ALCOHOL

Research on alcohol education for young people: a critical review of the literature

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THE period since the Second World War has seen adolescence and young adulthood established as stages in the life cycle during which individuals experience novel forms of psychological and social stress. In Europe and North America, public and political debate about substance use in youth is formulated around the notion that this is a problem *for* young people which may be resolved through the provision of *expert* help. As a result, there is an important debate in progress on the relative utility of alcohol control interventions which rely on helping young people to deal with substance use as part of the constellation of 'problems' now associated with youth, as opposed to adopting measures which set out more coercive, structural, constraints on young people's behaviour.

This paper is intended to contribute to this debate. In it, a range of interventions intended to respond to alcohol misuse amongst adolescents and young adults are reviewed. These measures are non-coercive and are characterised by attempts to bring about attitudinal change in target groups, and in so doing to lead to modifications in drinking behaviour. Unlike their structural counterparts, they do not rely on the legislative enforcement of ideas about who may drink and the circumstances in which they may do so. Instead, they revolve around attempts to project a consensus about appropriate and responsible behaviour.

Two major types of non-coercive intervention are reviewed and discussed in this paper. Firstly, measures directed at educating school and college students about alcohol, (and to some extent, other substances), are discussed. Secondly, wider campaigns on alcohol misuse and use which include adolescents and young adults in their target audience are examined.

Facts or skills?

Alcohol education has conventionally been conducted in schools and colleges, for obvious reasons. Although a number of countries, Norway and the USA for example, have long histories of temperance education, it is only in the latter half of the period since the war that education about alcohol has shifted from an explicitly moral frame of reference to one that is primarily concerned with health. The second half of this period has seen the emergence of increasingly sophisticated models of health education which have their basis in psychological theory. In historical perspective, the emergence of a predominantly psychological literature on alcohol education can be characterised in terms of a search for more technically efficient curricular interventions. These have tended to take the form of relatively short-term, experimental or quasi-experimental programmes. Where evaluation of the outcomes of such initiatives has been reported, this has tended to be in terms of self-reports of subjects within target groups. It should be noted at the outset, however, that methodologically sound project evaluations are rarely encountered in this body of literature.

The most common approach to alcohol education in the US and in Europe has been to provide target populations with 'facts' about the consequences of alcohol use and misuse. This does meet adolescents' perceived demands for knowledge[1], but the utility of such interventions is questionable. A number of evaluated programmes have failed convincingly to demonstrate any positive effect either on subjects' attitudes to alcohol use, or on their drinking behaviour. In an important review, Kinder and colleagues[2] concluded that evaluations of early attempts to influence subjects' attitudes to alcohol in this way[3,4,5] failed to demonstrate changes in attitudes or behaviour. Cooke and colleagues[6] did report attitudinal changes, but they note that these were modest and possibly counterproductive. A study of college students' attitudes to alcohol and other drugs[7] was unable to demonstrate any positive effects of an alcohol education programme over a period of three years, either in terms of attitudes to alcohol use, or of actual drinking behaviour.

The ineffectiveness of the provision of alcohol education through what Moskowitz[8] has called a 'facts/values' approach is now widely documented. It is also recognised[9,10] that such interventions may also be counterproductive, encouraging rather than discouraging alcohol use. Nevertheless, such measures remain the primary form of prevention. As Rhodes and Jason[11] have argued:

> *Despite the questionable etiology of this approach, as well as over a decade of research indicating that information alone does not deter or decrease substance abuse, drug education continues to be the most widely used approach to preventing substance abuse.*

The provision of factual information alone relies on the notion that members of the target group are unaware of the consequences of alcohol use and misuse. There is no empirical evidence to support such a supposition, and as Hansen[12] has pointed out, the existing evidence suggests that the reverse is true. A review of studies of alcohol use among young people

in Britain has shown that a large proportion of even very young children have consumed alcohol and have some knowledge of its effects and undesirable consequences[13,14,15].

