The Role and Effectiveness of Alcohol Policy at the Local Level: International Experiences

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Introduction

At the community level, traditional prevention efforts have emphasized programs such as public media campaigns, alcoholism recovery efforts, and school education. For the most part, local prevention strategies have been program-based, not policy-based. A program strategy generally refers to organized efforts to reduce alcohol problems by training or educating clients or the general public. Individual prevention approaches typically view communities as catchment areas of people. From this catchment area perspective, the community is viewed largely as a collection of target groups with adverse behaviors and associated risks, and prevention operates largely through educational and treatment efforts to reduce the problems with alcohol. The strategy is thus to find and treat or serve those most at risk. No particular structural change is proposed and those outside the targeted groups are not considered.

On the other hand, public policy seeks to prevent alcohol problems through structural change, i.e.. a regulation, law or enforcement priority. Alcohol policies can be implemented at a community level. Thus, a local alcohol policy is any established process, priority, or structure that purposefully alters local social, economic or physical environments to reduce alcohol problems. Examples include making a priority of drinking and driving enforcement by the local police; using local zoning laws and land regulations to control hours of sale or location and density of alcohol outlets, mandating server training for bars, pubs, and restaurants; setting a written policy for responsible alcoholic beverage service by a retail licensed establishment; or allocating enforcement resources to prevent alcohol sales to underage persons.

Thus, rather than attempt to reduce alcohol-related problems through the education and treatment of problem drinkers alone, local efforts can be directed toward affecting policy makers in positions to implement zoning restrictions governing outlet densities. More broadly, collective risk is thus reduced through interventions affecting community processes that influence alcohol use. In alcohol policies at the local level, the community is targeted, not individuals for compelling reasons. First, substance use occurs largely within community contexts. That is, particularly in the case of alcohol, communities provide structures (e.g.. zoning and control of alcohol establishments and their location) through which alcohol is typically obtained. Second, many of the costs associated with alcohol are born collectively at the community level, for example, through traffic crashes, property damage, and alcohol-related violence.

Alcohol Policies at the Local Level

This paper explores (a) the extensive range of actions, priorities, and structures that constitute local alcohol policy and (b) summarizes their effectiveness at the local level to reduce alcohol problems. The former point deserves more comment as local policy takes many forms that relate to alcohol use and thereby to alcohol problems, not simply restricting the retail sale of alcohol. One important example of local alcohol policy is enforcement of laws concerning drinking and driving. Many competing demands are made on local police for enforcement priorities. The priority police give to drinking and driving deterrence can be expressed to the community by the level of attention and resources the police commit to drinking and driving deterrence. This type of administrative (not regulatory) decision is an example of a local policy that can be very effective. Another example of local policy is reflected in the alcohol serving practices of bars and restaurants and the sales of alcohol to underage persons by off-premise establishments. Alcohol serving practices reflect policy whether the policy is written or not for an establishment. A wide definition of alcohol policy goes well beyond the direct regulation of retail sales of alcohol by the government. In this way local prevention alternatives in the community are greatly increased beyond services and programs.

The examples used strategies and approaches that go beyond educational programs to attempt changes in the local social, economic, or physical environment related to risky drinking. Adopting broader environmental approaches, these policy projects differ from more traditional approaches in that they attempt to seek policy change, seek to bring about system level community level change, use the media to target policy makers, and seek to mobilize the broader community to pursue desired changed. While applying policy at the community level has always been promising, only recently have there been systematic attempts to evaluate such efforts (Holder, et al., 1997b; Casswell & Gilmore, 1989). For this reason local policy makers find themselves attempting to implement policy changes in the absence of a scientific basis supporting such change.

The studies presented here generally meet a number of criteria to qualify for inclusion. First, they are community wide, as opposed to targeted at high-risk groups, in their focus. Second, they seek to bring about community level system change. Third, to the extent that they use media strategically, such use is targeted at key community leaders in the pursuit of policy change. Fourth, they seek to mobilize the entire community in the pursuit of such change.

Community policy projects use a systems approach to reduce alcohol problems by changing the community structures that provide the context in which alcohol consumption occurs. These system changes are achieved by local alcohol policies. Even if the control or licensing of alcohol production and sale is at the state or national level, policies at the local level can be used to control the number and site of retail outlets, the enforcement of laws regarding drinking driving and serving to intoxication and various other aspects of drinking likely to affect alcohol use and problems.

