POLICIES TO PREVENT ALCOHOL PROBLEMS: A RESEARCH AGENDA FOR 2010-2015

AUTHOR
HAROLD D. HOLDER, PH.D.
PACIFIC INSTITUTE FOR RESEARCH AND EVALUATION

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Advisory Board

Members of the Advisory Board include policy researchers and experts in all aspects of substance abuse—alcohol, tobacco, and drugs.

Introduction

The goal of alcohol prevention research is to reduce alcohol-involved problems at the family, neighborhood, community, state, and national levels. Alcohol problems are both acute (closely connected in time to the drinking event) and chronic (resulting from long-term exposure to ethanol). Acute alcohol problems include (1) traffic crashes involving injury or death to the driver or others; (2) non-traffic injuries and fatalities, such as falls, fires, poisonings, or drowning, as well as violent events resulting from domestic conflict or public assaults in which either the perpetrator or the victim has been drinking; and (3) the consequences of unprotected sex. Regular heavy consumption can lead to dependence and can substantially increase the risk of health problems, especially liver disease and certain cancers.

This research agenda for alcohol prevention should be viewed within the context of the "prevention paradox." This paradox suggests that while alcohol dependent persons have the highest individual risk of alcohol problems, moderate and heavy nondependent drinkers account for more total alcohol problems, especially those of an acute nature, because there are so many more such drinkers compared to dependent drinkers. Therefore, a much wider public health perspective for policy research is essential, and this identification of research priorities has focused on alcohol-involved problems or high-risk drinking where the individual drinkers have not been identified by the recovery, treatment, or health screening systems. The biggest future challenge for alcohol policy research is population-level alcohol problem prevention (a public health perspective).

It is important to define alcohol policy. For the purposes of this document, alcohol policy at any level is aimed at reducing alcohol-involved problems; that is, the policy is used to produce changes in the drinking environment or setting. In turn, changes in the environment can cause changes in drinking behavior, such as drinking before or while driving, or underage drinking. Examples of alcohol policy approaches include establishing written policies and staff training for responsible alcoholic beverage service by a retail licensed establishment, or restrictions on local density and location of alcohol outlets. See reviews and discussions of alcohol policy effectiveness in Babor et al. (2003, in press), Wagenaar and Toomey (2000), and Toomey and Wagenaar (1999). These and other research reviews confirm that there is a considerable existing body of evidence concerning the effectiveness of specific national, state, and local alcohol policies.

The Substance Abuse Policy Research Program (SAPRP) has funded many of the landmark studies in alcohol prevention policy during the last 15 years. The program, as funded by the Robert Wood Johnson Foundation, is coming to a close. But the focus on alcohol prevention policies needs to continue. SAPRP has helped create a field of alcohol prevention policy researchers. This research agenda will guide their efforts, the efforts of new researchers entering the field, and those of the many federal and private funders who have a stake in reducing the harm caused by alcohol in the United States and in many other parts of the world.

Key Alcohol Prevention Policy Issues for 2010 to 2015

The following summarizes key issues that should stimulate alcohol prevention policy research from 2010 to 2015. While many priorities exist and much more needs to be understood about the effectiveness of specific alcohol policies, the alcohol policy research priorities cited here reflect new or under-developed areas of research that are judged to be highly relevant to needed policy change. They are organized into domains identifying the highest alcohol policy research priorities at the international, national, state, provincial, and community levels.

I. International Trade Agreements

International trade agreements or economic unions (such as the European Union) can place restrictions or limitations on the ability of nations, states, provinces, or communities to regulate the retail sale of alcohol under terms of "restriction of retail trade."

What we know.

Many international trade agreements and economic treaties have been signed in order to promote the free trade between countries, including more than 127 agreements registered at the World Trade Organization (WTO) (Andriamananjara 2001). At the global level, multilateral trade agreements are now the business of the WTO, which in 1995 succeeded the General Agreement on Tariffs and Trade (GATT) which had been signed in 1947. The WTO includes GATT's 120-plus countries and represents almost 90% of world trade (http://www.wto.org, visited 27.10.08).

