Interpersonal violence and alcohol

INTERPERSONAL VIOLENCE (Box 1) and harmful and hazardous alcohol use[1] are major challenges to global public health. Both place large burdens on the health of populations, the cohesion of communities and the provision of public services including health care and criminal justice. Globally, alcohol is responsible for 4% of all years of health lost through premature death or disability (DALYs, disability-adjusted life years [1]), ranging from 1.3% in countries in the Middle East and Indian subcontinent to 12.1% in Eastern Europe and Central Asia *(1)*. Through homicide, interpersonal violence results in around 520 000 deaths per year (a rate of 8.8 per 100 000 population, ranging from 3.4 in the World Health Organization (WHO) Western Pacific Region to 27.5 in the WHO Region of the Americas) *(2)*. For every death resulting from interpersonal violence, scores of further victims require hospital treatment and many more remain untreated and unrecorded by either health or criminal justice agencies. Although levels of alcohol consumption, patterns of drinking and rates of interpersonal violence

1 Harmful use of alcohol is defined as a pattern of alcohol use that causes damage to health. Hazardous alcohol use is defined as a pattern of alcohol use that increases the risk of harmful consequences for the user (World Health Organization, http://www.who.int/substance_abuse/terminology/who_lexicon/en/).

vary widely between countries, across all cultures there are strong links between the two. Each exacerbates the effects of the other with a strong association between alcohol consumption and an individual's risk of being either a perpetrator or a victim of violence.

BOX 1: Interpersonal violence

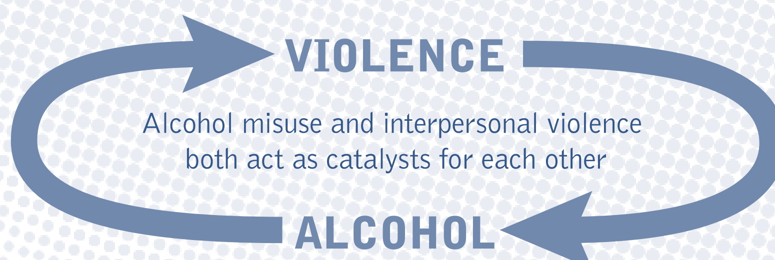
Interpersonal violence is the intentional use of physical force or power, threatened or actual, against another person, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation *(2)*. Interpersonal violence can be categorised into:

- *Youth violence:* Violence committed by young people.
- *Child maltreatment:* Violence and neglect towards children by parents and caregivers.
- *Intimate partner violence:* Violence occurring within an intimate relationship.
- *Elder abuse:* Violence and neglect towards older people by family, carers or others where there is an expectation of trust.
- *Sexual violence:* Sexual assault, unwanted sexual attention, sexual coercion and sexual trafficking.

The links between alcohol use and interpersonal violence

The mechanisms linking alcohol and interpersonal violence are manifold.

- Harmful alcohol use directly affects physical and cognitive function *(3)*. Reduced self-control and ability to process incoming information makes drinkers more likely to resort to violence in confrontations *(4)*, while reduced ability to recognise warning signs in potentially violent situations makes them appear easy targets for perpetrators *(5,6)*.
- Individual and societal beliefs that alcohol causes aggressive behaviour can lead to the use of alcohol as preparation for involvement in violence, or as a way of excusing violent acts *(7,8)*.
- Dependence on alcohol can mean individuals fail to fulfill care responsibilities *(9)* or coerce relatives into giving them money to purchase alcohol or cover associated costs *(10)*.
- Experiencing or witnessing violence can lead to the harmful use of alcohol as a way of coping or self-medicating *(11,12)*.



- Uncomfortable, crowded and poorly managed drinking settings contribute to increased violence among drinkers *(13,14)*.
- Alcohol and violence may be related through a common risk factors (e.g. anti-social personality disorder [15]) that contribute to the risk of both heavy drinking and violent behaviour.
- Prenatal alcohol exposure resulting in fetal alcohol syndrome or fetal alcohol effects are associated in infants with increased risk of their maltreatment, and with delinquent and sometimes violent behaviour in later life, including delinquent behaviour, sexual violence and suicide *(16)*.

Magnitude of alcohol-related interpersonal violence

Levels and patterns of alcohol consumption vary widely between countries (Table 1). Similarly, levels of violence differ between countries. Rates of mortality for intentional injury range from around 4 per 100 000 population in Georgia, Kuwait and Greece to over 50 per 100 000 in the Russian Federation, El Salvador and Colombia *(2)*.

