violence prevention
the evidence

Preventing violence by reducing the availability and harmful use of alcohol

Series of briefings on violence prevention

This briefing for advocates, programme designers and implementers and others is one of a seven-part series on the evidence for interventions to prevent interpersonal and self-directed violence. The other six briefings look at reducing access to lethal means; increasing safe, stable and nurturing relationships between children and their parents and caregivers; developing life skills in children and adolescents; promoting gender equality; changing cultural norms that support violence; and victim identification, care and support.

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Preventing violence by reducing the availability and harmful use of alcohol.

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Overview

Reducing the availability and harmful use of alcohol can substantially decrease violence.

Harmful use of alcohol is a major contributor to violence. Studies have shown that violence can be cut by reducing the availability of alcohol through regulating sales outlets and hours and prices; by providing brief interventions and longer-term treatment for problem drinkers; and by improving the management of environments in which alcohol is served. Although the evidence base is promising, studies are largely limited to developed countries.

Regulating the availability of alcohol can lead to reductions in violence.

The availability of alcohol can be regulated either through restricting the hours or days it can be sold or by reducing the number of alcohol retail outlets. Generally, reduced sales hours have been found to be associated with reduced violence and higher outlet densities with higher levels of violence. In the former Soviet Union in the mid-1980s, strict alcohol regulation, which included among other measures restricted hours and fewer outlets, led to a dramatic fall in violence.

Raising alcohol prices can lower consumption and, hence, reduce violence.

Alcohol prices can be raised by, for instance, increased taxes, state controlled monopolies and minimum price policies. Studies exploring the impact on violence of increases in alcohol prices are rare, but economic modelling strongly suggests that alcohol price hikes can be effective. However, such measures are potentially complicated by conflicts of interest with the alcohol industry and the presence, especially in developing countries, of large informal alcohol markets beyond state control.

Brief interventions and longer-term treatment for problem drinkers reduce violence.

Brief interventions and longer-term treatment can help reduce forms of violence such as child maltreatment, intimate partner violence and suicide. For instance, cognitive-behavioural therapy, programmes aimed at the partners of drinkers and behavioural marital therapy for newly abstinent male alcoholics and their partners have been shown to curb violence.

Community interventions to improve drinking environments can reduce violence.

Factors such as crowding, low comfort levels, physical design and poorly trained staff in drinking establishments and poor access to late night transport can contribute to violence. Several community interventions targeting such factors have been found to be effective. For example, the Stockholm Prevents Alcohol and Drug Problems partnership implemented measures such as responsible training for bar staff, training of door supervisors in conflict management and increased enforcement of licensing legislation; evaluation showed that it reduced violent crimes by 29%.

1. Introduction

Harmful use of alcohol is a major contributor to violence. The links between alcohol and violence are complex **(see Box 1)**, yet studies across the world show that alcohol use commonly precedes aggressive behaviour, and that harmful drinking is associated with being both a perpetrator and a victim of violence. Thus, individuals who start drinking at an early age, drink more frequently, in greater quantities and to intoxication have higher risks of violence (*1–4*). Similarly, environments where there is a culture of heavy drinking and greater alcohol availability experience higher levels of violence (*5–7*). Globally, 30% of mortality caused by violence is attributable to alcohol, ranging from 8% in the Middle East and North Africa to 56% in Europe and Central Asia (*8*). Studies in several countries suggest alcohol has been consumed by between a third and a half of perpetrators of violence prior to assaults taking place (e.g. the United States of America, 35% [*9*]; South Africa, 44% [*10*]; England and Wales, 45% [*11*]; China, 50% [*12*]). Studies typically show that males are more likely to drink alcohol, and to be both perpetrators and victims of alcohol-related violence (*13*). Importantly, the role of alcohol in aggression extends across many different forms of violence, including youth violence, sexual violence, intimate partner violence, child maltreatment and elder abuse (*13–17*). Further, 11% of global suicide mortality is attributed to alcohol, ranging from 2% in the Middle East and North Africa to 31% in Europe and Central Asia (*8*).

