Community action

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Preventive intervention at the community level

The social, health and economic burdens from alcohol (as well as from tobacco and other drugs) have impacts at both national and local level, and effective interventions are, therefore, needed at each level. A community-based approach can contribute decisively to the success of different types of preventive intervention, increasing their probability of success through the resonance and enhancement provided by the local context.

Rather than focusing on vulnerable individuals or providing treatment for those afflicted, this approach involves a shift from the individual to the societal level. A central aspect of community work is the bottom-up approach and the sharing process, by which local people are considered active contributors to identifying problems and bringing about changes. The prevention expert's task would, therefore, be to give information about non-obvious problems which may be nested in the population, and to favour the expression of local needs, taking into account the readiness of the community to accept or to reframe the preventive initiatives. When the community is ready, the professional can mobilize local resources to increase health awareness and start preventive action. In doing so, he or she needs to connect with local stakeholders and the key people who coordinate local action and contribute to the coalition with the community's organizations and institutions.

In general, community interventions for alcohol-related problems consist of information/ education, enforcement of restrictive rules in existing legislation and mobilization of residents to create preventive initiatives. The *area* of the intervention can be, for example, a group of community schools, the retail sector and restaurants, the traffic sector and the local police, a holiday resort or the overall community.

The *evaluation* can address changes in knowledge (which are difficult to assess clearly in terms of effect on subsequent behaviour of the individuals informed), attitudes about risky behaviour and consumption, and rates of accidents, violence or deaths. Community-based prevention is difficult to evaluate, even when local government funding and involvement is available. Qualitative evaluation is necessary but will not suffice; testable hypotheses, a well-defined time frame, access to high-quality data and an evaluation design, preferably including control communities, are also required (Anderson & Baumberg, 2006).

One of the problems with the scientific literature on community action is that it tends to be positive-thinking and convinced that whatever is done is worthwhile. However, the basic conclusion drawn from community action that has shown an effect is that it was directed at concrete goals, mainly reducing drink–driving casualties, assaults or underage drinking. The involvement of community actors provides a cover and level of acceptance in the community, but what actually works is regulatory enforcement of one kind or another, mainly directed at those who serve alcohol, although sometimes also at drinkers (for example, enforcement of drink–driving regulations).

Successful alcohol preventive community programmes have been implemented in Canada and the United States since the 1970s (Giesbrecht et al., 1990; Greenfield & Zimmerman, 1993), and a decade later they were also implemented in a few European countries (Holmila, 1997; Larsson

& Hanson, 1997; WHO Regional Office for Europe, 1999). Their relative diffusion in Europe was supported by the publication of the WHO European Alcohol Action Plan in 1992 (WHO Regional Office for Europe, 1992), which recommended local action as an important prevention approach. The Malmö community-based study, undertaken during the 1970s in Sweden, was the first European community action project, and it was able to demonstrate that under the right conditions, the positive effects on health can be dramatic. An intervention for heavy drinkers consisting of early identification and brief information, backed up with periodic control of blood gamma-GT, resulted in half the number of deaths that occurred in the control group which did not receive the intervention at six-year follow-up (Kristenson et al., 1983).

Almost all the European countries recently reported that community prevention is part of their current alcohol policy (WHO, 2010; WHO Regional Office for Europe, 2010). This may be an overestimation since, according to data from the ongoing EU-funded Alcohol Measures for Public Health Research Alliance (AMPHORA) project in 2010, only 7 out of 12 countries have community projects aimed at reducing alcohol-related problems (AMPHORA, 2011).

The two most recent and significant books which summarize the available evidence for the new alcohol policies are the *Evidence for the effectiveness and cost–effectiveness of interventions to reduce alcohol-related harm* (WHO Regional Office for Europe, 2009) and the second edition of *Alcohol: no ordinary commodity* (Babor et al., 2010). Both publications concluded that projects based on information do not produce visible changes, even if they can increase knowledge. On the other hand, those that actively involve and mobilize the local population and its organizational forms in different sectors (including the enforcement of existing norms such as prohibition of sales to minors, responsible beverage service and control of drink–driving) can not only increase citizens' knowledge about and attitudes towards the risks of their own drinking, but also limit their purchase and consumption of alcohol and drinking before driving, and eventually reduce alcohol-related harm such as violence and traffic fatalities.

Some recent initiatives have the merit of introducing the community action approach in areas where little prevention work was previously done. Examples are a multi-year community action project in South Tyrol, Italy, about preventive measures to enhance awareness in dealing with alcohol and drugs among children and adolescents as well as their parents (Greca, Schäfferling &, Siebenhüter, 2009); some community programmes in Denmark oriented towards minimizing harm and focusing on risky situations and areas (Elmeland, 2006); and attempts to replicate the United States study of three community trials (Holder et al., 2000) in three United Kingdom cities in 2003 (Hodgson & Davidson, 2008), adopting a community partnership approach.

