.

In Venezuela, another country that exports oil, beer production doubled between 1970 and 1976 and then increased by 21% in 1977. Spirit production rose by 536% between 1970 and 1976, while whisky imports rose from 0.3m l in 1945 to 13m l in 1976. Thus consumption per head almost doubled between 1961 and 1976. Alcohol was considered to be the main factor in half of all traffic accidents, and in 1978 traffic accidents were the commonest cause of death in Venezuela (sic). Crime and alcohol consumption are strongly associated in South and Central America, and a quarter to a half of all offences in Venezuela were committed under the influence of alcohol in 1974–6.

ASIA

In India the government is aiming at prohibiting alcohol totally and most of the population do not drink. “Country liquor” and beer production between them more than doubled between 1970 and 1977, however, and in some sections of the population alcohol is said to have replaced traditional drugs. In Sri Lanka consumption per head in men over 15 increased from 1.63 l 100% alcohol to 2.01 l in 1977, and one study found a prevalence of alcoholism of 28.7 per 1000 in men over 25.

THE CARIBBEAN

Alcohol abuse is a big problem in the West Indies. About 30 000 of the 1 100 000 people in Trinidad and Tobago were judged to be alcoholic in one study.

Why is there increased alcohol consumption and damage in the Third World?

Determining what makes societies, groups, and individuals drink as much as they do is very difficult. Hundreds of factors

come into play, but certain of them may be tentatively teased out. Furthermore, the countries we conveniently describe as Third World differ greatly, and a factor that is important in one country may not be important in another.

Increasing wealth is undoubtedly important. Time and time again in developed countries the price of alcohol relative to average income has been found to be crucial in determining consumption. In a country such as Venezuela that has rapidly become richer this is probably very important. Erosion of old customs is probably also important, but, as Griffith Edwards has argued,⁴ rapid social change and development do not lead automatically to increased alcohol problems. They do not seem to be the inevitable price of development, as some cynics have argued.

At opposite ends of the spectrum, high status and absolute poverty both seem to be associated with increased alcohol consumption in Third World countries. Those in the upper reaches of society not only have more money to spend on alcohol but they associate it with urbanity and sophistication. Meanwhile, in the slums of South and Central America (the *pavels* in Brazil, the *ranchos* in Caracas, the *barriadas* in Lima, and the *villas miserias* in Argentina) people drink to forget.

Finally, in a way that nobody seems to have been able to measure or describe, the alcohol producers of the developed world are promoting their products in Third World countries. They see markets open up and they try to sell their products as do all other manufacturers. Unfortunately they are selling problems at the same time.

Special problems for the developing world

Alcohol will cause problems in any society and it will do so more as consumption rises, but Third World countries are in some ways specially vulnerable.⁴ Firstly, the tendency for the very poor and the privileged to be particularly affected has serious consequences. For the very poor, who live on the edge of survival, an alcoholic father may mean death for members of the family. Furthermore, alcoholism and malnutrition are a particularly unhappy and dangerous combination. The society is likely to suffer badly if the professionals and the technocrats are removed through alcohol problems. At all levels alcohol problems may interfere with national development as they are an important cause of lowered productivity, absenteeism, and accidents. Finally, patients with alcohol problems may put a large load on health services that are already likely to be over-stretched.

What is being done and what can be done?

In a very few countries—such as India—the government is aiming at total prohibition of alcohol. In contrast, the governments in other countries—some African ones, for instance—do not see alcohol problems as important. Most countries, however, are paying some attention to the problems and are setting up agencies to look at alcohol. Some governments have banned alcohol advertising; many have introduced some kind of licensing system; many are instituting laws on alcohol and driving; some have work-based programmes; and a few have tried health education campaigns.³ In most countries these “preventive” measures are also complemented by treatment and rehabilitation programmes.

WHO has suggested a blueprint for countries wishing to develop alcohol programmes.⁵ It emphasises that a programme that includes prevention, treatment, and rehabilitation will be needed and that the programmes will need to fit into the overall framework of development. Some kind of co-ordinating body (preferably governmental) is recommended, and an alcohol policy should be formed. The WHO recommends the Ontario policy as an example. This has three main aims:

maintaining the price of alcohol relative to disposable income; stopping any further relaxation of alcohol control measures; and educating the public on the social and individual danger of alcohol. Few countries, however, including most developed countries, have such a policy.

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MATERIA NON MEDICA

Waikouaiti Fencing Championship

The midday sun shone on a little-known coastal village of New Zealand called Waikouaiti. By the flagpole on a trim lawn a figure in kneebreeches and with the badge of the 21st Småland Regiment of the Swedish army in his beret hoisted the New Zealand colours as Gio Angelo Tremamondo blew "Reveille" on his bugle. Not far off a cavalry-booted, red-coated, British officer called Smith pulled the lanyard of a 2-inch smooth-bored cannon and a hole was blasted through the hulk of an old Ford V8 lying in a field 200 yards away. This bizarre, and absolutely true, record of events could well have sprung from the fertile brain of some avant-garde film maker. In fact it heralded the beginning of the least-known fencing event in the world, the Waikouaiti Fencing Championship, fought off in the open (weather permitting) by a branch of enthusiastic fencers of assorted ages, sizes, and sexes. Gio Angelo is descended from a famous dynasty of fencing masters but, while a competent fencer himself, earns his living as the local schoolmaster. His lawn becomes the venue for the clash of foils and sabres as absolute novices battle desperately against grey-bearded experts whose own glories are well in the past. The hilarity quotient is high, and a popular event is when each sabreur attempts to burst an inflated balloon fixed to the mask of his opponent. The last fencer with an intact balloon is the winner. Pauses for solid and liquid refreshment were frequent. The ghost of Gio Angelo's ancestor Domenico Angelo Malevolti Tremamondo must have smiled on the gathering—I thought I heard a gentle voice say "Molto bene!" but it might have been the wind in the trees.—E R NYE, physician, Dunedin, New Zealand.

