ISSUES IN MEDICINE

The Alcohol Injury Fund

A B (Sebastian) van As, Charles D H Parry, Mark Blecher

Ethyl alcohol, the drinkable form of alcohol, has many facets. It may be a social lubricant, a sophisticated dining companion, a cardiovascular health benefactor, or an agent of destruction. Although international data suggest a trend towards decreasing consumption in most developed countries since 1980 (with the exception of Japan and some parts of the former Soviet Union), a steady rise in alcohol consumption in most developing countries has been recorded, albeit from a low base.[1] In stark contrast to the image its advertising portrays, the effects of alcohol are detrimental to many members of society. The negative effects of alcohol usually take place through intoxication, misuse and dependence. Besides chronic health and social problems associated with alcohol dependence, intoxication is a major factor in acute negative outcomes such as motor vehicle injuries and interpersonal violence.

South Africa suffers particularly heavily from negative consequences associated with the use of alcohol. Trauma is the leading cause of admission to hospitals in all South African provinces and the leading cause of childhood deaths.[2] A South African multicentre study demonstrated that over half of all patients presenting to trauma units were victims of violent injuries (A Plüddemann, C Parry, H Donson *et al.* — unpublished data). Across sites and for each respective year of the survey, between 35.8% and 78.9% of patients tested positive for alcohol. In 1999, between 16.5% (Durban) and 67.0% (Port Elizabeth) of patients had breath alcohol concentrations of 0.05 g/100 ml or more. The study concluded that efforts to combat the abuse of alcohol are paramount in reducing the burden imposed by injuries on the health care services.

According to the third annual report of the National Injury Mortality Surveillance System,[3] 51.9% of patients who died in a transport-related accident had an elevated blood alcohol level. In the majority of these cases (91.0%) the level was above 0.05 g/100 ml. Pedestrians and drivers had the highest proportions with positive blood alcohol levels. Of all homicides (the most common cause (44%) of non-natural death, as opposed to 27% for transport-related injuries), 52.9% were alcohol-related and the blood alcohol level was above 0.05 g/100 ml in 89.1% of these. Of all firearm-related deaths 42.8% were alcohol-related; figures for other causes of death were 76.7% for stabbings with sharp objects, 53.8% for assaults with a blunt instrument, 26.4% for strangulation and 44.5% for burns.[3] Recently the strong correlation between intimate partner abuse and alcohol abuse by the male partner has also been reported.[4,5] Alcohol is also an important co-factor for high-risk sexual behaviour and HIV transmission, a wide range of social problems within the welfare system, and violent crimes affecting all departments in the Justice and Protection cluster.

A conservative estimate of the health and other social costs associated with alcohol abuse in South Africa is R9 billion per year or 1% of the country's gross domestic product.[6] Excise duties on alcoholic beverages will collect approximately R4.2 billion in 2003/4.[7]

We argue that existing government programmes and interventions have been insufficient to address the extent of this public health problem, and call for a much more robust and comprehensive government programme to tackle it. Such a programme should be based on interventions that have been demonstrated internationally to be effective. These include dealing with under-age access and decreasing access through a coherent liquor outlet policy (also bringing shebeens into a regulated framework). Greater use should be made of random breath testing of drivers and, in cases of trauma, addressing drinking and driving more aggressively through increased random breath testing and a graduated driver licensing policy (much lower allowable alcohol levels in the first 3 years after obtaining a licence). Attention should be given to screening and motivational interviewing at primary health care centres, counter-advertising, and enforcing existing legislation, for example around public drunkenness and the 'dop' system.[8,9]

Internationally price has been widely shown to be an important determinant of consumption, and excise taxes are a key factor in price. Price elasticity of demand for different forms of alcoholic beverage is between –0.3 and –0.98 (i.e. a 10% price increase results in a 3 - 9.8% decrease in quantity demanded).[10] Setting levels of excise taxes requires great wisdom given the large potential trade-offs. The beer and wine value chains contribute over R35 billion in turnover and employ over 660 000 people.[10] The two main justifications for increasing excise taxes on alcohol are to correct for externalities associated with alcohol consumption that are not currently being paid for by alcohol consumers, and to raise revenue for