Community Action Project (CAP), New Zealand (1982-1985)--0ne of the first community-focused projects was the Community Action Project (CAP) in New Zealand (1982-1985). The CAP was targeted at increasing support among the general public for public policies limiting alcohol consumption as well as promoting attitudes and behaviour supportive of moderate alcohol use (Casswell & Gilmore, 1989), Using a "quasi-experimental" research design, cities were matched in terms of size, ethnic composition and economic level. Of six cities selected, two were exposed to a media campaign only, two to a media campaign plus community action, and two served as controls. A mass media campaign intervention was designed to influence drinking behaviour at the individual level among young males and a print media campaign was used to enhance media advocacy promoting support for restrictions on alcohol advertising and availability (Stewart & Casswell, 1993). The community action intervention was led by a full-time project organiser in each of the two communities. These project organisers worked with local community organisations, particularly local government sectors, in support of project goals. Work with the police and the licensing authorities attempted to restrict alcohol availability via the licensing process. Issues pertaining to alcohol were negotiated with local city councils, including the use of bylaws and placing conditions on leased property such as sports grounds. The project organisers used media advocacy techniques throughout the project, including capitalising on the controversy engendered by the paid media campaigns (both of which were prevented from full publication and broadcast following criticism by the vested interest groups concerned (Casswell, et al., 1989).

While the long-term goal of this project was to reduce alcohol-related problems, such outcomes were not expected as a result of a two year project. The evaluation criteria instead centred first on support for alcohol policies primarily about availability and advertising and targeted social behaviours, measured before and after the intervention using general population surveys. Secondly, the project evaluated conceptualisation of alcohol-related problems and solutions,

using key informant surveys and street interviews. Third, media coverage of alcohol issues was assessed using qualitative and quantitative analysis of local newspaper coverage of alcohol issues.

In regard to support for the policy areas measured in the survey, there was a decline in the control cities in public support, reflecting a national trend towards increasing liberalisation whereas support was maintained in the intervention cities (both media and intensive intervention). Qualitative data from the key informant interviews supported these findings and suggested that policy support was linked to project activities including response to new license applications, work with the police on enforcement and with the local councils on alcohol policy development (Casswell & Stewart, 1989). Media coverage of policy issues was also enhanced in intervention cities (Stewart & Casswell, 1993). Norms about target social behaviours were significantly changed in communities exposed to both media and community organisation compared with the other two conditions. These were concerned with alcohol's effect on fitness and its use to quench thirst and also with the provision of alcoholic and non alcoholic drinks when entertaining (Casswell & Gilmore, 1989).

Community Alcohol Abuse/Injury Prevention Project (CAAIPP)-USA (1984-1989)--The Rhode Island Community Alcohol Abuse/Injury Prevention Project (Putnam, Rocket & Campbell, 1993) was directed toward reducing alcohol-related injuries. Three communities were selected for the study; one community was randomly selected for the intervention while the other two served as controls. The intervention included a 5-hour server training program and policy development for on- and off-premise alcohol sales, enhanced enforcement of liquor and DWI laws, training of police, and community mobilisation activities including mass media and publicity campaigns.

The implementation rate of the server training was high with 61% of servers trained and a very high rate of adoption of house policies by both on-premise (79%) and off-premise (100%) licensed establishments. There was a significant improvement in knowledge following server training and a significant improvement in self-reported serving behaviour that was mostly sustained up until the four-year follow-up (Buka & Birdthistie, 1999).

Outcomes were monitored using twelve survey and surveillance data sets collected pre-post intervention (Putnam, et al., 1993). The results from police and emergency room surveillance indicated a positive impact of the intervention. In particular, the intervention resulted in a 27% increase in alcohol-related assault arrest rates (reflecting increased enforcement) while emergency room visits declined 9% for injury, 21% assault and 10% for motor vehicle crashes with no comparable decline in the control community. However, follow-up data indicated that the increased enforcement brought about by the project was not maintained after the project ended (Stout, et al., 1993).

The Lahti Project-Finland (1992-l995)-- This project, conducted in the city of Lahti, was aimed at the prevention of alcohol-related harm by increasing awareness of alcohol consequences and lowering high risk drinking (Holmila, 1995, 1997). The project involved most sectors of the community and was co-ordinated through the city's health bureau. The core of the project consisted of a local coordinator, information experts, and seven researchers who met approximately every 2 months. The project was composed of multiple prevention components including local approaches to alcohol policy to increase key leaders' perception of alcohol as a social problem, increase brief interventions in primary health care, establish educational events to increase community awareness about heavy drinking, conduct youth community activities to increase knowledge about strength of different drinks and level of drunkenness, conduct parental

education about drinking norms, provide counseling for families of alcoholics, and conduct retail sales surveillance and beverage server training to reduce public violence related to drinking. The evaluation utilizing data from Lahti and two comparison communities before and after the intervention found that the project had increased local newspaper attention to alcohol issues, public perception of alcohol as a social problem, and knowledge of alcohol content and the limits for risky drinking. There was a decline in self-reported heavy drinking (Holmila. 1997).