Given the strong links between alcohol and violence, measures to reduce the availability and harmful use of alcohol are important violence prevention strategies. This review summarizes the evidence for

BOX 1

Examples of links between alcohol and violence

- Alcohol has a direct effect on physical and cognitive functioning, contributing to violence through, for example, reducing self-control and the ability to recognize warning signs.
- Individual and cultural beliefs that alcohol causes aggression can lead to alcohol being used to prepare for or excuse violent acts.
- Dependence on alcohol can mean individuals fail to fulfil care duties, for example, towards children or elders.
- Problematic use of alcohol can develop as a coping mechanism among victims of violence.
- Prenatal alcohol exposure can affect fetal development and consequently is linked to behavioural problems in later life including delinquent behaviour and violence.
- Alcohol and violence may be linked through common risk factors, for instance, an underlying anti-social personality disorder may lead to both heavy drinking and violent behaviour (*13,18*).

the impact of such interventions on violence and covers:

- **Regulating alcohol availability**
  Measures to control sales of alcohol, for example, through restrictions on alcohol sales times and locations;
- **Increasing alcohol prices**
  Measures to reduce access to alcohol by raising prices, including through taxation and minimum alcohol price policies;
- **Reducing alcohol use in problem drinkers**
  Measures targeting individual drinkers through, for example, brief interventions for problem drinkers or treatment for alcohol dependence;
- **Community interventions to improve drinking environments**
  Typically, these incorporate a range of measures to mobilize community resources, encourage responsible retailing, improve the comfort and physical design of drinking establishments and better enforce alcohol legislation.

2. Regulating alcohol availability

Sales of alcoholic beverages take place through formal and informal markets. Formal markets are regulated by governments and subject to controls over, for example, where and when alcohol can be sold (*19*). The ability to control alcohol sales provides governments with a means of influencing the population's alcohol consumption and related harms. In some countries, governments manage alcohol sales, particularly off-licence sales[1], through retail monopolies (e.g. Costa Rica, Sweden and parts of Canada and the United States). Despite evidence suggesting that such monopolies can help limit alcohol consumption and related harm (e.g. road traffic injuries, alcohol-related diseases) (*20–22*), this practice is becoming increasingly rare. Rather, in many countries alcohol sales are managed through licensing systems that permit private bodies to sell alcohol under controlled conditions. While formal markets account for the majority of alcohol purchases in most developed countries, in many developing societies a large proportion of alcohol production and sales occurs in unregulated, informal markets (*19,23*). A 2002 study in Sao Paolo, Brazil, for example, found that just 35% of alcohol outlets surveyed had a licence of some form, and that alcohol vendors, whether licensed or not, faced few apparent restrictions on trading (*24*).

This section discusses the effects of interventions to regulate alcohol availability on violence prevention, covering restrictions on alcohol service (hours and days of service and targeted sales bans) and the density of alcohol retail outlets. **Box 2** provides information on the impacts of strict alcohol regulation incorporating both types of measures in the former Union of Soviet Socialist Republics (USSR) under a state monopoly system. Although such strict regulation may not be feasible in most societies, this example nonetheless demonstrates how drastic reductions in alcohol availability can reduce violence.

2.1 Changing permitted alcohol sales times

Changes to permitted alcohol service hours have been implemented in several countries to address alcohol-related harm, including violence. There is a lack of clear evidence currently available on the impact of changes to permitted drinking hours on violence, with studies reporting contradictory results.

Studies assessing the impact of interventions to reduce alcohol service hours have been carried out in Brazil and Australia. In Brazil, implementation of a municipal law in the city of Diadema preventing sales of alcohol after 23:00 was associated with significant reductions in violence, as highlighted in **Box 3**. Similar beneficial results have been seen through restrictions on alcohol service hours in cities in Colombia (for example, the DESEPAZ programme in the city of Cali [*25*]). In Australia, restrictions on day-time sales of alcohol have been used in Aboriginal communities to reduce harm linked to alcohol. For example, in the town of Halls Creek all sales of packaged alcohol were banned prior to midday and specific regulations were applied to cask wine, which could only be sold between 16:00 and 18.00, with purchases limited to one case per person per day. A before and after study found that these measures were associated with decreased alcohol consumption over two years following implementation of the restrictions, and with lower levels of crime and emergency evacuations for injury. As-

[1] Off-licensed premises are those that sell alcohol for consumption elsewhere (e.g. supermarkets, liquor stores), whereas on-licensed premises are those that sell alcohol for consumption in the place of purchase (e.g. bars, restaurants).