One such agreement, the North American Free Trade Agreement (NAFTA) between Canada, Mexico, and the United States, went into effect in 1994 and includes products as well as services. Most treaties do not make provision for alcohol as a special commodity with public health and safety implications, and increasingly the WTO and the European Union (E.U.) consider any restrictions on the free movement of alcohol to be illegal under the terms of free movement of goods, which could have serious consequences for national and local efforts to restrict the sale of alcohol.

A number of international trade agreements and economic treaties have already affected the activities of state enterprises and monopolies. For example, Finland, Iceland, Norway, and Sweden were compelled to abandon their import, export, wholesale, and production monopolies for alcoholic beverages when they entered the European Economic Area (EEA) Agreement, although they have managed to retain their off-premise retail monopolies for alcoholic beverages (Holder et al. 1998). Also, trade complaints by the E.U. and the U.S. under the GATT about the operation of Canadian provincial alcohol monopolies resulted in a weakening of the Ontario monopoly and a decrease in the minimum price for beer (Giesbrecht et al. 2006). E.U. oversight of retail licensing procedures has also weakened the control of private retail sales outlets for alcoholic beverages, thus potentially blocking an important public health policy, i.e., restricting licenses as a means to reduce over-selling or heavy drinking.

What we need to know.

Alcoholic beverages are almost always treated like normal consumer goods under international trade agreements and economic treaties. But these trade agreements have the potential to weaken alcohol prevention policies. Unfortunately, other than general discussions about international trade and legal observations, we lack specific policy analyses and empirical evidence (Babor et al. 2003, in press; Grieshaber-Otto et al. 2000).

International Trade Agreements
Priority Research Questions 2010-2015

1. What major provisions or legal regulations within international trade agreements pose the greatest challenge and threat to efforts by nations, states, provinces, and communities to regulate alcohol as a public health concern?

2. How can international tax levels for alcohol be established which can reduce cross-border importing of cheap alcohol?

3. What policy strategies can be contained in international trade agreements which will reduce smuggling, including establishing common standards of enforcement across nations?

4. What policy strategies exist which can limit or abolish agricultural subsidies for the production of alcoholic beverages?

5. What policy alternatives exist which can establish a restriction or abolishment of duty-free travelers' allowances for alcohol and tax-free alcohol sales?

II. National/State/Provincial/ Community Prevention

One of the challenges in spending government or private funds for prevention is to ensure accountability. Policies to prevent alcohol problems could ensure accountability by requiring or supporting the idea that prevention programs or efforts are based upon epidemiological evidence of incidence and prevalence. Accountability could also be increased by requiring scientific evidence of prevention effectiveness.

Employing the following basic domains as guides for future research is essential: (A) establishment of a uniform set of indicators of problems and harms at the population level (such as the Fatality Analysis Reporting System [FARS] of the National Highway Traffic Safety Administration, and the National Violent Death Reporting System [NVDRS] of the Centers for Disease Control); and (B) creation of a set of tools and capacities which assure that standard epidemiological data are used to determine population level of alcohol problems and ensure the selection and testing of prevention strategies with evidence of effectiveness. Minimum tools and capacities include (1) the establishment of accountability for prevention funds; (2) the development of a practitioner-friendly registry/archive/summary of prevention strategies which prevention decision makers have used to select (and/or further test) effective programs, practices, and policies; and (3) a means to develop local prevention capacity as essential to support/accountability of local implementation of evidence-based prevention strategies.

What we know.

Other than special projects funded by the U.S. federal government, such as the Strategic Prevention Framework State Incentive Grant (SPF SIG), there are currently no national policy requirements that prevention funds spent by states using federal block grant funds be based upon demonstrated epidemiological evidence of the prevalence and incidence of alcohol-related problems. There is also no national policy requirement that prevention funds used by states be spent on demonstrated epidemiological evidence of effectiveness of alcohol prevention.

The actual prevention of alcohol-involved problems at the population level under current prevention practice in most communities has modest (at best) scientific basis. Examples of community-based prevention trials that have demonstrated effectiveness at the population level of alcohol policy include Hingson et al. (1996, 2005), Holder et al. (1997, 2000), Treno et al. (2007), and Wagenaar et al. (2000a, 2000b).