The Saving Lives Project-USA--The Saving Lives Project was conducted in six communities in Massachusetts and was designed to reduce alcohol-impaired driving and related problems such as speeding (Hingson, et al., 1996). In each community a fulltime co-ordinatorfrom within city government organised a task force representing various city departments. Each project was funded $1 per inhabitant annually to pay for: a local coordinator, police enforcement, program activities and educational materials. Programs were designed locally and involved a host of activities including media campaigns, business information programs, speeding and drunk driving awareness days, speed watch telephone hotlines, police training high school peer-led education, Students against Drunk Driving chapters, college prevention programs, and so on.

The program evaluation involved a quasi-experimental design with five comparison communities as controls which while slightly more affluent than experimental sites had similar demographic characteristics, rates of traffic citations and fatal crashes. Outcome measures were based on telephone surveys of drinking and drinking driving and police statistics on fatal and injury crashes, seat belt use, and traffic citations. Results of the evaluation indicated that during the five years that the program was in operation, cities that received the Saving Lives intervention produced a 25% greater decline in fatal crashes than the rest of Massachusetts, i.e., a 42% reduction in fatal auto crashes within the experimental communities, a 47% reduction in the number of fatally injured drivers who were positive for alcohol as welt as a 5% decline in visible crash injuries and 8% decline in 16-25 year old crash injuries. In addition, there was a decline in self-reported driving after drinking (specifically among youth) as well as observed speeding. The greatest fatal and injury crash reductions occurred in the 16 to 25-year-old age group.

The COMPARI Project--Australia (1992-1995)-- University researchers initiated the Community Mobilization for the Prevention of Alcohol Related Injury (COMPARI) project in the Western Australian regional city of Geraldton. The project was designed to reduce alcohol-related injury by focusing on the general context of alcohol use in the community and not solely on alcoholics or heavy drinkers. The rationale for this global focus was evidence that a large proportion of injuries occur among drinkers who are not alcoholics and sometimes not even chronic heavy drinkers. Project activities addressed five areas: (1) networking and support (e.g., coordinating a local committee on domestic violence); (2) community development (e.g., giving presentations to community service groups related to the prevention of alcohol-related injury); (3) alternate non-drinking activities, e.g., underage youth disco; (4) social marketing (e.g., media campaign presenting safe partying tips); and (5) policy institutionalisation (e.g., implementation of guidelines for licensing applications to serve liquor on council property, the development and delivery of a training package in responsible serving of alcohol).

The project was evaluated using time series statistical techniques, examining wholesale alcohol sales, assaults, traffic crashes, and hospital morbidity. Although one of the harm indicators approached statistical significance, the analyses failed to demonstrate an impact, possibly due to the short length of the follow-up period. On the other hand, the project was highly valued by the community. After completion of the university-managed demonstration project, the project was transferred to local control. It currently operates under a contract awarded by the government

and is the only non-metropolitan alcohol and drug program undertaking community-wide activities in Western Australia (Midford, et al., 1998).

The Surfers Paradise Safety Action Project and Its Replications-Australia (1993-1994)-- The goal of the Surfers Paradise project was to reduce violence and disorder associated with the high concentration of licensed establishments in the resort town of Surfers Paradise in Queensland, Australia (Home!, et al., 1997). The project used a full-time community organiser who formed a steering committee to oversee a number of activities focused on increasing safety in and around licensed establishments. The project involved three major strategies: (1) the creation of a Community Forum including the development of task groups and implementation of a safety audit; (2) the development and implementation of risk assessments. Model House Policies, and a Code of Practice; (3) Improvement in the external regulation of licensed premises by police and liquor licensing inspectors (see Homel, et al., 1997).