Programmes that spread public health information about the risk of alcohol can also focus individuals' attention on their own drinking behaviour. An "Alcohol, less is better" community-based prevention programme was carried out in Italy from 1999 to 2006, designed as a controlled intervention trial (Bagnardi et al., 2011). The intervention had the collaboration of community leaders and institutional or volunteer organizations in 10 selected small Italian communities involving more than 100 000 individuals, with the aim of informing and sensitizing the community about the harmful effects of alcohol. Eight communities were chosen as a control group. Overall, a significant reduction in individual self-reported alcohol consumption before and after the intervention was observed in the intervention sample (-1.1 drinks/week) relative to the control sample (+0.3 drinks/week).

Generally, projects that are able to *mobilize the community* and activate its various components, including community members and organizations, and promote grassroots initiatives have been shown to produce different types of positive change in the local population, such as changed

attitudes towards alcohol sales to minors, wider acceptance of public health material, the sharing of local initiatives to promote healthy lifestyles, reduced alcohol consumption and reduced drunkenness. The following are some examples.

- A programme in a holiday resort in the Netherlands during 2004, which involved representatives of the municipality and of the stakeholders who have a role in dealing with excessive alcohol use, was able to increase the attention given to sales to minors and to reduce the nuisance to third parties (van de Luitgaarden, Knibbe & Wiers, 2010).
- A multicomponent community project in Scandicci, Italy, which in 2000–2003 involved several hundred residents (schoolchildren and members of community organizations) in producing and distributing information material locally, gradually increased the awareness of the risks of alcohol in a culture that traditionally has a strong positive attitude towards drinking (Allamani et al., 2007).
- A campaign to distribute health information pamphlets during the delivery of a brief intervention programme to health professionals in Tampere, Finland, which was supported by a community-based approach, turned out to be successful at least in terms of visibility of the material delivered (Kääriäinen et al., 2008).
- A project in Sweden aimed at supporting the local community through a local coordinating committee, which formulated and implemented interventions to reduce heavy episodic drinking and to delay the onset age of alcohol consumption (the 1996–2002 Trelleborg project), was able to show a considerable decrease in alcohol consumption among those adolescents who were excessive drinkers (Stafström et al., 2006; Stafström & Östergren, 2008).
- A quasi-experimental two-and-a-half-year alcohol prevention programme addressed at 900 schoolchildren aged 13–16 years in Örebro, Sweden, and also aiming to influence parents' attitudes towards underage drinking, demonstrated at post-test that young people in the intervention group reported less drunkenness and delinquency (Koutakis, Stattin & Kerr, 2008).

Other multicomponent projects, which included such initiatives as responsible beverage service and stricter enforcement of drink–driving regulations and sales norms, were able to demonstrate reductions in sales to minors and intoxicated patrons as well as in the illegal availability of alcohol, alcohol-related violence, car crashes and even deaths. Examples are given below.

- A multicomponent community intervention to reduce the number of sales to intoxicated individuals and subsequent alcohol-related violence and injuries (Local Alcohol Policy project, or PAKKA in Finnish) was conducted in the Finnish town of Jyväskylä between 2004 and 2007 (Warpenius & Holmila, 2010). A local multi-agency steering group and a working group developed the intervention with the following components: enforcement of norms about liquor licensing, a training programme for alcohol servers, community mobilization and campaigns to reinforce policies and media coverage. In the evaluation, refusal of service to a pseudo-drunk customer significantly increased in the intervention area from 23% in 2004 to 42% in 2007.
- A 10-year Swedish multicomponent programme was also conducted in Stockholm starting in 1996 and based on community mobilization, training in responsible beverage service for servers and stricter enforcement of existing alcohol laws. Data on police-reported violence during the period January 1994 to September 2000 showed a 29% reduction in violent crimes in the intervention area compared with the control area (Wallin, Norstrom & Andreasson, 2001).

- The goal of the quasi-experimental Sacramento Neighbourhood Alcohol Prevention Project in California was the reduction of access to alcohol, drinking and related problems in two low-income predominantly ethnic minority neighbourhoods. The focus was on individuals aged 15–29 years (Treno et al., 2007), with the Sacramento community at large as the control site. The five components of the intervention carried out between 2001 and 2003 included mobilization, community awareness, responsible beverage service, and enforcement of the law on access to alcohol by minors and the law on intoxicated patrons. The results demonstrated the effectiveness of interventions in terms of sales of alcohol to minors, and a reduction in alcohol-related problems such as assaults and motor vehicle crashes.

Community action programmes are implemented within the overall context of national developments and policies which may delimit the scope of action or moderate the effects.