Considerable evidence of effectiveness also exists for specific alcohol policy strategies including minimum drinking or purchase age, lower blood alcohol concentration (BAC) limits and enforcement of drinking and driving laws, responsible beverage service strategies, and use of excise taxes to increase retail price of alcohol.

What we need to know.

There is a need to know the optimal ways by which substance abuse prevention agencies can routinely maintain an epidemiological data base of incidence and prevalence of high-risk drinking or alcohol-involved problems. There is also a need to know how prevention priorities can be established upon empirical evidence of alcohol-involved problems, including testing and determination of prevention effectiveness in reducing priority problem levels. A more detailed discussion of the need for a common evidence base is already available (Holder and Treno 2005).

While the comprehensive prevention trials cited above demonstrate the feasibility of local policy strategies for the community, there is limited knowledge of what mix of strategies is likely to be most effective for local prevention of alcohol problems. Moreover, strategies from these trials typically are not replicated in practice by community prevention professionals. Research-designed trials essentially establish the feasibility or potential effectiveness of local policy prevention strategies, but little is known about the effectiveness of such strategies without researcher leadership. Further, states neither provide nor require evidence of effectiveness of publicly-funded prevention programs utilizing national, state, or local government sources.

There is also limited research on the effects of mixed policy strategies at the local level to reduce alcohol problems, even though there is knowledge about individual strategies. There is currently no systematic policy to support local testing of mixed prevention strategies as a means to inform other localities. One means to increase accountability and utilization of prevention strategies with empirical evidence of potential effectiveness is to establish a policy that all prevention efforts are required to demonstrate feasibility of effectiveness before any funds are committed to them. The highest evidence could be prior scientific studies (evaluations) which are replicated in multiple conditions and have consistently demonstrated the effectiveness of the proposed prevention activity or policy. Short of this standard, the next level of evidence would come from promising scientific research (perhaps not substantially replicated) and theory supporting the potential of the proposed prevention activity to be effective. The lowest minimum level of support should be a clear statement of the theory or conceptual model on which the prevention effort is based. This third level should also require that the scientific evidence from other basic research support the potential of the program to be effective based upon this theory. Research could evaluate the operational elements and the efficacy of this three-tier approach.

The Substance Abuse and Mental Health Services Administration (SAMHSA) has established a registry called the National Registry of Evidence-based Programs and Practices (NREPP) for both treatment and prevention. One of the major limitations of this registry is its emphasis on programs rather than policy. This is illustrated by its definition of the "most rigorous" design where (1) the intervention is compared with one or more control or comparison conditions, and (2) subjects are randomly assigned to study conditions. This condition is close to practically impossible in evaluating mixed prevention policy strategies at the state or local level, and typically the expectation of "subjects" is individuals, which is not central to population-level alcohol policy interventions using a public health approach. The capability to conduct randomized studies of entire communities is quite difficult in practice, especially for prevention practitioners. Further, the types of statistical analyses typically used in the evaluation of community prevention approach emphasize "pre" and "post" measures. As there is increased scientific evidence of the relationship of physical environment (especially location and density of alcohol outlets) to alcohol problems at the neighborhood and community levels (see Gruenewald and Reamer 2006; Stockwell et al. 2005), the potential application of geo-spatial analyses to evaluate the effects of community alcohol policy strategies represents a new opportunity for future research.

While there is inadequate attention to evidence of potential effectiveness, there is even less attention to the cost of prevention activities and, more importantly, relative cost and effectiveness. There are few efforts to conduct cost-effectiveness assessments of alcohol policy strategies (Miller and Levy 2000; Caulkins et al. 1999).

Another major issue is capacity development. Is there a need, for example, for more and better trained prevention professionals (e.g., at the Master's level) to staff and implement effective prevention programs?

National/State/Provincial/ Community Prevention

Population-Level Indicators

Priority Research Questions 2010-2015

1 What are alternative policy options (provisions, regulations, requirements, standards) at the federal level to support or mandate that prevention priorities be based upon epidemiological evidence? What is the relative effectiveness of alternative policy options to impact use of epidemiological evidence?

2 What are the leading valid and reliable set of epidemiological indicators or measures for alcohol-related problems which should be developed and maintained to enable nations, states, provinces, and communities to determine the nature of, extent of, and changes over time in alcohol-involved problems?