The Surfers Paradise project (Homel, et al., 1997) and its replications in three North Queensland cities, Caims, Townsville and Mackay, (Hauritz, et al., 1998) resulted in significant, improvements in policy, in the bar environment, in bar staff practices, and in the frequency of violence. Following the intervention, the number of incidents per 100 hours of observation dropped from 9.8 at pre-test to 4.7 in Surfers Paradise and from 12.2 at pre-test to 3.0 in the replication sites. These results are suggestive of impact; however, they are not conclusive given the lack of a controlled experimental design. Moreover, 2 years following the intervention in Surfers Paradise, the rate had increased to 8.3, highlighting the need for mechanisms that can maintain gains achieved from community action projects (Homel, et al., 1997).

The **CMCA** Project-USA-The Communities Mobilizing for Change on Alcohol (CMCA) was designed to reduce the accessibility of alcohol to youth under the legal drinking age of 21. The project was composed of five core components: (1) influences on community policies and practices, (2) community policies, (3) youth alcohol access, (4) youth alcohol consumption, and (5) youth alcohol problems. The CMCA project recruited 15 communities in Minnesota and western Wisconsin. Communities were matched and randomly assigned to be in the intervention or control condition, resulting in seven intervention sites and eight comparisons, ranging in population from 8,000 to 65,000.

The CMCA project employed a pan-time local organiser within each community to activate the communities to select and implement interventions designed to reduce underage access to alcohol. Such interventions could include decoy operations with alcohol outlets (in which police typically have underage buyers purchase alcohol at selected outlets), citizen monitoring of outlets selling to youth, keg registration (which requires that purchasers of kegs of alcohol provide identifying information thus establishing liability for resulting problems at panics where minors are drinking), developing alcohol-free events for youth, shortening hours of sale for alcohol, responsible beverage service training, and developing educational programs for youth and adults.

Evaluation data were collected before the intervention and about two-and-a-half years after beginning the intervention. These data included a survey of 9th and 12th grade students at baseline, 12th graders at follow-up, pre and post telephone surveys of 18 to 20-year-olds and beverage alcohol merchants, a study using 21-year-old women who appeared to be younger to see if they would be sold or served alcohol without having identification, and monitoring of mass media. Qualitative and quantitative process data were collected to capture how the intervention moved ahead and the obstacles staff and communities faced in reaching their objectives.

Merchant survey data revealed that they increased checking for age identification, reduced their likelihood of sales to minors, and reported more care in controlling sales to youth (Wagenaar, et al., 1996). The study using young looking purchasers confirmed that alcohol merchants increased age identification checks and reduced their propensity to sell to minors. The telephone survey of 18 to 20-year-olds indicated that they were less likely to consume alcohol themselves and less likely to provide it to other underage persons (Wagenaar, et al., 2000), Finally, the project found a statistically significant net decline (intervention compared to control communities) in drinking and driving arrests among 18-20 year olds and disorderly conduct violations among 15 to 17-year-olds (Wagenaar, Murray, & Toomey, 2000).

Community Trials Project-USA (1992-1996)--The Community Trials Project (Holder, et al., 1997a) was a five component community-level intervention conducted in three experimental communities matched to three comparisons selected for geographical and cultural diversity. The five interacting components included: (1) a "Community Knowledge, Values, and Mobilization" component to develop community organisation and support for the goals and strategies of the project: (2) a "Responsible Beverage Service Practices" component to reduce the risk of intoxicated and/or underage customers in bars and restaurants; (3) a "Reduction Of Underage Drinking" component to reduce underage access; (4) a "Risk Of Drinking And Driving" component to increase enforcement efficiency regarding Driving While Impaired and reduce drinking and driving; and (5) an "Access To Alcohol" component to reduce overall availability of alcohol.

Community Knowledge. Values, and Mobilization, which trained key community members in techniques for working with local news media, was associated with a statistically significant increase in coverage of alcohol issues in local newspapers and on local TV in the experimental communities. Increased media coverage was an important mechanism to gain leaders' support of specific alcohol policies and to increase public awareness of drinking and driving enforcement (see Holder & Treno, 1997).

Alcohol Sales to Underage Persons produced a significant reduction in alcohol sales to minors. Overall, off-premise outlets in experimental communities were half as likely to sell alcohol to minors as in the comparison sites following the intervention. This was the joint result of special training of clerks and managers to conduct age identification checks, the development of effective off-premise outlet policies, and, especially, the threat of enforcement of lawsuits against sales to minors (see Grube, 1997).

Responsible Beverage Services yielded an increased adoption of responsible alcohol serving policies in the experimental communities over the comparison communities. There was a nonsignificant but suggestive trend toward reduced alcohol service to heavy-drinking patrons. Such reductions in service may require longer follow-up than was possible at this time (see Saltz & Stanghetta, 1997).

