

The Australian Wine Research Institute



Thursday, 29 May 2008

The Secretary,
Senate Community Affairs Committee
PO Box 6100
Parliament House
Canberra ACT 2600

Dear Mr Humphery,

Senate Community Affairs Committee Inquiry into ready-to-drink alcohol beverages

Thank you for the opportunity to comment on, and address issues with, the terms of reference of the Inquiry.

Price as a measure of reducing risky alcohol consumption

Over the past two decades, numerous studies have been published which have analysed whether price is a determinant of alcohol consumption (Cook 1982; Maynard 1988; Progue *et al.* 1989; Collins *et al.* 1991; Richardson *et al.* 1994). Some of these studies have built on the Kreitman Theory, whereby increased taxation based on alcohol content and hence increased selling price of an alcohol beverage, decreases the total alcohol consumption of a population and, therefore, decreases alcohol abuse in a population (Kreitman 1986). This also equates to a reduction in alcohol-related costs (Richardson 1989; Crowley *et al.* 1991). Implementation of the theory is problematic (Richardson *et al.* 1994) and studies to date have been methodologically imperfect.

For example, many of the studies consider the individual alcoholic beverages, that is, beer, wine and spirits, separately and do not examine the possibilities for beverage substitution in response to selective tax increases (Maynard 1988). Alcohol is a complex good composed of different types and qualities. While certain consumers respond to price increases by altering their total consumption, others vary their choice of type or quality. Indeed significant reductions in sales have been observed in response to price increases but these reductions were mitigated by significant substitutions between beverages types of qualities (Gruenewald *et al.* 2006).

While it can be demonstrated that the mean consumption of alcohol correlates with the prevalence of excessive alcohol consumption in a population (Rose *et al.* 1990), a reduction in total alcohol consumption results from some and not necessarily all individuals in a population consuming less. Unless the effect of the policy on the consumption by alcohol abusers is known specifically, such a policy can be regarded as a social experiment rather than a scientific prescription (Duffy 1977). Indeed when studies have evaluated whether prices have a differential

Waite Road Urrbrae
Correspondence:
PO Box 197
Glen Osmond, SA 5064, Australia
Telephone 61 8 8303 6612
Facsimile 61 8 8303 6601

effect on light, moderate and heavy alcohol consumption, the results suggest that both light and heavy alcohol consumption are much less price elastic than moderate consumption (Manning et al. 1995).

Indeed, as Skog remarked in 1980 and which was reiterated by Duffy in 1980, the necessity is to obtain direct evidence of the effect of specific control policies on the consumption habits of heavy drinkers. Hypothetical examples illustrating the 'effects' of hypothetical policies capable of halving or doubling the *per capita* consumption are of little value, particularly when they are also based on untenable statistical assumptions (Duffy 1980; Skog 1980).

Furthermore, econometric analysis of aggregate alcohol consumption shows that income, rather than price, is a main source of variation over time in consumption. The decline in alcohol consumption in Ireland in the mid 1970s and in the early 1980s was due to recession and high unemployment rather than to tax-induced price increases (Walsh 1987).

Alternative measures to reduce risky alcohol consumption

Research suggests that telling an individual that a behaviour is harmful or providing information about the risk associated with a behaviour is insufficient to affect an individual's actions. In addition, increasing an individual's knowledge about a health risk does not necessarily cause that individual to change or modify negative or risky behaviour (Engs 1989).

It is considered that product warnings cannot readily and reliably be targeted to 'high risk' groups and individuals, such as excessive consumers of alcohol, whether regular consumer or 'binge drinkers'. The personal experiences affecting judgements of personal risk, motivations for high risk behaviour and the individual pharmacological and physiological properties of, and responses to, alcohol, all make the design of warnings that are effective with these individuals difficult. Young people, for example, who are considered to be an 'at risk' group, may have difficulty in judging or perceiving risks associated with alcohol consumption. This is because if an event has not occurred to an individual, and he/she cannot associate an event with a certain risk, then the individual may perceive that the risk may not occur in the future—that is, the risk is not related or relevant to them personally (Patterson *et al.* 1992). Also, 'at risk' individuals apparently give greater weight to uneventful experiences with alcohol interpreted to indicate that it carries low risk (Cvetkovich and Earle 1994, 1995). Indeed, the possibility that there are different reasons and motivations for high-risk behaviour makes it difficult to target messages to these individuals. Heavy alcohol consumers also perceive the risk of alcohol-related harm as low and less believable (Andrews et al. 1991, Andrews 1995) than do light alcohol consumers.