National/State/Provincial/ Community Prevention

Accountablilty

Priority Research Questions 2010-2015

1. What is the most effective means to establish a source or archive of prevention strategies with the potential to reduce alcohol problems, for use by researchers and practitioners? How can we build a science base for enabling local and state policy changes and implementation in support of effective prevention strategies which best fit community and/or state needs and cultural contexts?

2. What policy approaches can be used to establish minimum prevention standards for all states, provinces, and communities, but also permit and encourage testing of a mix of effective strategies relevant to local conditions?

3. What are alternative evaluation/research designs that states, provinces, and communities can use to test specific types of strategies or mixes of strategies? What is the potential role of geo-spatial analyses in documenting risk environments and evaluating alcohol policy effects?

4. What combinations of alcohol prevention strategies have the best potential to reduce alcohol-involved problems identified via epidemiology?

National/State/Provincial/ Community Prevention

Accountablilty (continued)

Priority Research Questions 2010-2015

5 What is the relative cost-effectiveness of alternative prevention strategies in reducing alcohol-involved problems? There is a need to determine the cost-effectiveness of major prevention strategies (or mixes of strategies) in terms of cost to implement compared to level of alcohol problem reductions at the population level.

6 Which policies increase the incentives or decrease barriers for local prevention efforts to reduce specific sets of alcohol problems?

7 Are specific state population-level, alcohol-involved problems reduced as a result of policy options to require all states to provide epidemiological evidence of substance abuse problems in submission of the state prevention plan under federal block grants?

8 What is the most effective policy approach to increase the capacity of local prevention practitioners/ professionals to undertake effective prevention strategies? How effective are policies that seek to increase the capacity of local prevention practitioners? Could additional resources and certification requirements for prevention practitioners (for example, as illustrated by state standards for substance abuse treatment counselors) enhance the quality and efficacy of local prevention?

III. Retail Price of Alcohol

Economic research has demonstrated consistently that higher retail alcohol prices are associated with reduced drinking. Price thus provides a means to reduce alcohol problems (and provides an alternative means to increase government revenue).

What we know.

The demand for alcohol, as for many other products, responds both to price and to available income. Retail price as used here simply refers to the retail cost or direct monetary costs of alcohol. Price can be contrasted with the full costs of a product, which also include opportunity costs (such as effort or difficulty in finding a product) as well as monetary costs. As alcohol becomes more expensive, consumption decreases. When it becomes less expensive, consumption increases. Price elasticity refers to the percent change in consumption expected for a unit change in price. Although price is affected by other considerations as well, it most easily indexed to or measured as level of taxation (Young and Bielinska-Kwapisz 2002).

Responses to price changes may differ from one group to another. For example, young people (who tend to have less disposable income) are more responsive to price than older people. Many studies have focused on the relation between taxation or price and alcohol consumption and related problems among youth (Grossman et al. 1994). It has been estimated that increasing taxation on alcohol in the U.S. to keep pace with inflation would lead to a 19% reduction in heavy drinking by youth and a 6% reduction in high-risk drinking (Laixuthai and Chaloupka 1993). Substantial reductions in drinking and driving and alcohol-related traffic fatalities also have been associated with price or tax increases across all beverages (Saffer and Grossman 1987a). It has been specifically estimated that increasing the price of beer (typically the preferred beverage of youth) to keep pace with inflation would reduce youth drinking by 9% and heavy drinking by 20% (Laixuthai and Chaloupka 1993). In contrast to these studies, however, recent research has found no evidence for the effects of taxation and price on alcohol consumption and alcohol-related traffic fatalities, either among youth or in the general population (Dee 1999; Young and Likens 2000).

A simple one-time increase in the excise tax assigned to a unit of absolute alcohol may be insufficient to achieve a long-term policy effect. Trolldal and Ponicki (2005) have suggested that people respond primarily to changes in the full price of alcohol, including opportunity costs. As a result, the demand for alcohol simply based upon price could be less sensitive where regulation is stricter. An example of this was found by Ponicki et al. (2007). Demand for beer and spirits was less price sensitive in states with monopolies on alcohol sales and distribution than in license states where alcohol sales are privatized. In addition, although tax increases may serve as a means to raise the cost of alcohol, consumers may find means to circumvent such increases. They may switch to cheaper forms of alcohol or to cheaper brands (Treno et al. 2006).