Alcohol Access achieved some of its goals as all communities adopted some aspects of local policies to reduce alcohol access, particularly in addressing the density of on-premise outlets. For example, one community began a ban on new outlets. However, the effect of the alcohol access component will require much longer follow-up to determine whether a significant reduction in the density of alcohol outlets and an associated reduction in heavy or high risk drinking occurred as result of the intervention (see Reynolds, Holder, & Gruenewald, 1997).

Drinking and Driving produced a statistically significant reduction in alcohol-involved traffic crashes over the initial 28-month intervention period from September 1993 (see Voas, Holder, &

Gruenewald, 1997), largely due to the introduction of special and highly visible drink and drive enforcement with new equipment and special training, as well as support from increased news coverage. Alcohol-involved traffic crashes were estimated (via time-series analysis with matched comparison communities) to have dropped by about 10% annually, drink/drive crashes with arrests dropped by 6%, alcohol-involved assault injuries appearing in the Emergency Room of local hospitals declined by 2% and severe assault cases requiring hospitalization dropped by 43% in comparison to control communities (Holder, et al., 2000).

Implications from Community Action Research on Policy Interventions at the Local Level

Community action is essential for increasing local awareness, changing attitudes regarding alcohol use and problems, and increasing support for local alcohol policies (Casswell, 1995;

Holmila, 1997; Holder, et al., 2000; Midford, et al., 1998). The most local alcohol policy projects internationally have focused on specific issues, such as underage drinking (Wagenaar, et al., 1996), drinking and driving (Hingson, et al., 1996; Holder, et al., 2000; Voas, Holder, & Gruenewald, 1997), violence in and around licensed premises (Hauritz, et al., 1998; Homel, et al., 1997) or alcohol injuries (Putnam, et al., 1993). None of these projects decreased overall alcohol consumption or sales, suggesting that community policy approaches may not be useful strategies for decreasing overall alcohol consumption, at least in the short-term, but have high potential to decrease alcohol problems.

Community Mobilization is essential-- Community mobilization in support of alcohol policies to reduce alcohol-related problems typically have the following methods in common:

- a full or pan-time person serves as a community organizer
- the community organizer (and often others on the project) working with local government, businesses, police, etc., to support prevention policies and strategies
- usually local committees are formed to develop or refine policies/interventions and support their implementation
- media advocacy or the use of local news about alcohol issues and public policy as a key strategy.

As part of community action, the process of developing and sustaining alcohol policy approaches encourages local organisations and citizens to participate in and support policies. In this way, community action can result in powerful effects by developing a collection of strategies that work together synergistically.

Media Advocacy Plays important Role-Media advocacy as the purposeful use of local news to support policy initiatives has become an increasingly popular tool in local efforts. This approach complements health and community action campaigns and is based on the view that public health problems are the result of social, economic and political conditions. As noted by Wallack and Dorfman (1996), the two main goals of media advocacy are to gain access to the media to tell an important local story and to frame that story so that it focuses on the policy issues rather than the unhealthy behaviour of individuals. By having newspaper or TV editors and reporters “tell the story” rather than paying for counter-advertising, or preparing PSAs, program staff time and resources can be more efficiently used.

Media advocacy is usually undertaken as a component of a multi-faceted community action initiative (see Stewart & Casswell, 1993) or in connection with regulatory changes, law enforcement, community mobilization and monitoring of high risk behaviour (Treno, et al., 1996; Treno & Holder, 1997; Holder & Treno, 1997). Jemigan and Wright’s (1996) volume

povides case studies of media advocacy, and Stewart and Casswell (1993) provide outcomes from the New Zealand Community Action Project (CAP) carried out in the early 1980s. In the New Zealand study there were positive effects in intervention communities, in comparison with the reference communities. For example, an increase in media coverage of alcohol-related material focusing on moderation and alcohol policy was evident.