TABLE 1: **Levels and patterns of alcohol consumption by WHO Region**

WHO Regions[a]		Total consumption (all people)[b]	Proportion of drinkers	Consumption per drinker[c]	Pattern[d]
LOW TO MIDDLE INCOME COUNTRIES					
Very high or high mortality: lowest consumption	Islamic middle east and Indian subcontinent (EMR-D, SEAR-D)	1.88	15.0%	12.27	2.9
Very high or high mortality: low consumption	Poorest countries in Africa and America (AFR-D, AFR-E, AMR-D)	5.93	42.8%	14.21	2.8
Low mortality emerging economies	Better-off developing countries in America, Asia, Pacific (AMR-B, EMR-B, SEAR-B, WPR-B)	5.23	51.0%	10.53	2.4
HIGH INCOME COUNTRIES					
Very low mortality	North America, Western Europe, Japan, Australasia. (AMR-A, EUR-A, WPR-A)	10.90	77.8%	14.00	1.5
Former socialist: low mortality	Eastern Europe and Central Asia (EUR-B, EUR-C)	11.42	74.5%	15.09	3.3
WORLD		6.03	48.6%	12.26	2.5

Source: Room et al 2005 *(1)*

[a] Regional sub groupings defined by WHO on the basis of mortality levels (see World Health Report 2002, available from: http://www.who.int/whr/2002/en/index.html).

[b] Litres of pure alcohol per resident aged 15 and over per year (recorded and unrecorded consumption).

[c] Litres of pure alcohol per resident drinker aged 15 and over per year (recorded and unrecorded consumption).

[d] Indicator of hazard per litre of alcohol consumed, composed of several indicators of heavy drinking occasions, frequency of drinking in public places plus frequency of drinking with meals (reverse scored). Range, 1=least detrimental, 4=most detrimental.

Few countries routinely measure the involvement of alcohol in violence. Further, most recording systems and research examining alcohol use by victims and perpetrators of violence derive from high-income countries. Even where estimates of alcohol's role in violence are available, methodological differences between studies complicate direct comparisons between countries. However, across countries, harmful alcohol use is estimated to be responsible for 26% of male and 16% of female DALYs lost through homicide *(17)*. Furthermore, the role of harmful alcohol consumption as a risk factor for violent victimization and perpetration, and the impact of violent experiences on future drinking behaviours, are increasingly being identified throughout the world. Findings from a review of global scientific literature include the following:

Harmful alcohol consumption by perpetrators of violence

- In the USA, among victims that were able to report whether their attacker had been using alcohol, 35% believed the offender had been drinking *(18)*.
- In England and Wales, 50% of victims of interpersonal violence reported the perpetrator to be under the influence of alcohol at the time of assault *(19)*.
- In Russia, around three-quarters of individuals arrested for homicide had consumed alcohol shortly before the incident *(20)*.
- In South Africa, 44% of victims of interpersonal violence believed their attacker to have been under the influence of alcohol *(21)*.
- In Tianjin, China, a study of inmates found that 50% of assault offenders had been drinking alcohol prior to the incident *(22)*.

Harmful alcohol consumption by victims of violence

- In Australia, 26% of male and 17% of female homicide victims (2002–2003) had been drinking just prior to death *(23)*.
- Between 1970 and 1998, 36% of victims of violence presenting to a trauma department in the Netherlands had consumed alcohol *(24)*.
- Among victims of violent injuries presenting to emergency rooms in six countries[2], the percentage testing positive for alcohol[3] ranged from 24% in Argentina to 43% in Australia *(25)*.
- Between 1999 and 2001, between 43% and 90% of victims presenting to hospital trauma units in three South African cities tested positive for alcohol *(26)*.
- In São Paulo, Brazil, 42% of homicide victims were shown to have used alcohol prior to death (2001) *(27)*; and 46% of assault victims presenting to a trauma centre tested positive for alcohol (1998–1999) *(28)*.

Harmful alcohol use is a risk factor across all types of interpersonal violence. Victims are less likely than perpetrators to be under the influence of alcohol during an

2 Argentina, Australia, Canada, Mexico, Spain, and the USA.

3 For countries where 95% or more patients were tested.

incident *(29)*, and for many victims harmful levels of alcohol use can occur later as a consequence of violent experiences (Table 2).