What we need to know.

Even with the extensive research evidence of price effects on alcohol-related problems, a number of relevant policy research questions exist. Some of this gap in knowledge comes from the relatively few instances where alcohol prices are purposefully increased to reduce drinking, especially harmful drinking. The Nordic countries of Sweden, Finland, Norway, and Iceland have historically used alcohol price as a means to reduce demand and drinking. This policy has been weakened (but not eliminated) by the requirements of the E.U., of which each is either a member or associated via economic agreement. One state has purposefully increased alcohol prices in the U.S. Alaska in 1983 and 2000 increased state excise states with the purpose of reducing heavy drinking. Wagenaar et al. (2009) evaluated the effect of these price increases and found a significant associated decline in the numbers of deaths caused by alcohol-related diseases. While helpful to confirm the importance of the use of taxes as a public health policy tool, national and state experiments provide insufficient research guidance for the effective use of alcohol price as a practical means to reduce future problems.

Retail Price of Alcohol

Priority Research Questions 2010-2015

1. What alcohol excise tax level is most effective at the national, state/province levels to achieve minimum prevention effects? Are there minimum threshold price levels for achieving prevention effects?

2. What are most effective levels of alcohol retail price by beverage type (beer, wine, and distilled spirits) which represent the level or threshold for obtaining desired price effects—that is, where heavy drinking and alcohol problems are reduced but undesired effects (such as smuggling, illegal production, and theft) are minimized?

3. What factors (political, sociological, or cultural) facilitate or inhibit states from raising alcohol excise taxes?

IV. Physical Availability of Alcohol

Physical availability refers to the ease of access to alcohol through any source, i.e., retail sale and social provision or availability.

What we know.

Retail availability refers to ability to purchase alcohol from commercial sources including on-premise outlets, such as bars or restaurants, and off-premise outlets, such as grocery stores, liquor stores, or other retail outlets licensed to sell alcohol within their community. In general, when retail alcohol is convenient and easily accessible, people drink more and the rates of alcohol problems are higher. Conversely, when alcohol is more expensive (e.g., through taxes), less convenient (e.g., because there are fewer retail outlets), and less accessible (e.g., because of restrictions on drinking age), people generally drink less and problem rates are lower. Social availability of alcohol is a major source of alcohol, especially for youth and young adults. This includes the sharing of alcohol without cost—for example at parties, social gatherings, and through informal networks—as well as obtaining or providing alcohol to underage youth by persons of legal purchase age.

Some countries have special sales regulations for alcoholic beverages, reflecting their status as a commodity that raises special concerns about health, safety, and public order. Thus, retail outlets for the sale of alcoholic products may have general limits on hours of operation or days allowed for retail services and the placement and location of the retail market. Several longitudinal studies have demonstrated that changes in the number of outlets are related to changes in alcohol use. When overall availability is low, the addition of a few outlets can have noticeable effects on drinking. Gruenewald et al. (1993) conducted a time-series cross-sectional analysis of alcohol consumption and density of alcohol outlets across 50 U.S. states. The results suggested that a 10% reduction in the density of alcohol outlets would reduce consumption of spirits 1-3% and consumption of wine by 4%.

One policy tool used by nations and states is selling alcohol in government retail monopolies. The evidence is quite strong that these systems hold down rates of alcohol consumption and alcohol-related problems. A summary of seven time-series analyses of six U.S. states and New Zealand showed a consistent increase in total consumption when government-owned, off-premise outlets were replaced with privately owned outlets (Wagenaar and Holder 1996). Typically, the network of stores in such a government-operated system is sparse rather than dense, and the opening hours are limited. Miller et al. (2006) determined that state retail alcohol monopolies are associated with reduced underage drinking and deaths of impaired drivers aged 20 and younger.

A number of studies have indicated that changing either the hours or the days of alcohol sales can redistribute the times at which many alcohol-related crashes and other alcohol-related violent events occur. For example studies
in Australia found increases in traffic crashes and assaults following extensions of trading hours (Chikritzhs and Stockwell 2002, 2006).