When evaluated, alcohol education programmes have taken the subjects' *baseline* knowledge of alcohol into account, modest positive effects have been reported, as has been demonstrated in a recent intervention and evaluation by Bagnall[15]. This study is unusual in its comprehensive evaluation and experimental design[16]. In Bagnall's study, student participation was an important feature of the educational intervention finally deployed in schools. Participation by subjects, rather than their passive reception of an intervention, is an important component of success in achieving these, albeit limited, effects. This is borne out in work by Dennison[17,18] who reports that an intervention for college students involving direct experience of persons with alcohol-related problems appeared to induce some degree of behavioural change. Interventions of this type, however, are less practicable for school-age students.

Whilst alcohol education programmes which provide facts and values to a passive target group are now widely seen to be of doubtful utility, measures which involve students *participating* in educational activities have become increasingly popular[19] and are widely perceived to be more effective. The development of such measures has involved the deployment of more sophisticated psychological models of individual behaviour and group processes. This more recent body of 'skills'-based interventions stresses the importance of target groups acquiring the social skills necessary to resist peer pressure to misuse alcohol. Role-playing, or 'acting out' situations which may lead to alcohol or other substance use, is an important component of such programmes. *Social assertiveness training*, reported by Pentz[20]; *Life-skills training*, reported by Botvin[21]; and *Cognitive-behavioural skills training*, reported by Schinke and Gilchrist[22], are examples of such approaches.These interventions are intended to promote healthy behaviours by enhancing self-esteem, self-control and a sense of individual self-worth. Nevertheless, an important recent evaluation of such an intervention by Manuss and colleagues[23,24] has produced disappointing results. The programme concerned was 'intended to enhance students' knowledge of alcohol and its effects, but also to improve self-esteem and decision-making skills and to impart appropriate attitudes regarding the responsible use of alcohol'[23]. A comprehensive evaluation of this intervention was unable to demonstrate any 'appreciable impact'[23]. Furthermore, while peer-led programmes have been widely assumed to have a greater degree of effectiveness than those led by teachers or other instructors,[12,26,27] this study was also unable to demonstrate this.

Although skills-based approaches to alcohol education may be marginally more effective than those which rely solely on the provision of information, reviews and meta-analyses of their results have drawn depressingly negative conclusions[2,8,10,19]. A more serious criticism is made by Schaps and colleagues[25] in a review of 127 alcohol and drug education programmes. They note that fewer than 10 per cent of these had been comprehensively evaluated; only two had any demonstrable effect on substance use, and these were related to tobacco. A similar position is adopted by Moskowitz[9], who argues that poor project design, confused objectives and the failure of many investigators properly to evaluate interventions means that the benefits of such programmes remain unproven.

The assumptions which underpin skills-based approaches need also to be thoroughly questioned[8,23]. Here, the supposition that adolescents use or misuse alcohol because of their lack of social competence or poor decision-making skills, or because of an inability to resist peer-group pressure, has little foundation in empirical research. Moreover, the emphasis on psychological models of behaviour and action has tended to over-determine the individual as the source of behavioural change, neglecting the social contexts in which alcohol use comes to be understood and experienced. Gilliss and colleagues[29] have offered a compelling critique of this individualistic perspective on alcohol education, arguing that such programmes are 'hampered by the cultural myopia that highlights individuals and blurs their family and community contexts.'

An important point needs to be made in relation to this. Whilst alcohol education interventions employing skills-based techniques appear to have very limited effects, tobacco education programmes employing similar techniques seem to have been somewhat more successful[6,30,31]. There are two possible reasons for this. First, in the technical domain of curricular intervention, it may be easier to convey a message about total abstinence from tobacco than a message about responsible drinking, the latter being inevitably characterised by some ambiguity. Second, and perhaps more important, tobacco education initiatives have achieved a greater degree of success in a social climate in which hostility to tobacco use has become more prevalent. In consequence, as Mauss and colleagues[33] observe, these interventions 'fit' with established patterns of adult socialisation in a way not hitherto achieved in alcohol education. The apparent success of some tobacco education interventions, therefore, may be only partially related to their technical efficiency. That these programmes both mediate existing, powerful social norms and reinforce meanings already subjectively attributed to tobacco use by target groups, may also play an important part in their effects.