TABLE 2: **Alcohol misuse as a risk factor for and a consequence of violence**

	Alcohol misuse as a risk factor for violence	Alcohol misuse as a consequence of violence
CHILD MALTREATMENT	In Germany, 32% of offenders of fatal child abuse (1985–90) were thought to have consumed alcohol prior to the offence *(30)*. Parental alcohol or drug use was reported in 34% of child welfare investigations in Canada *(31)*.	Globally, a history of child sexual abuse is estimated to cause 4–5% of alcohol misuse in men and 7–8% in women *(32)*.
YOUTH VIOLENCE	In Israel, 11–16 year olds who reported both drinking five or more drinks per occasion and having ever been drunk were twice as likely to be a perpetrator of bullying, five times as likely to be injured in a fight and six times as likely to carry a weapon *(33)*.	In the USA, victims of violence during adolescence report higher levels of alcohol consumption in later life *(34)*.
INTIMATE PARTNER VIOLENCE	In Russia, 60–75% of male perpetrators of intimate partner homicides had been drinking *(35)*. In Iceland, 71% of female victims of intimate partner violence stated partner alcohol use as the main cause of their assault *(36)*.	In Iceland, 22% of female intimate partner violence victims reported using alcohol following the event as a mechanism for coping *(36)*.
ELDER ABUSE	In the USA, 44% of male and 14% of female abusers of elderly parents (age 60 years and over) were dependent on alcohol or drugs, along with 7% of victims *(37)*.	In Canada, an outreach program for seniors with alcohol or other substance misuse problems reported 15–20% of clients experiencing some form of elder abuse. For some, alcohol use was a way of coping with violent experiences *(38)*.
SEXUAL VIOLENCE	In the United Kingdom, 58% of men imprisoned for rape reported having consumed alcohol in the six hours preceding the offence and 37% were considered to be alcohol dependent *(39)*.	In the USA, victims of sexual assault report higher levels of psychological distress and the consumption of alcohol, in part, to self-medicate *(40)*.

Risk factors for alcohol-related interpersonal violence

A wide range of factors can increase individuals' risks of being either a perpetrator or victim of alcohol-related violence. To help understand these factors and how they interact, an ecological model *(2)* (Figure 1) is used to divide risk factors into those associated with the individual, relationships between individuals, communities and society. Risk factors for each are summarised below.

Individual Factors

Victims

- *Age*: Alcohol-related assaults are experienced more frequently among young adults. For instance in England and Wales and Australia, 16–29 year olds *(41)*, and 15–34 year olds respectively *(42)* are at increased risk.

FIGURE 1: **The ecological model for understanding violence**

- *Gender*: In general, males are at higher risk of alcohol-related interpersonal violence requiring hospital treatment. In studies of hospital admissions, males accounted for the majority of all alcohol-related assault victims (e.g. Australia 74% [42], England 80% [43]) and in one Kenyan study of emergency department presentations for injury, were approximately twice as likely as females to have been drinking alcohol prior to assault *(44)*.
- *Drinking patterns*: High levels of alcohol consumption have been associated with increased risk of experiencing violence *(41)*, with those who report more frequent intoxication most likely to be involved in an alcohol-related assault *(45)*. Further, early initiation into alcohol use has been associated with increased risk of sexual victimisation in adolescence *(46)*.
- *Experience of violence*: Individuals who experience violence in childhood *(47,48)* and adulthood *(49)* can be at greater risk of alcohol dependence later in life. Further, adults who have suffered more than one type of violence (e.g. by an intimate partner and a stranger) have higher rates of alcohol problems than those who have experienced only one type *(49)*.

Perpetrators

- *Age*: Risk of perpetration varies with age. In the USA, 38% of offenders of alcohol-related violent crime are aged 30–39, and a further 29% aged 21–29 *(18)*. In the United Kingdom, alcohol-related violence towards strangers is more likely to be committed by 16–24 year olds and that towards acquaintances by those aged 25 years and older *(41)*.
- *Gender*: Perpetrators of alcohol-related violence are more likely to be male (e.g. Norway [50]; England and Wales [41]).
- *Drinking patterns*: Heavier and more frequent drinkers are more at risk of perpetrating violence (e.g. Norway [45], Latin America and Spain [51]), as are those that start drinking alcohol at an earlier age *(52)*.

- *Personality*: The relationship between alcohol and violence is mediated by certain characteristics such as an antisocial personality, which increases the risk of a person becoming aggressive after drinking *(15)*.