Based on this evidence, it appears that changes in licensing provisions that substantially modify hours of service can have a significant effect on drinking and drinking-related problems overall. These studies suggest that reduced hours and days of sale can have net effects in reducing overall alcohol consumption and problems levels, with the effects concentrated during the times of closure but not matched by counterbalancing changes at other times of the week.

While there are fewer studies that have specifically investigated changes in retail availability on the drinking of underage persons, there is no reason to believe that the general population effects are not generalized to youth. Among college students—many of whom are under the legal drinking age—outlet density surrounding college campuses has been found to correlate not only with heavy drinking and frequent drinking but also with drinking-related problems (Weitzman et al. 2003). Treno et al. (2003) similarly found evidence that outlet density was positively associated with frequency of underage drinking and driving and riding with drinking drivers. A recent study found that perceived compliance and enforcement of underage drinking laws at the community level were inversely related to individual heavy drinking, drinking at school, and drinking and driving, and to use of commercial sources for alcohol by adolescents (Dent et al. 2005). Conversely, students exposed to strongly enforced alcohol policy environments were less likely to binge than youth in areas with less strongly enforced policies. Similarly, students who attend colleges in states that have more restrictions on underage drinking, high volume consumption, and sales of alcoholic beverages, and devote more resources to enforcing drunk driving laws, report less drinking and driving (Wechsler et al. 2003).

There has been increasing evidence that young people continue to drink and incur alcohol-related problems. Thus underage drinking continues as a priority area including the new evidence that the younger the age of drinking initiation, the greater the risk that the drinker at some time in life will develop an alcohol disorder (alcohol abuse or dependence) as well as incur health and safety problems, including drinking and driving crashes, even in teenage and young adult years (Grant and Dawson 1997; Grant 1998; Hingson et al. 2000, 2001, 2002, 2003a, 2003b, 2005). This finding from the U.S. has been replicated in international studies from other countries (e.g., Pitkänen et al. 2005). Studies of alcohol regulations suggest that restrictions on the physical availability of alcohol, including retail availability, can contribute to the reduction of alcohol-related problems, especially for underage persons. Specific effective policies include reductions in the hours and days of sale and the number of alcohol outlets, as well as restrictions on access to alcohol (Babor et al. 2003, in press).

What we need to know.

Much emphasis has been placed over the past 30 years on underage drinking and drinking-problem prevention including school and family educational programs as well as policy strategies focused on legal/regulatory approaches for retail sales and service (Grube and Nygaard 2001; Toomey and Wagenaar 1999). Policy strategies have been shown to be effective (Wagenaar and Toomey 2002), and even moderate increases in enforcement can reduce sales of alcohol to minors by as much as 35-40%, especially when combined with strategic media advocacy and other community and policy activities (Grube 1997; Wagenaar et al. 2000a, 2000b). Even with the enforcement against retail sales/service to underage youth, parties, friends, and adult purchasers are very common sources of alcohol, especially for younger drinkers (Harrison et al. 2000; Wagenaar et al. 1996). Paschall et al. (2007) concluded that compliance with underage alcohol sales laws by licensed retail establishments may affect underage alcohol use indirectly, through its effect on underage use of commercial alcohol sources and perceived ease of obtaining alcohol. However, use of social alcohol sources is more strongly related to underage drinking than use of commercial alcohol sources and perceived ease of obtaining alcohol.

We know the impacts of drinking initiation, but what is not known is whether any successful delay of age of drinking initiation can actually reduce subsequent alcohol-involved problems in later ages or even later alcohol dependency. What is needed are longitudinal prevention interventions that are designed to test the potential of such intervention to (a) delay initiation of youth drinking and reduce frequency for youth drinking, binge drinking, and alcohol-related problems for youth and (b) therefore show potential effectiveness to reduce alcohol-involved injuries and death. Such longitudinal research can also study individual and family gene/environment interventions. Unfortunately, the specific modest (at best) effects on youth drinking based upon school and parent programs appear to decay over time. Studies of community alcohol policy in conjunction with school/parent programs are needed to determine the most effective means to sustain this effect and to investigate the potential reductions in youth drinking levels, binge drinking, and associated alcohol-related harm for youth, including violence, injuries, and unprotected sex.