The discussion of alcohol education so far presented has emphasised the uniformly negative and disappointing outcomes of evaluated programmes. When existing interventions have been properly evaluated, they have been shown to have only modest effects on alcohol-related attitudes and behaviour. There is little evidence to suggest that school or college-based interventions have any significant effect on the target groups' subsequent use or misuse of alcohol. A similar body of evidence pertains to the use of large-scale mass media campaigns. These have routinely been used to convey health promoting messages about alcohol. Such measures offer policy makers

an immediate, highly visible response to social problems, and for this reason are politically attractive[32]. Their efficacy as a means of providing education for *change*, however, remains doubtful.

There is evidence that such campaigns play a role in raising public awareness of a problem, and that they can effect changes in *knowledge* in particular target groups[33,34]. However, a number of reviews have pointed to the accumulating body of evidence which suggests that claims about mass media campaigns being able to achieve attitudinal or behavioural change are exaggerated or inaccurate[8,35,36,37]. It is, of course, much more difficult properly to evaluate the results of a campaign[38] than those of a small-scale classroom intervention. Nevertheless, while some agenda-setting impact may be achieved[39], public awareness of a campaign should not be seen as being synonymous with its effectiveness[40,41]. Research based evidence suggests that such measures achieve little at high cost, and Moskowitz has argued that:

> *In sum, the effects of mass media campaigns appear similar to those of education programs. Knowledge is most likely to be influenced and behaviour least likely*[8].

A similar point has been made by Smart[42] in a review of the effectiveness of alcohol advertising. Studies of the effectiveness of positive messages about alcohol use are subject to the same methodological problems which confront the evaluation of health education messages in the media. Despite this, Smart argues that there is good evidence to suggest that alcohol advertising has only a minimal or inconsistent impact, affecting only some drinkers.

Education or legislation?

The body of international evidence reviewed in this paper is uniformly negative on the prospects of bringing about attitudinal and behavioural change through formal educational interventions. Nor does it suggest that large-scale campaigns are any more effective in reducing alcohol-related problems in this age group. In Britain, as elsewhere, the misuse of alcohol remains a problem for a minority of young people[13,43]. It is important to note, however, that alcohol-related problems in this age group tend not to be the consequence of long-term or systematic alcohol misuse. Instead, they stem from the results of episodic intoxication and its acute social and clinical effects[44].

At the beginning of this paper it was noted that the basis of alcohol-related education is that it is intended to be non-coercive. Such interventions rely on the formulation of ideas about alcohol use and misuse as a problem for individuals. In relation to this, Holder and Giesbrecht have argued that:

> *It is curious that behaviour such as alcohol or drug use, which is highly social, organised in groups, typically takes place in institutional contexts and has strong cultural restraints and inducements, is usually confronted through prevention programmes that focus on the individual. This seems to be a weak response to a highly diverse and broadly based phenomenon*[45].

In the case of alcohol education this may be partially explained through the importance of the notion of peer pressure. As has already been noted, resistance to peer pressure is the central focus of much skills-based health education. Maskell, for example, has pointed out that school courses and home training policies tend to assume that young people will come under pressure to drink at some time in their lives[46]. Similar positions set the tone for much debate about alcohol education. Dorn[47] has argued that such a view reflects political concerns about the reliability of groups. He points to the ways in which the formulation of health education policy in Britain has mediated these political assumptions:

> *The rise of the affective approach to health education has resulted in the production of educational curricula in which the former warnings about alcohol abuse and its dangers are replaced by warnings of 'peer pressure' and the dangers of acceding to it. The shift is from anti-drink to anti-collective sentiments.*