Dr Sebastian van As is Head of the Trauma Unit at the Red Cross War Memorial Children's Hospital and Director of the Child Accident Prevention Foundation of Southern Africa. Dr Charles Parry is Director of the Medical Research Council's Alcohol and Drug Abuse Research Group. Dr Mark Blecher is Director, Social Services, in the Department of Finance. This paper is written in Dr Blecher's individual capacity.

programmes to reduce the social burden associated with alcohol abuse. The National Treasury has recently undertaken a comprehensive review of taxation of alcoholic beverages.[10] On the basis of this review the level of tax (excise plus VAT) has been increased for beer from 30.7% of the retail selling price in 2001 to 33%, for wine from 20.2% to 23% and for spirits from 38.6% to 43%. These increases are to be welcomed. However, we question whether they go far enough.

The review quotes Stiglitz,[11] Rosen[12] and Walsh,[13] who argue that such taxes should present individuals and firms with the true social costs of their actions. Marginal social costs should equate to marginal benefits in order to adequately control negative externalities and to bring the value of an additional unit of consumption in line with its social costs. Levels of excise taxes are approaching international levels, but not in all cases. In the case of spirits, for example, they are still significantly lower (43% versus 51 - 58%). Our main concern, however, is that the level of social costs in South Africa, given extremely high levels of alcohol-related violent trauma and accidents, far exceeds that of most other countries. This suggests that our excise taxes need to be higher to achieve the correct balance between benefits and costs. We recognise that smuggling of alcohol and consumption of unhygienic concoctions may occur if prices are increased too much. Parry *et al*.[6] have made the case for increasing excise taxes on beer to near the international average, instituting a moderate increase in the excise taxes on wine and spirits (by 2 - 3 percentage points) to narrow the current gap between local and international excise tax levels, and pegging the tax on sorghum beer and sorghum powder to 50% that of malt beer. They also support the National Treasury's policy of pegging the excise tax on alcoholic fruit beverages and ciders to that of malt beer, and spirit coolers to the same level as that of spirits.

Expenditure on a range of intervention programmes needs to be increased. Primary prevention activities, drug and alcohol treatment and rehabilitation units and interventions described earlier are in many cases non-existent or operating at far below required levels.[14] Trauma units filled with pathologies associated with alcohol have insufficient equipment and resources.

Should funding from excise taxes be more specifically linked to specified expenditures? Parry *et al*. have argued for increased excise taxes to be specifically allocated for the prevention and treatment of problems caused by the misuse of alcohol, including alcohol counter-advertisements, funding alternatives to liquor industry-funded sports sponsorships, community-based prevention programmes targeting high-risk groups (e.g. motor vehicle drivers and pedestrians), and treatment programmes for young people.[6] They indicate that increased funding for alcohol intervention could occur directly via an earmarked tax, or indirectly following applications by provincial departments of Health and Social Services).[6] Van As has recently argued the case for the establishment of an alcohol injury fund (along the lines of the Road Accident Fund) to specifically compensate victims of trauma by paying for health costs and other damages suffered (Van As AB — 'The alcohol injury fund', unpublished paper, 2003). Such victims are frequently poor and have little recourse to bringing legal action for compensation. A prerequisite for claiming from the fund would be proof that the perpetrator was under the influence of alcohol while inflicting the injury. This could be performed by a breathalyser test, followed by a blood test for alcohol if positive (performed by a district surgeon on instruction from the police). This will encourage alcohol testing and create a climate of more awareness, which in itself might lead to fewer alcohol-related injuries. This follows a similar logic to that of the Road Accident Fund.

Amalgamating these two proposals would result in an expansion of the idea of an Alcohol Injury Fund for victims of alcohol-related trauma to provide a broader base of funding of victims as well as for needed equipment for beleaguered trauma units, funding for substance abuse treatment centres (particularly for young persons and residents of previously disadvantaged areas where there is a lack of services),[14] and primary prevention at a community level aimed at reducing the burden to society associated with alcohol-related injuries. This would also be in accordance with the point made in the Draft National Liquor Policy that we should move towards a 'polluter pays' policy.[15]

These types of earmarked excise taxes for alcohol are fairly unusual internationally and exist, for example, in only two countries in Europe.[16] However if government programmes to address this serious public health programme continue to lag behind, such calls for dedicated financing will become increasingly loud. The time has come for stronger government action on alcohol.

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