Mechanisms/or Change at the Local Level -- Community action projects support interventions whose effects can span several years. Effects can occur immediately and over the long-term. Sometimes, it is not possible to measure ultimate impacts during the timeframe of the project. Therefore, it is important to monitor proximal or mediating outcomes and link these in an overall causal model to long term public health goals. For example, increased enforcement of laws against drink driving and increased local news attention to police enforcement has been linked to increases of perceived risk of arrest which in-turn has been linked to decreases in drinking and driving and subsequent automobile crashes (Voas, Holder, & Gruenewald, 1997; Hingson, et al.,

1996). Merchant training, enforcement of rules and regulations, and local news coverage of policy when used in combination appeared to be instrumental in reducing underage purchases (Wagenaar, et al., 2000; Grube, 1997). Similarly, both training and enforcement may be necessary in order to reduce service to intoxicated patrons (McKnight & Streff, 1994; Saltz,

1997). Finally, decreases in alcohol outlet densities have been linked recently to decreases in automobile crashes (Gruenewald & Johnson, under review) suggesting that community efforts to limit such densities may produce desired outcomes in terms of crashes and resulting injuries and deaths.

Advantages and Disadvantages of Local-Based Alcohol Policy

Enacting policy at the community level has a number of advantages. First, local citizens are close to where alcohol problems are experienced personally. The community must deal with drinking drivers, and injuries and deaths from crashes involving alcohol-impaired drivers. It must provide hospital services and emergency medical services, conduct autopsies, and work with personal rehabilitation and recovery. Alcohol problems are personal experiences for community members, and efforts to prevent or reduce future problems are also a personal matter. Parent groups can be formed around a concern about underage drinking. Such groups can be mobilized to create public pressure against retail alcohol sales to underage persons and against access to alcohol at youthful social events. The consequences of such a policy, if it constrains local retailers or establishes priorities for local police enforcement, are experienced locally. When local policy advocates advance policy positions, they also encounter those who may oppose such policies (also members of the community) who may have vested interests in information dissemination, selling alcohol, and treatment. This means that policy can create, in a local forum, debate between opposing community groups and individuals and thus draw news media attention to such issues,

Funds to support extensive or expensive community alcohol programs are either limited or nonexistent in many countries today. If the implementation of an alcohol policy and its maintenance can be of low or no cost, then local leadership, especially elected officials who have a number of competing demands for tax revenue, may be especially receptive. Local leaders wish to show that they are finding solutions to problems that require little local funds. Low-cost approaches help leaders win elections, increasing their power and influence, and make a real contribution to the community. A policy can be shown to the community to (a) have the potential to reduce alcohol problems, (b) be inexpensive to implement and maintain, and (c) have

local citizen support (even if there is special interest opposition, e.g., local alcohol wholesalers). These three elements are especially attractive to local leaders.

Many strategic alcohol policies have generated evidence of effectiveness (often at the national or state/provincial level) that can be presented to local citizens. Evidence of potential effectiveness within a real community appeals to both citizens and their leaders. In current times, prevention programs are increasingly being asked to demonstrate that they work or have benefit. The research base for many alcohol policies demonstrates what can and cannot work (see Edwards, et al., 1994).

There are also problems and difficulties for alcohol policy at the local level.

First, local alcohol policies are rarely highly visible, lacking lapel pins, balloons, posters, brochures, PSAs, etc. Policies, by their very nature, do not usually naturally generate public spectacles or celebrations. However, news media coverage prompted by media advocacy strategies (Treno, et al., 1996) can stimulate public attention to the need for and support of specific policies. Public activities that bring attention to alcohol problems have a valuable place in a spectrum of prevention strategies, but they are almost certainly never sufficient. However, public activities such as an "Alcohol Awareness Week" produce personally satisfying experiences for citizens and leaders. Such programs generate enthusiasm and public recognition. Policies generally arc not guaranteed to provide immediate persona] satisfaction to their advocates, in the way that a campaign or visible service program can.

Second, local alcohol policies generate controversy. Such controversies occurred in each of the three experimental communities of the U.S. community trial. Unless the local citizens who are supporting and leading efforts to implement special policies are prepared for opposition, the enthusiasm of local groups can be reduced. As opposition grows in response to a local alcohol policy, for example to restrictions on new alcohol outlets, local volunteers can feel torn between wanting to be "good neighbors" and wanting to reduce alcohol problems in the community. This conflict can arise in cases of local restrictions on alcohol retail outlets, stores, or bars and restaurants, and opposition by retailers.

Third, a program that provides services or educational materials is more easily grasped than are proposed changes in local zoning requirements that establish minimum distances between alcohol outlets. Community leaders may require more convincing before they appreciate the importance of local policies. Policies were as easily understood and appreciated by community representatives as were prevention programs or services.

Fourth, policies often take time to work. Increased enforcement of laws prohibiting alcohol sales to minors coupled with manager/clerk training are unlikely to immediately reduce youthful drinking. As a result, local advocates will not necessarily personally experience a quick success. The potential long-term effectiveness of a policy can be difficult for people to accept.