It is important not to over-extend this line of argument. However, given that alcohol use is primarily *social*, it would make sense to regard preventive efforts directed at placing constraints on collective consumption as likely to be more effective than those which focus on problematic relationships between individuals and their reference groups. The case of alcohol-related vehicle accidents offers a compelling example. If deaths of drivers with a blood alcohol content of over 80mg/100ml are taken as a measure, the UK has had outstanding success in reducing mortality, while arrests, cautions and convictions for alcohol-related driving offences are an unreliable guide, since these are skewed by police and prosecuting agency resource allocation and policy. A percentage reduction in the number of fatally injured car drivers of 67 per cent in the 16-19 age group, and 43 per cent in the 20-29 age group, has been achieved since 1980[48]. Amongst all ages the reduction has been in the order of 40 per cent. This has been achieved in a context of education and exhortation being closely linked with increasingly deliberate and focused policing of driving following alcohol consumption. In other words, campaigns and education have formed a background to attempts to restructure collective alcohol consumption. Here, the consequence of combining campaigns and regulation has been the formulation of a set of public attitudes in which combining alcohol with driving has become more generally regarded as irresponsible.

Even so, the relationship between consensual and coercive policy measures is neither self-evident, nor is it clear in the case of alcohol-related driving whether it has been education or regulation that has been the effective element of the policy. What is clear is that structural constraints on alcohol use have an immediate and demonstrable impact on some alcohol-related problems, and that consensus-building or educational interventions do not. This is evinced in Jeff and Saunders'[49] classic study of the relationship between policing practices and the behaviour of drinkers in an English town. In this study, more focused and preventive policing of public houses was shown to be associated with a marked reduction in public order and criminal damage offences. Similarly, upward changes in drinking age have been shown to have positive

effects on levels both of vehicular accidents and of crime[50,51,52,53]. Such measures, of course, depend on the political will to set them in place, and the allocation of sufficient resources to ensure their continued enforcement.

In comparison with the limited effects of alcohol-related education, structural constraints on youthful drinking appear to offer considerable cost-benefits – at least in terms of their effectiveness. Nevertheless, educational interventions remain highly popular. Clearly, such measures are politically attractive, since they place the onus for being responsible with alcohol on the consumer. The important point here is that educational initiatives do not interfere with the operation of the market place: in effect, they address problematic *consumers* rather than products.

New directions for alcohol education?

The thrust of this paper has been to emphasise the limits of the claims that can be made about the utility of alcohol education for adolescents and young adults. This is brought into the foreground when interventions have been tested and comprehensively evaluated.

Second, the question of 'peer resistance' as a basic principle underlying alcohol education has been critically discussed. Models of alcohol education which centre on individuals resisting peer group pressure neglect the extent to which this may check the misuse of alcohol. Here, the normality of alcohol use in western societies has its counterpart in the ways in which collectively-defined norms and values define appropriate drinking behaviour. It is important to emphasise, therefore, the potential importance of peer group pressure as a restraint on inappropriate drinking behaviour. The problem of alcohol-related motor offences, discussed above, would appear to offer just such an example.

Third, it has been noted that educational interventions offer few benefits over structural contraints on alcohol consumption. Conveying ideas about responsible drinking in the classroom may assist, however, in the explanation of legislative controls. Regulation of the market place in which alcohol is produced, distributed and consumed offers a more cost-beneficial means of reducing some alcohol-related problems. However, a substantial minority of young people place their health and safety at risk through alcohol misuse, both accidentally and deliberately. To have any prospect of greater success, alcohol education must attend to the social contexts in which misuse takes place; to the meanings which young drinkers attribute to these; and to their drinking behaviour within them. Although these meanings cannot necessarily be captured through conventional survey research techniques, they are highly responsive to ethnographic and other qualitative research methods[13,47,54,55].

Finally, it should be emphasised that little is currently known about the cumulative effects of sequences of health education initiatives. It has already been observed that in the case of smoking and of alcohol-related driving offences, some beneficial changes have taken place in the last decade. In contrast, patterns of youthful alcohol consumption appear to have remained more or less stable in the UK[13,56,57,58]. Alcohol is almost universally consumed in the 14-24 age group, except in certain ethnic and religious minorities, while the level of alcohol problems encountered within it remains relatively low. In this context, *health* education may not be appropriate for *alcohol* education. Interventions which are directed at minimising accidental trauma or alcohol-related offences may well offer a more cost-effective means of reducing the damaging consequences of alcohol misuse.

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