BOX 2

Effects of strict alcohol regulation in the former USSR

A strict anti-alcohol campaign was implemented in the former USSR in 1985 to address growing levels of alcohol consumption and related harm. Facilitated by a state monopoly on legal alcohol production and sales, the campaign included:

- Reduced state alcohol production
- Reduced numbers of alcohol outlets
- Increased alcohol prices
- A ban preventing alcohol use in public places and at official functions
- Increased age of alcohol purchase (to age 21)
- Increased penalties for, and the enforcement of a ban on, the production and sale of home-made alcohol

The effects of the campaign were dramatic. In Moscow, state alcohol sales fell by 61% (1984–1987), alcohol consumption by 29%, total violent deaths by 33% and alcohol-related violent deaths by 51% (1984–1985/6). However, the campaign became increasingly unpopular, and by 1988 the consumption of illegal alcohol was increasing while government finances were suffering through reduced alcohol taxes. Late that year, alcohol production, outlets and trading hours were increased, effectively ending the campaign. By 1992, market reforms had been introduced that liberalized prices and trade, and violent deaths increased dramatically to exceed previous levels. Given the additional social and political changes in the Russian Federation over this period, the increase in violent deaths was unlikely to be due to alcohol alone. However, the temporal relationships between the changes in alcohol regulations and subsequent variation in violence suggest that they are at least closely related (*26–28*).

BOX 3

Preventing homicides by reducing alcohol sales times in Diadema, Brazil

Crime data in the city of Diadema, Brazil, indicated that 60% of murders and 45% of complaints regarding violence against women occurred between 23:00 and 06:00. Many murders took place in areas with high concentrations of drinking establishments, while violence against women was often linked to alcohol. In response, in 2002, a municipal law was implemented that prevented alcohol retailers from selling alcohol after 23:00. Adoption of the law was followed by a public information campaign informing residents about the law. Alcohol retailers received two visits by the municipal civil guard six months and three months prior to the implementation of the law, during which the law and its implications were discussed and retailers were asked to sign a declaration indicating their knowledge of the law and its legal consequences. Following implementation, the law was strictly enforced by a dedicated multi-agency unit supporting the municipal civil guard. Assessment of the impacts of the regulation, using an interrupted time series analysis, estimated that it reduced homicides by almost nine per month, representing a 44% reduction from expected levels without the regulation and preventing an estimated 319 homicides over three years. Assaults against women also decreased over the evaluation period. However, such assaults were already decreasing prior to the implementation of the law, so this could not be directly attributed to the intervention (*29*,*30*).

sociations with intimate partner violence were less clear, with hospital presentations for such violence fluctuating over the evaluation period (*31*). However, the study did not control for other changes that may have affected violence over the intervention period.

Studies exploring the impact of extended alcohol sales times on violence report mixed results. In Western Australia, legislation permitting drinking premises to extend their alcohol service hours from midnight to 01:00 was initiated in 1988. A cohort study examined police data between 1991 and 1997 to identify changes in assault rates in premises that had extended their licenses, compared with those in premises with unchanged hours. The study found a significant increase in assaults occurring in premises with extended alcohol service hours, which was linked to higher quantities of beverages with high-alcohol content purchased in these premises (*32*). In England and Wales, however, initial assessments of extended alcohol service hours permitted through the Licensing Act 2003 have found little evidence of increased violence. Implemented in November 2005, the Act changed the licensing system in England and Wales to end fixed alcohol service hours and allow individual retail outlets to agree their hours with local authorities. National studies comparing pre- and post-Act data from police and other sources (e.g. health services) have found no evidence that violence has increased (*33*,*34*).