Personal susceptibility or relevance is also affected by a range of social and psychological factors, which act to establish the context of the judgement regarding credibility and hence the eventual effectiveness of the warning label (Cvetkovich and Earle 1995). Indeed, for a health warning label to be effective, it should involve the individual consumer, such that the individual will read the warning and process the information contained in the warning. It should also be relevant to the individual, as well as believable and credible.

Interestingly, a study of alcohol consumption in 34,001 students in Cyprus, France, Hungary, Iceland, Ireland, Lithuania, Malta, the Slovak Republic, Slovenia, Sweden and the United

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Correspondence:
PO Box 197
Glen Osmond, SA 5064, Australia
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Facsimile 61 8 8303 6601

Kingdom participating in the 1999 European School Survey Project on Alcohol and Other Drugs Study (Bjarnason et al. 2003) suggests that adolescent or underage drinking is more common in all types of non-intact families; this was observed in all 11 countries. The adverse effect of living in non-intact families is greater in societies where alcohol availability is greater and where adolescents drink more heavily. A combination of school-based approaches, involving curricula targeted at preventing alcohol, tobacco, or marijuana use and extracurricular approaches, offering activities outside of school in the form of social or life skills training or alternative activities, may be effective in reducing underage drinking (Komro and Toomey 2002).

Overall, however, the usefulness of international data in Australia is limited as the observations are not consistent. For example, a study by Engels and Knibbe (2000) suggests that the drinking patterns of young people in Mediterranean countries can be characterized as 'innovative' while those of young people in Northern countries as 'rebellious'. The main health risk associated with the innovative pattern is the volume of consumption and associated chronic consequences, where the main health risk associated with the rebellious drinking is intoxication and the associated risks concerning violence, traffic accidents and acute health consequences.

The School Health and Alcohol Harm Reduction Project (SHAHRP) aimed to reduce alcohol-related harm by enhancing students' abilities to identify and deal with high-risk drinking situations and issues. The SHAHRP study involved a quasi-experimental research design, incorporating intervention and control groups and measuring change over a 32-month period. The study occurred in metropolitan, government secondary schools (13 to 17-year-olds) in Perth, Western Australia. The 14 intervention and control schools involved in the SHAHRP study represent approximately 23% of government secondary schools in the Perth metropolitan area. The sample was selected using cluster sampling, with stratification by socio-economic area, and involved over 2,300 intervention and control students from junior secondary schools. The retention rate of the study was 75.9% over 32 months. The intervention incorporated evidence-based approaches to enhance potential for behaviour change in the target population. The intervention was a classroom-based program, with an explicit harm minimization goal, and was conducted in two phases over a 2-year period. The results were analysed by baseline context of alcohol use to assess the impact of the program on students with varying experience with alcohol. Knowledge and attitudes were modified simultaneously after the first phase of the intervention in all baseline context of use groups. The program had little behavioural impact on baseline supervised drinkers; however, baseline non-drinkers and unsupervised drinkers were less likely to consume alcohol in a risky manner, compared to their corresponding control groups. In line with program goals, early unsupervised drinkers from the intervention group were also significantly less likely to experience harm associated with their own use of alcohol compared to the corresponding control group. Unsupervised drinkers experienced 18.4% less alcohol-related harm after participating in both phases of the program and this difference was maintained (19.4% difference) 17 months after the completion of the program. This study indicates that a school drug education program needs to be offered in several phases, that program components may need to be included to cater for the differing baseline context of use groups, and that early unsupervised drinkers experience less alcohol-related harm after participating in a harm reduction program (McBride et al. 2003).

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Correspondence:
PO Box 197
Glen Osmond, SA 5064, Australia
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Facsimile 61 8 8303 6601

In summary, to change the behaviour of an individual is complex, and price and labelling are simplistic interventions. Interventions to reduce risky alcohol drinking must make an individual:

- feel personally susceptible to a health (or other) risk;
- believe that the risk can cause a significant harm; and
- know what actions can be taken to avoid the harm, and also know the cost or benefit of the actions; if the costs outweigh the benefits, the action to avoid the harm is unlikely to be taken.

Yours sincerely,



Creina Stockley
Health and Regulatory Information Manager

cc. Sakkie Pretorius
cc. Stephen Strachan

Waite Road Urrbrae
Correspondence:
PO Box 197
Glen Osmond, SA 5064, Australia
Telephone 61 8 8303 6612
Facsimile 61 8 8303 6601

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PO Box 197
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Telephone 61 8 8303 6612
Facsimile 61 8 8303 6601

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