Conclusions

This review of community approaches to the prevention of alcohol problems at the local level can draw important conclusions. The case studies reviewed here demonstrate the potential of a well-defined, theory-driven community action approach to reduce local alcohol problems. Each of these examples, and other local efforts not discussed here, show that local initiatives can be efficacious.

Community action projects are just that, projects that seek to address the total community system and are not naturally limited to a specific target group or service group. These are not projects in which a local program to provide services to a specific target group happens to be located in a community. These are efforts to involve community leadership in designing and implementing and supporting alcohol policies to reduce problems across the community in total.

Recommendations based upon local prevention efforts suggest alcohol problems are best considered in terms of the community systems that produce them. Local alcohol policy strategies have the greatest potential to be effective when prior scientific evidence is utilized. Many of the local projects described here implemented a series of interventions that prior research had indicated were likely to reduce alcohol-related problems. Thus, complementary system strategies that seek to restructure the total alcohol environment are more likely to be effective than single intervention strategies. Finally, prevention strategies with the natural capacity for long-term institutionalization are to be favored over interventions that are only in place for the life of the project.

REFERENCES

Buka, S.L. and Birdthistle, I.J. (1999). Long-term effects of a community-wide alcohol server training intervention. Journal of Studies on Alcohol, 60, 27-36.

Casswell, S. (1995). Public discourse on alcohol: Implications for public policy. In H.D.Holder and G. Edwards (eds.) Alcohol and Public Policy: Evidence and Issues, pp. 190-212. Oxford; Oxford University Press.

Casswell, S. and Gilmore, L. (1989). An evaluated community action project. Journal of Studies on Alcohol, 50, 339-346,

Casswell, S., Gilmore, L., Maguire, V., and Ransom, R. (1989). Changes in public support for alcohol policies following a community-based campaign. British Journal of Addiction, 84,515-522.

Casswell, S. and Stewart, L. (1989). A community action project on alcohol; Community organisation and its evaluation. Community Health Studies, 13(1), 39-48.

Edwards, G., Anderson, P., Babor, T.F., Casswell, S., Ferrence, R., Giesbrecht, N., Godfrey, C., Holder, H.D., Lemmens, P., Makela, K., Midanik, L.T., Norstrom, T., Osterberg, E., Romelsjo, A., Room, R., Simpura, J., and Skog, O.-J. (1994), Alcohol Policy and the Public Good. New York; Oxford University Press.

Grube, J.W. (1997). Preventing sales of alcohol to minors: Results from a community trial. Addiction. 92(Supple. 2), S251-S260.

Gruenewald, P.J. and Johnson, F.W. (under review). Drinking, driving and crashing: A traffic flow model of alcohol-related motor vehicle accidents. Addiction.

Hauritz, M., Homel, R., McIlwain, G., Burrows, T., and Townsley, M, (1998). Reducing violence in licensed venues through community safety action projects: The Queensland experience. Contemporary Drug Problems. 25(Fall), 511-551.

Hingson, R., McGovern, T., Howland, J., Heeren, T., Winter, M., and Zakocs, R. (1996). Reducing alcohol-impaired driving in Massachusetts; The Saving Lives program. American Journal of Public Heath, 86(6), 791-797.

Holder, H.D., Gruenewald, P.J., Ponicki, W., Grube, J.W., Saltz, R.F., Voas, R.B., Reynolds, R., Davis, J., Sanchez, L., Gaumont, G., Roeper, P., and Treno, A.J. (November 8, 2000), Effect of community-based interventions on high risk drinking and alcohol-related injuries. Journal of the American Medical Association, 284(18), 2341-2347.

Holder, H.D., Saltz, R.F., Grube. J.W., Voas, R.B,, Gruenewald, P.J., and Treno, A.J. (1997a). A community prevention trial to reduce alcohol-involved accidental injury and death: Overview. Addiction, 92(Supple. 2). S155-S171.

Holder, H.D., Saltz, R.F., Grube, J.W., Treno, A.J., Reynolds, R.I., Voas, R.B., and Gruenewald, P.J. (1997b). Summing up: Lessons from a comprehensive community prevention trial. Addiction, 92(Supple. 2), S293-S301.

Holder, H.D. and Treno, A.J. (1997). Media advocacy in community prevention: News as a means to advance policy change. Addiction, 92(Supple. 2), S189-S199.

Holmila. M. (ed.) (1997), Community Prevention of Alcohol Problems. London: MacMillan Press, Ltd.