Physical Availability of Alcohol
Priority Research Questions 2010-2015

1. What is the relative effectiveness of alcohol policies designed to reduce social access and availability of alcohol to youth, including party patrols, keg registrations, curfews, and prevention of adult purchases for youth?

2. What sources of alcohol contribute most to drinking, drinking initiation, high volume consumption, and alcohol-related problems? What are effective policies for preventing or reducing Internet sales of alcohol to underage drinkers?

3. What are the most cost-effective levels of restrictions on physical access to alcohol to reduce harms while not stimulating unacceptable levels of counter-behavior, such as smuggling, private production, and provision of alcohol to youth?

4. What is the effectiveness of prevention strategies to delay initiation of drinking by youth? For example, are state-level policies concerning access to alcohol as or more cost-effective in delaying initiation of youth drinking as compared to local-level policies?

Physical Availability of Alcohol *(continued)*

Priority Research Questions 2010-2015

5 What are the environmental, biobehavioral, and genetic factors that promote early initiation of alcohol drinking and transition into harmful use/abuse and dependence? What are the developmental processes and factors over the life course which stimulate or damp after first drink and thus potentially lead to heavy drinking, alcohol-problems, and dependency in adolescence, young adults, and adults? Priority should be given to longitudinal research to determine if actual delay caused by prevention interventions in youthful drinking initiation results in reduced incidence of alcohol dependency, associated health problems, and alcohol-involved acute problems.

6 What are the critical factors which retard adoption of science-based strategies? What are the barriers to policies designed to reduce social availability of alcohol, including resistance of police and government officials in conducting social surveillance and enforcement of alcohol provision?

7 What are the most effective social host responsibility policies and penalties aimed, for example, at parents for providing alcohol to youth? What are key policy factors necessary to maintain existing government retail monopolies as a part of national, state, and provincial strategies to reduce alcohol problems? How can existing government retail monopolies be protected and maintained?

V. Prevention of Intoxication and Over-Service of Alcohol

A major aim of alcohol prevention policy is to reduce current prevalence and levels of intoxication/impairment across all ages and situations.

What we know.

Drinking refers to the consumption of alcohol prior to or concurrent with an activity that requires full concentration and motor skills, such as driving a motor vehicle, walking in traffic as a pedestrian, or managing domestic tasks. Since driving involves multiple tasks, the demands can change continually. Binge drinking, often defined by consumption of five or more drinks within a short time span, is strongly associated with injuries, motor vehicle crashes, violence, fetal alcohol spectrum disorder, chronic liver disease, and several other chronic and acute conditions. Young people who consume alcohol are more likely than adults to binge drink.

What we need to know.

While there is a considerable epidemiological research base as to how intoxication increases the risk of a number of alcohol-related harms, the research knowledge about specific prevention or reduction of this behavior is limited. There is limited knowledge of the relationship of intoxication to domestic violence and conflict, though we have case reports from social workers and law enforcement.

Prevention of Intoxication and Over-Service of Alcohol

Priority Research Questions 2010-2015

1. Which prevention strategies are most effective in reducing heavy drinking and intoxication?

2. What is the most cost-effective mix of training, alcohol serving and selling establishment policy, and enforcement to reduce over-serving to adults in bars and restaurants? What combination of approaches has the greatest potential to reduce high-risk drinking and associated problems such as traffic crashes and violence?

3. What policy strategies can potentially reduce alcohol-related domestic violence (intimate partner violence and child abuse)?

Conclusion

This research agenda is designed to raise numerous critical research questions that will need to be answered in preventing the problems caused by alcohol. New and innovative approaches to reduce the burden of problems associated with alcohol use need to be generated and they need to be debated with the support of an evidence base. The author hopes that this research agenda will advance that process.

The Substance Abuse Policy Research Program (SAPRP) website has syntheses of current knowledge on many important alcohol-related topics. These syntheses are available as "Knowledge Assets" at www.saprp.org.

SAPRP has also developed three other research agendas on tobacco control, drug prevention, and alcohol and drug treatment. Each agenda was written by a primary author or authors with input from a group of advisors. All four agendas, including the highlights, are available on the SAPRP website at http://www.saprp.org/research_agenda.cfm.

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Notes

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