Some countries place restrictions on the days of the week when alcohol can be sold. In 1981, for example, the Swedish government closed liquor stores on Saturdays to explore effects on alcohol use and crime. A descriptive before and after study of the trial found reductions over the study period in indoor and outdoor assaults and domestic and public disturbances (*35*). Saturday closure was maintained in Sweden until 2000, when Saturday opening was trialled and, in 2001, reinstated across the country. A controlled longitudinal study found that alcohol sales increased following Saturday opening of liquor stores, yet no significant changes in assaults were identified (*36*).

Research also suggests that bans on alcohol sales in areas associated with alcohol-related violence can contribute to preventing violence. For example, in the United States, a before and after study was used to assess the impacts of a ban on alcohol sales and consumption in a college stadium. This found that the ban was associated with significant reductions in assaults and arrests, ejections from the stadium and student referrals to the judicial affairs office (*37*). In several countries, national legislation has been used to control the sale and consumption of alcohol in sports stadia (e.g. Portugal, the United Kingdom) (*38*).

2.2 Density of alcohol retail outlets

A range of studies have explored associations between densities of alcohol outlets and violence. Despite methodological limitations, findings are generally consistent, associating higher outlets densities with higher levels of violence (*5*). For example:

- In Norway, increased density of alcohol outlets (number of public drinking premises per 10,000 inhabitants) between 1960 and 1995 was found to be associated with higher numbers of violent crimes investigated by police. An increase of one alcohol outlet corresponded to an increase of 0.9 assaults investigated each year (*39*).
- In Melbourne, Australia, spatial analysis found an association between concentration of public house licences and assaults. Here, as concentrations of licences increased numbers of assaults per licence also increased, but with greater increases seen at higher concentrations of licences. This suggests licensing authorities could identify a maximum density of licensed premises above which sharp increases in assaults would be likely to occur (*40*).

In Los Angeles, California, the United States, many alcohol outlets were damaged during the 1992 riots and then closed. Analysis of the impact of these closures on crime showed a reduction in violent assault rates, occurring one year after the reduction in alcohol availability and lasting for around five years (*41*). In California, the number of liquor stores allowed is determined by a city or county's population (one off-sale beer and wine licence per 2,500 people) (*42*,*43*). A longitudinal analysis covering 581 zip (or postal) codes in California estimated that a reduction of one bar per zip code area would reduce assaults by 1% in the area, equivalent to 101 assaults per year (*42*). Decisions on the permitted number of alcohol outlets in an area are sometimes determined by perceived need or market forces. Consequently, an important issue is not just the legislative process but also whether licensing systems favour commercial interests or the protection of public health.

3. Increasing alcohol prices

Levels of alcohol consumption are linked to the price of alcohol. A range of meta-analyses have explored relationships between changes in price and demand for beer, wine and spirits and show that a 1% increase in the price of these drinks would decrease consumption by approximately 0.46% for beer, 0.69% for wine and 0.80% for spirits (*44*). With strong links between alcohol price and consumption and, in turn, consumption and violence, a range of studies have used economic modelling to estimate the effects of alcohol price increases on incidence of violence. Findings from the United States suggest:

- A 1% increase in the price of an ounce of pure alcohol would reduce the probability of intimate partner violence against women by 5.3% (*45*).
- A 10% increase in the excise tax on beer would reduce the probability of child abuse perpetrated by females by approximately 2% (*46*); it would, however, have no impact on child abuse perpetrated by males (*47*).
- A 10% increase in the price of beer would reduce the number of college students involved in violence each year by 4% (*48*).