Holmila, M. (1995). Community action on alcohol: Experiences of the Lahti Project in Finland. Health Promotion International, 10(4), 283-291.

Homel, R., Hauritz, M., Worthley, R., Mcllwain, G., and Carvolth, R. (1997). Preventing alcohol-relating crime through community action: The Surfers Paradise Safety Action Project. In: Policing for Prevention: Reducing Crime. Public Intoxication, and Injury. Crime Prevention Studies, 7, pp. 35-90. Monsey, NY: Criminal Justice Press.

Jernigan, D. and Wright, P.A. (1996). Media advocacy: Lessons from community experience. Journal of Public Health Policy, 17(3), 306-329.

McKnight, A.J. and Streff, P.M. (1994). The effect of enforcement upon service of alcohol to intoxicated patrons of bars and restaurants. Accident Analysis and Prevention, 26, 19-88.

Midford, R., Boots, K., Masters, L., and Chikritzhs, T. (1998). Time series analysis of outcome measures from a community alcohol harm reduction project in Australia. Presented at the 1998 Kettil Bruun Society's Fourth Symposium on Community Action, Research and the Prevention of Alcohol and Other Drug Problems, Russell, New Zealand, February 8 to 13.

Putnam, S.L., Rockett, I.R.H., and Campbell, M.K, (1993). Methodological issues in community-based alcohol-related injury prevention projects; Attribution of program effects. In T.K. Greenfield and R. Zimmerman (eds.) Experiences with Community Action Projects: New Research in the Prevention of Alcohol and Other Drug Problems, pp. 31-39. Rockville, MD: Center for Substance Abuse Prevention.

Reynolds, R.I., Holder, H.D., and Gruenewald, P.J. (1997). Community prevention and alcohol retail access. Addiction, 92(Supple. 2), S261-S272.

Saltz, R.F. (1997). Prevention where alcohol is sold and consumed: Server intervention and responsible beverage service. In M. Plant, E. Single, and T. Stockwell (eds.) Alcohol: Minimising the Harm, pp. 72-84. London: Free Association Books, Ltd.

Saltz, R.F. and Stanghetta, P. (1997). A community-wide responsible beverage service program in three communities: Early findings. Addiction, 92, S237-249.

Stewart, L. and Casswell, S. (1993). Media advocacy for alcohol policy support: Results from the New Zealand Community Action Project. Health Promotion International, 8(3), 167-175.

Stout, R.L., Rose, J.S., Speare, M.C., Buka, S.L., Laforge, R.G., Campbell. M.K., and Waters, W.J. (1993). Sustaining interventions in communities; The Rhode Island community-based prevention trial. In T.K. Greenfield and R. Zimmerman (eds.) Experiences with Community Action Projects: New Research in the Prevention of Alcohol and Other Drug Problems, pp. 253-261. Rockville, MD: U.S. Department of Health and Human Services.

Treno, A.J., Breed, L., Holder, H.D., Roeper, P., Thomas, B.A., and Gruenewald, P.J. (1996). Evaluation of media advocacy within a community trial to reduce alcohol involved injury: Preliminary newspaper results. Evaluation Review, 20(4). 404-423.

Treno, A.J. and Holder, H.D. (1997), Community mobilization: Evaluation of an environmental approach to local action. Addiction, 92(Supple. 2), S173-S187.

Voas, R.B., Holder, H.D., and Gruenewald, P.J. (1997). The effect of drinking and driving interventions on alcohol-involved traffic crashes within a comprehensive community trial. Addiction. 92(Supple. 2), S221-S236.

Wagenaar, A., Murray, D., Gehan, J., Woofson, M., Forster, J., Toomey, T., Perry, C,, and Jones-Webb, R. (2000). Communities mobilizing for change on alcohol: Outcomes from a randomized community trial. Journal of Studies on Alcohol, 61, 85-94.

Wagenaar, A., Murray, D., and Toomey, T. (2000). Communities mobilizing for change on alcohol (CMCA); Effects of a randomized trial on arrests and traffic crashes. Addiction, 95, 209-217.

Wagenaar, A.C., Toomey, T.L., Murray, D.M., Short, B.J., Wolfson, M., Jones-Webb, R. (1996). Sources of alcohol for underage drinkers. Journal of Studies on Alcohol, 57(3), 325-333.

Wallack, L. and Dorfman, L. (1996). Media advocacy: A strategy for advancing policy and promoting health. Health Education Quarterly, 23(3). 293-317.