Relationship factors

- *Drinking patterns*: Discrepant drinking patterns (i.e. only one partner is a heavy drinker) have been found to increase the risk of intimate partner violence *(53)*.
- *Exposure to violence*: Experience of parental violence in childhood is associated with the development of alcohol-related problems later in life *(54)*.
- *Parental use of alcohol*: A young person's risk of violent offending is increased if their parent (particularly their mother) engages in harmful use of alcohol *(55)*.
- *Acquaintances*: A higher risk of alcohol-related criminal and disorderly offending is found among those who associate with delinquent acquaintances *(56)*.

Community factors

- *Time of day and day of week:* Alcohol-related assaults occur most frequently at night and particularly at weekend nights (England and Wales [41], Kenya [44]).
- *Drinking venues:* Greater concentrations of drinking venues within an area have been found to increase the risk of interpersonal violence in that area *(57)*.
- *Characteristics of licensed premises*: Premises that are uncomfortable (e.g. crowded, lacking seating and ventilation, hot and noisy); unattractive and poorly maintained; offer discounted alcoholic drinks; employ aggressive door supervisors; have a high proportion of intoxicated patrons, or have a permissive attitude towards anti-social behaviour (e.g. serving underage or drunk customers and allowing swearing and overt sexual activity) are more associated with violent behaviour *(14,58,59)*.

Societal factors

- *Risky drinking culture*: Across studies in seven countries[4], the percentage of violence-related injuries associated with harmful alcohol use was higher in societies that had greater alcohol consumption per capita *(60)*. Societies characterized by heavy episodic drinking suffer higher levels of alcohol-related violence *(61)* than societies where alcohol use is high but more integrated into daily routines (e.g. mealtimes) *(60)*.
- *Societal beliefs and attitudes*: Beliefs that alcohol has disinhibiting effects encourage the harmful use of alcohol as an excuse for violent behaviour (such as youth violence; Sweden [62]) or to fuel the audacity necessary to commit crimes (including violent crimes; South Africa [63]). Also in South Africa, rape can result from men who buy drinks for women and subsequently think they are owed sexual favours in return *(64)*.

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4 Argentina, Australia, Canada, Mexico, Poland, Spain, and the USA

Impact

Across all countries, alcohol-related violence has far-reaching consequences, affecting the health and well-being of victims, relationships with family and friends, levels of fear within communities, and pressures on health and other public services (Box 2). For victims, health impacts include physical injuries and emotional harm such as depression, anxiety and sleep problems *(65,41)*. In England and Wales, around three-quarters of victims of assault experience some form of subsequent emotional harm *(41)*. Harmful alcohol use is often cited as a method of coping with violent experiences *(12)* and victims are more likely to develop problematic drinking habits later in life *(47–49)*. Other longer-term health effects can include suicide and post-traumatic stress disorder *(65–68)* (Box 3).

Research in high-income countries has found that alcohol consumption by both victims and perpetrators of violence can increase the severity of injuries *(69,70)*. Furthermore, in serious assaults alcohol may play a role in determining victims' survival, for example by reducing their ability to seek urgent medical assistance or reducing perceptions of the seriousness of injury *(71)*.

Social problems resulting from the experience of violence often affect victims' relationships with family, friends and future intimate partners *(76)*, as well as their ability to work or attend school *(76,77)*. Children who witness violence, or threats of violence, between their parents are more likely to develop emotional and behavioural problems during childhood *(78)* and heavy drinking patterns or alcohol dependency later in life *(79)*, increasing their risk of becoming perpetrators of violence. A high prevalence of alcohol-related violence within a community can also affect quality of life, reducing community cohesion, increasing fear of crime and preventing people from visiting places associated with disorder such as city centres at night *(80)*, or using public transport *(81)*.

BOX 2: Economic costs of alcohol-related violence

The economic costs of alcohol-related violence include direct costs such as those to healthcare and judicial services, and indirect costs such as work and school absenteeism. Estimates of the economic costs of violence and the proportion of violence related to alcohol include:

- *USA*: US$ 46.8 billion *(72)* to US$425 billion *(73)* per year, depending on the type of costs included. An estimated 35% of violence is related to alcohol *(18)*.
- *England and Wales*: £24.4 billion per year *(74)* (approximately US$ 42.7 billion) (excluding violence towards children aged less than 16 years and elders over 65 year of age), around 2% GDP. An estimated 50% of violence is related to alcohol *(19)*.
- *Latin America*: Estimated percentages of GDP lost due to violent crime (1997) including collective violence range from 1.3% in Mexico to 24.9% in El Salvador *(75)*, although the proportion related to alcohol is not known.