The price of alcohol can be increased through increased taxation, state controlled monopolies, implementation of minimum prices for alcohol and bans on drinks promotions. However, the ability to implement such measures is frequently hampered by factors such as competition regulations and international trade agreements (*49*). In Finland, for example, European Union membership prompted a 33% decrease in alcohol taxes in 2004[2] which reduced average alcohol retail prices by 22% and led to increased consumption (*50*). A time series analysis using national data associated these tax cuts with a 17% increase in the average weekly number of alcohol-positive sudden deaths (including cardiovascular disease, accidents, homicides, suicides and sudden deaths of undetermined cause) (*51*). However, a before and after study covering the Helsinki Metropolitan area found no adverse effects of the price reduction on police-recorded violent crime or emergency call-outs related to domestic violence (*52*). For other Nordic countries (Sweden and Norway), models predicting the impacts of reductions in state alcohol retail monopolies and taxation following European Union membership suggested these would increase both alcohol-related mortality and violence (*53*). However, for Sweden, later analyses identifying actual effects of European Union membership found that predicted increases had not occurred for suicides or homicides, or for alcohol-related mortality in males. Despite this, increases were seen in non-fatal assaults, fatal accidents and alcohol-related mortality in females (*54*).

The Living With Alcohol project in the Northern Territory of Australia used additional alcohol taxes to fund prevention interventions. This was associated with a reduction in acute alcohol-related harm (including violence); however the alcohol taxes were removed following a High Court ruling preventing such taxes from being applied (**see Box 4**). In England, economic modelling has estimated that setting a minimum price for alcohol of 50 pence per unit would reduce violent crime by 2.1%, equivalent to 10,300 fewer violent crimes per year (*55*).

[2] European Union membership forced Finland to conform to the requirement for free movement of goods between European Union countries. Alcohol taxes were lowered to prevent large increases in alcohol imports from other European Union countries with lower alcohol prices, particularly neighbouring Estonia, which joined the European Union in 2004 (*51*).

BOX 4

The Northern Territory Living With Alcohol (LWA) programme

The LWA programme, initiated in 1992, aimed to reduce alcohol consumption and related harm in the Northern Territory of Australia to national levels by 2002 through education, stricter controls on alcohol availability and improved treatment services. At the outset, the programme was funded through a state levy on sales of alcoholic drinks with greater than 3% alcohol by volume, adding five cents to the price of a standard drink. This levy remained in place until 1997, when an Australian High Court ruling prevented states from raising taxes on alcohol, tobacco and petrol. After this time, the levy was removed, but the LWA programme continued through other funding until 2002. A time series analysis of the LWA programme explored its association with acute alcohol-attributable deaths, which predominantly comprised road traffic accidents (52%), assaults (16%), suicides (16%), drownings (4%) and falls (3%). Analyses found that implementation of the levy and LWA programme was associated with reductions in hazardous and harmful alcohol consumption (particularly for males) and a 36.6% decrease in acute alcohol-attributable death rates, compared with a 15.9% decrease over the same period in a control area. After the removal of the levy, however, acute alcohol-related deaths remained stable in the Northern Territory while continuing to decline in the control area. While this suggests that effects may have resulted from the levy alone, the study design was not capable of confirming this (*56–58*).

4. Reducing alcohol use in problem drinkers

A systematic review of randomized controlled trials concluded that the following measures to address alcohol use in problem drinkers can reduce violence (*59*):

- In the United States, screening and brief intervention[3] with problem drinkers, including two 15-minute sessions with physicians and two follow-up phone calls by nurses, was associated with fewer arrests for assault, battery and/or child abuse among participants than in those receiving standard care (8% versus 11%). Sustained reductions in binge drinking were also reported (*60*,*61*).
- In Australia, problem drinkers receiving cognitive behavioural therapy (e.g. goal setting, self-monitoring, problem solving) showed reduced risks of committing assault in the six months after treatment (0%) compared with those receiving cue exposure therapy (e.g. understanding drinking triggers, resisting alcohol after moderate consumption) (5%) (*62*).
- In Australia, partners of problem drinkers taking part in the Pressures to Change programme, which teaches participants strategies to promote positive changes in their partners' drinking behaviours, reported reduced intimate partner violence after the intervention (4 out of 16 participants in the programme versus 3 out of 7 controls) (*63*).
- In the United States, telephone aftercare for dependent drinkers discharged from hospital-based alcohol treatment services, providing a biweekly source of support to patients for a year following treatment, reduced suicide attempts in participants (4 out of 125 receiving the interventions versus 11 out of 167 controls) (*64*).