One such was a large community trial conducted in six urban and rural municipalities (and six control communities) in Sweden during 2003–2006, where activities took place with alcohol and drug coordinators at the county level and local coordinators at the municipal level (Kvillemo, Andréasson & Bränström, 2008). The focus of the action plan was to stimulate evidence-based preventive measures at the municipal level in order to reduce problems related to alcohol and drug use. The positive outcomes of the project were: increased commitment and cooperation by local politicians, administrators, police and general practitioners; more responsible beverage service, with less alcohol served to minors in bars and restaurants (a decrease from about 45% in 1997 to about 15% in 2007); and a reduction in the social and illegal availability of alcohol. The communities gradually reoriented their thinking about prevention from a single focus on youth activities to a broader approach involving the whole population. However, after an initial surge, alcohol consumption levels stabilized after 2004, and other problem indicators such as hospital admissions for alcohol intoxication among teenagers, as well as crime indicators, indicate that the alcohol situation developed negatively during the implementation period. These trends might be explained by other non-prevention factors occurring in the meantime, such as a decrease in the price of alcohol, an increase in import allowances and more premises licensed to sell alcohol beverages.

Only a few studies have estimated the *costs* of community action projects or the cost savings achieved. If only mass media campaigns are considered, these interventions are not expensive (Chisholm, 2004). In the Stockholm project on training in responsible beverage service implemented since 1996 (Wallin, Norstrom & Andreasson, 2001), a cost–saving ratio of 1:39 was reached, considering the costs of both the programme (about €796 000) and of violent crimes (Mansdotter et al., 2007).

A systematic review was conducted to determine the effectiveness and economic efficiency of multicomponent programmes with community mobilization for reducing alcohol-impaired driving (Shults et al., 2009). Six studies published between 1994 and 2002 (Rhode Island Department of Health, 1994; Hingson et al., 1996; 2005; Holder et al., 2000; Wagenaar, Murray & Toomey, 2000; Voas et al., 2002) qualified for the review. According to evidence, carefully planned multicomponent programmes (including efforts to limit access to alcohol, particularly among young people, training in responsible beverage service, sobriety checkpoints, public education and media advocacy), when implemented in conjunction with community mobilization efforts, are effective in reducing alcohol-related road crashes.

Three studies have reported evidence that such programmes produce cost savings. A study in Massachusetts, United States (Hingson et al., 1996) showed that the 26 alcohol-related deaths

averted as a result of the programme resulted in savings of approximately US$ 20 million – an estimated saving of US$ 9.33 for each dollar invested. The Community Trials Project (Holder et al., 2000) returned an estimated US$ 6.56 in savings for every dollar invested, while the Community Trials Project comparative study in Salinas, California returned an estimated US$ 15.72 in savings for each dollar invested.

Table 1 summarizes the evidence of the impact of community projects on alcohol published since 2006.

Table 1. Summary of evidence on alcohol community projects published since 2006

Area of project	Evidence
Information/ education and the community	Of the 20 trials included in a Cochrane review of studies on the effectiveness of multicomponent prevention programmes with a combination of school, community and/or family-based interventions in preventing alcohol misuse in school-aged children up to 18 years of age (Foxcroft & Tsertsvadze, 2011), 12 showed some evidence of effectiveness in terms of reductions in alcohol use or heavy drinking compared to a control or other intervention group, with effects lasting from 3 months to 3 years.
Drink–driving and the community	A systematic review was conducted to determine the effectiveness and economic efficiency of multicomponent programmes with community mobilization for reducing alcohol-impaired driving (Shults et al., 2009).According to evidence in the six studies which qualified for review, carefully planned, multicomponent programmes (including efforts to limit access to alcohol, particularly among young people, training in responsible service of beverages, sobriety checkpoints, public education and media advocacy), when implemented in conjunction with community mobilization efforts, are effective in reducing alcohol-related road crashes. Three studies reported evidence that such programmes produce cost savings.
Mobilization and multiple interventions within the community	Projects that are able to mobilize the community and activate its components, as well as community members and organizations, have been shown to produce different types of positive change in the local population, including changed attitudes towards alcohol sales to minors, sharing local initiatives to promote healthy lifestyles, reduced alcohol consumption and reduced drunkenness. When these projects also focused on responsible beverage service and included stricter enforcement of drink–driving and sale norms, they were able to demonstrate reductions of sales to minors or to intoxicated patrons, reductions in illegal availability of alcohol (as in the case of the Swedish six community trial), and a decrease in alcohol-related violence and car crashes (as in the Sacramento study).

Conclusions

Community action to prevent alcohol-related harm is an important area where science can interact with citizens and allow for shared and practical initiatives to improve the public health. Community projects work best when they mobilize different sectors of the community. A community approach can also be a successful support for different alcohol preventive programmes.

To prevent the reduction or disappearance of successful outcomes over time after the end of the project, alcohol (and other drug) community action programmes should also include the means to institutionalize effective prevention efforts, which can be done in cooperation with the local authorities (Holder, 2010).

A consistent and coordinated relationship between local and national initiatives should be sought, and caution should be exercised in transferring specific community programmes developed in one culture or setting to another. They may work well in one context and culture and less well in others where, in any case, they may have a degree of success from different perspectives, such as raising awareness to bring about popular acceptance of certain policies or

changes in consumption (Andréasson, 2010).

Community action and prevention programmes have been criticized as being hardly a science (Gorman, 2010). To meet this criticism, efforts should be made to have programme evaluated by independent scholars so as to ascertain the extent to which the results reported are dependent on the analysis strategies employed by the original investigators.

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