Musings at a church organ

On rare and memorable occasions the long-suffering organist plays to a packed church. Then, instead of each hymn seeming to be merely a frequently repeated solo performed on a variety of stops or manuals, he is carried away on a rising swell of sound from the nave which almost threatens to submerge his instrument. It is then that the organ comes into its own, since if played rhythmically, and with adequate volume it can impose order on chaos and the organist can truly lead the singing even though he is often out of sight. Guitars, amplifiers, and other devices beloved of the trendy clergyman cannot do this, and the pipe organ thus comes to resemble that famous brand of lager so amusingly advertised on TV. To those of us unaccustomed to a full church it is very important to avoid emotional excitement induced by the music (or, for that matter, by the lager). Just as a doctor must retain a dispassionate relationship to his patients, a professional musician must remain equally cool (or an amateur must attempt to do so) otherwise rhythmic control is lost, and even worse, elementary errors are made—such as forgetting to observe the correct number of verses. I have often envied the cricket umpire who by transferring a coin from one pocket to the other with each delivery, to a maximum of eight, avoids miscounting the over. Something of the sort might be useful in the organ loft—possibly a choir member with a long pointed stick, or a wink from one of the younger choir ladies observed through the organist's rear view mirror.

I always appreciate the annual St George's Day parade since the church is then well filled with uninhibited youth, singing hymns of the more popular sort rather in the spirit that "Abide with me" is rendered at football matches, "con belto" if not exactly "bel canto." Unfortunately some of the best tunes have inappropriate word associations not conducive to reverence—"Lloyd George knew my father"

for "Onward Christian Soldiers" or "Glory, glory alleluiah and the whole damn lot got shot" as the last line of the chorus in the "Battle hymn of the Republic." Even St George's Day parades are not what they were 30 years ago, in the days of hairy knees and traditional felt hats with carefully pressed brims. Now there is a preponderance of cubs and brownies and fewer scouts and guides (who often exhibit the rather sheepish air of those who are pretending not to be really there). It seemed, once, to be the other way round: the expense of a uniform was deferred for the real thing, scouting itself, and those of cub age stayed at home or went to the choir. The current adolescent prefers the more modern machismo of motor cycles, karate, and football violence to the exhortations of Baden-Powell; thus is induced a secular chaos quite comparable to the disorder in church when a pipe organ is played without due discipline and rhythm.—J C GRIFFITHS consultant orthopaedic surgeon, Salford.

Cricket at Trent Bridge

I had calculated that the match would end by late Monday afternoon. My guilty apologies were proffered to the secretary of the medical division and I prepared to slip across to Trent Bridge after lunch to watch Nottinghamshire win their first County Championship for 52 years—the real County Championship, not the "hit and miss" one day potboilers which have emasculated the modern games.

"You ought to ring up to make sure it hasn't finished already," said Anne, my secretary. As usual she was right. Glamorgan had tumbled to 149 all out, and shortly after lunch Notts had won. I hope that I do not have to wait another 52 years for my next chance to witness the event.

Had I lived here in the Trent Valley a hundred years ago I would have enjoyed the heyday of Nottinghamshire cricket when the county team were champions in 1873, 1875, 1880, 1884-1886, and 1889. We did not need a South African and a New Zealander to open the bowling then. Two local worthies, Fred Morley and Alfred Shaw, spearheaded the attack, which was regarded as the most accurate in the country. Alfred Shaw, dubbed by Richard Daft the "Emperor of Bowlers," was born in my own village of Burton Joyce and achieved immortal fame by bowling the first over in the first-ever test match in Melbourne in 1878. Unfortunately, Morley, a genuinely fast bowler, was unable to play after 1884 after fracturing his ribs when the steamer in which he was travelling with the England team to Australia collided with a sailing ship. How much compensation would an English fast bowler claim in 1981? During the 1880s a boisterous burley Notts County goalkeeper, Mordecai Sherwin, kept wicket for the county. He was renowned for his skill in taking fast bowling down the leg side, but his extraverted antics often led to the disapproval of WG, who believed that he played too much to the gallery. Of the batsmen, Scotton, a left-handed stonewaller, whose tedious batting sometimes emptied the grounds, frequently paired up with Shrewsbury, a cautious but prolific run-getter. Looking at their lugubrious, moustachioed features in the old faded photographs it is difficult to believe that these Victorian sportsmen generated more excitement and drew even bigger crowds than our latterday heroes.

In 1977 I wrote in *Materia non Medica* grumbling that the maligned Nottinghamshire clay produced better roses than wickets at Trent Bridge. This year the groundsmen have allowed the grass to grow and the dewy morning turf has frequently discomfited our visiting batsmen. It has been a season to remember.—P J TOGHILL, consultant physician, Burton Joyce, Nottinghamshire.