The review also found evidence that interventions with problem drinkers reduced other alcohol-related injury types (e.g. road traffic injuries).

Other studies have shown that structured treatment for alcohol dependence can reduce violence. For example, a before and after study in the United States followed 301 alcohol dependent males through an outpatient treatment programme that included eight individual and 16 group therapy sessions over a 12-week period (*65*). In the year prior to treatment, 56% of participants reported having been violent towards their female partner compared to 14% in a non-alcohol dependent control group. A year after the programme, violence had decreased to 25% in the alcohol dependent group. However, over half of the sample had relapsed into alcohol use; among remitted alcoholics, violence had decreased to 15%. There were also reductions in female-to-male aggression in remitted alcoholics within the programme. Similar beneficial effects on both male-to-female and female-to-male violence have been achieved, also in the United States, through an abstinence-oriented programme for male alcoholics combined with cognitive behavioural treatment for depression or relaxation therapy (*66*), and through behavioural marital therapy[4] for newly-abstinent male alcoholics and their partners (*67*,*68*).

[3] Brief interventions aim to identify a real or potential alcohol problem and motivate the individual to do something about it. Conducted in a variety of settings, particularly primary care and other health services, they typically comprise short one-on-one sessions providing at-risk drinkers with information on the adverse consequences of alcohol and techniques to help moderate their consumption.

[4] This seeks to promote relationship factors that are conducive to abstinence, including developing relationships with better communication and involving partners in abstinence promoting activities.

5. Community interventions to improve drinking environments

Alcohol-related violence occurs in and around drinking settings (e.g. pubs, bars and nightclubs). Research has found that specific environmental factors in drinking settings can contribute to violence, including low comfort levels (due, for instance, to limited seating availability or crowding caused by intersecting traffic flows resulting from inappropriate locations of entries, exits, bar serving areas, dance floors and toilets), poorly trained staff, permissiveness towards deviant behaviours and poor access to late night transport (*69*). A range of community-based interventions have thus sought to modify and manage licensed premises and their surrounding environments to reduce alcohol-related harm, including violence (*69–71*). A systematic review reported beneficial effects on violence reduction (*72*). For example, the Stockholm Prevents Alcohol and Drug Problems (STAD) project in Sweden reported a 29% reduction in violent crime through a combination of responsible beverage service training, community mobilization and strict enforcement of existing licensing legislation (*73*). The intervention was also found to have significant cost-benefits. Further information is provided in **Box 5**.

In Australia, the Queensland Safety Action Projects used community mobilization, codes of practice for licensed premises, increased enforcement of licensing laws and environmental safety measures (e.g. lighting and public transport) to address alcohol-related problems in nightlife environments. A controlled before and after study associated the intervention with reductions in arguments (28%), verbal abuse (60%) and threats (41%) in drinking premises over the course of the intervention. The changes within drinking venues that contributed most to reductions were improved comfort (e.g. availability of seating), increased public transport, less overt sexual activity and fewer highly drunk men (*75*).

Police activity is central to many violence reduction strategies in drinking environments. This can include highly visible policing of areas associated with alcohol-related disorder, and enforcement activity in licensed premises. The impacts of police enforcement have been explored in several countries, including Australia, New Zealand, the United Kingdom and the United States. A review of these strategies (*69*) concluded that the effects of ran-

BOX 5

The Stockholm Prevents Alcohol and Drug Problems (STAD) project in Sweden

In Stockholm, the STAD project was initiated in 1996 to reduce alcohol-related problems in licensed premises, including violence. The project established a partnership between representatives of the licensing board, police, the county administration, the national health board, Stockholm city council, the organization of restaurant owners, the trade union for restaurant staff and owners of licensed premises in the city. Interventions implemented through the project included responsible service training for bar staff, training of door supervisors in issues such as conflict management, house policies for licensed premises and increased enforcement of licensing legislation. Evaluation of the intervention found that violent crimes decreased by 29% during the intervention period (*73*). Cost effectiveness analysis estimated that the programme saved 39 euros for every one euro invested (*74*).

domized police enforcement (targeting licensed premises at random) were modest, with intervention periods and any benefits on violence often being short-lived. Greater evidence supports the use of targeted police enforcement on practices *within* licensed premises. In New South Wales, Australia, the Alcohol Linking Program records whether individuals involved in police-attended incidents had consumed alcohol prior to the incident, and where they had consumed their last drink. Licensed premises identified as 'last drink' locations received feedback detailing the number and characteristics of alcohol-related crimes associated with their premises. This was followed by a police visit to the premises to conduct an audit of management practice and provide recommendations for improvement, with licensees also invited to attend a police-led workshop on responsible premises management. Evaluation using a randomized controlled design found greater reductions in alcohol-related incidents and assaults in intervention sites (*76*).

Training for staff in licensed premises can also form an important aspect of community-based prevention measures and many programmes focus on the responsible serving of alcohol by bar staff. In Canada, the Safer Bars training programme has shown success in reducing aggression by developing staff skills in managing and reducing aggressive behaviour. Safer Bars involves: a three-hour training programme for all staff in licensed premises; a workbook for bar owners and managers to help them to assess environmental risks in their premises that may contribute to violence; and a pamphlet informing bar owners and staff of their legal responsibilities in preventing violence. A randomized trial showed that the programme reduced severe and moderate aggression in intervention premises; these effects were moderated by the turnover of managers and door staff in bars, with higher staff turnover associated with higher aggression post-intervention (*77*).

Community interventions that incorporate, but extend beyond, alcohol server settings have also been found to have beneficial effects. In Sweden, the Trelleborg Project addressed youth drinking and related harm by developing and implementing: community and school policies on alcohol and drug management; a school curriculum on alcohol and drug use; information materials for parents; and enforcement activity against off-licensed alcohol retailers. Evaluation suggested that self-reported alcohol-related violence had reduced over the intervention period and was attributed to reductions in excessive drinking and frequency of consumption of distilled spirits (*78*). In the US, a longitudinal time series analysis explored the impacts of a combination of community and media mobilization; responsible beverage service; strengthened licensing legislation; and increased enforcement of the ban on sales of alcohol to under-age customers and of drink driving and licensing legislation. The intervention was associated with reductions in alcohol consumption, assaults and road traffic crashes (*79*).

6. Summary

The evidence base for violence prevention through alcohol-focused interventions is promising. However, implementing and studying alcohol-focused interventions, particularly those that require legislative changes, can be complex and consequently the range of evidence currently available is limited and comes largely from developed countries.

Generally, studies exploring the impact of reduced alcohol sales hours have found these to be associated with reduced violence, including homicide. Conversely, extended alcohol service hours have been associated with increased violence, yet in some setting have shown few effects. For alcohol pricing, economic modelling studies strongly suggest that increasing prices would be an effective violence reduction strategy. Successful implementation of any measure to regulate alcohol availability requires an established system of state licensing or other formal control at national or local level. Where effective systems do not exist, implementing such systems is a prerequisite for effective management of alcohol availability.

A number of good quality studies have shown that brief interventions and structured alcohol treatment for problem drinkers can reduce individuals' risks of violence. Similarly, several studies of community-level interventions in alcohol server settings have reported success in reducing violence. The development of multi-agency partnerships to coordinate components of community interventions also facilitates the implementation of broader alcohol and violence focused prevention strategies.

While there is considerable evidence linking alcohol consumption and violence, models for addressing this relationship are limited in both number and geographical distribution. Thus, across all types of alcohol-focused interventions discussed here, evidence is largely limited to studies conducted in high-income countries. However, current evidence does support the use of alcohol-focused interventions to prevent violence. Further, the benefits of reducing the harmful use of alcohol are substantial and extend far beyond reductions in violence to include decreases in accidents, cancers, liver disease and a wide range of other health and social problems. Successfully implementing restrictive measures and ensuring they are not overturned, however, requires governmental commitment to prioritize public health over commercial benefits, along with better public understanding of the harms associated with alcohol, including links between alcohol and violence.

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