BOX 3: Alcohol and suicide

Suicide can be a consequence of interpersonal violence. There is also a strong relationship between alcohol consumption and suicide or attempted suicide, especially among those who drink heavily. In this group the risk of suicidal behaviour increases if other mental health problems such as depression are present. Approximately 7% of people with alcohol dependence die through suicide *(82)*. Suicide rates rise with increased per capita consumption, and tend to be higher in drinking cultures characterized by irregular heavy drinking, in common with interpersonal violence *(83)*. Effective interventions that reduce heavy drinking may reduce both assaults and suicide.

The burden of alcohol-related violence on public service provision and the economy can be immense. For health and criminal justice agencies, apprehending and treating offenders and victims of alcohol-related violence is financially costly (Box 2) and diverts resources from other health and crime issues. Furthermore, health and judicial staff can frequently be victims of alcohol-related violence themselves whilst at work *(84)*, and this may encourage both employees and prospective employees to consider alternative careers.

Prevention

Although alcohol consumption is a normal and acceptable part of society throughout much of the world, violence associated in particular with hazardous and harmful consumption poses an important but preventable problem. Central to prevention is creating societies and environments that discourage risky drinking behaviours and do not allow alcohol to be used as an excuse for violence. The evidence base for the effective prevention of alcohol-related violence is mainly from high-income countries. Much less is known about the effectiveness of interventions elsewhere with differences in drinking cultures, societal attitudes towards violence and laws surrounding the sale and consumption of alcohol being important considerations.

For interpersonal violence in general, early interventions such as pre- and postnatal services can be effective prevention measures and these strategies have been thoroughly reviewed elsewhere *(2)*. Specifically for alcohol-related violence, interventions to reduce population alcohol consumption (e.g. regulating alcohol sales) have proven effective in reducing levels of violence both in low-to middle-income and high-income countries. However, interventions to modify drinking settings (e.g. improving licenced premise management), screen for harmful drinking and conduct brief interventions, treat alcohol dependence, and improve drinking environments have been found to be effective in high-income countries, but are largely untested elsewhere (See Box 4).

Several important factors impinge on the applicability of prevention strategies in low- to middle-income countries. In many low- to middle-income societies, a large proportion of alcohol consumed is produced at home. Thus, strategies to reduce alcohol consumption through increased price (e.g. higher taxation) may be less effective and may switch drinkers to cheaper, home produced alcohol *(85)*. In some low- and middle-income countries, the enactment and enforcement of legislation on the legal minimum age for purchase of alcohol, and efforts to strengthen and expand the licensing of liquor outlets could be of great value in reducing alcohol-related violence. For example, there is no legal minimum age of sale for alcohol in the Gambia, and in South Africa it is estimated that 80–90% of liquor outlets are unlicensed *(86)*. In contrast, in high-income countries the the majority of alcohol outlets are licensed, most alcohol is produced by industry and laws to restrict access to alcohol by minors are enforced. More research is needed in low- to middle-income countries to identify successful interventions for preventing alcohol-related violence and to examine opportunities to regulate production and sale.

BOX 4: **Interventions to prevent alcohol-related violence**

Increasing alcohol prices

Increased alcohol prices through higher taxation can reduce levels of violence *(93)*. In the USA, it has been estimated that a 1% increase in the price of alcohol will decrease the probability of wife abuse by about 5% *(94)*, while a 10% increase in the excise tax on beer will reduce the likelihood of severe child abuse by around 2% *(95)*. However, regional and international trade agreements can hamper national efforts to influence alcohol prices. Such agreements resulted in a 45% decrease in tax on spirits in Finland and Denmark and increased spirit sales by 20% *(96)*. Locally, minimum price policies can reduce access to cheap alcohol in licensed premises if adhered to by all vendors *(97)*. Interventions to increase alcohol prices however should also seek to control illegal alcohol production and smuggling.

Regulating alcohol sales

Reducing the availability of alcohol can reduce consumption levels and related violence. In Diadema, Brazil, prohibiting the sale of alcohol after 23:00 helped prevent an estimated 273 murders over 24 months *(87)*; conversely, removal of the government monopoly on off-licence beer sales in Finland led to a 46% increase in consumption and increased alcohol problems *(88)*. Bans on alcohol sales that are implemented during certain periods, such as football matches, can be effective in reducing levels of assaults *(89)*. In some countries (e.g. the United Kingdom) permanent location-specific bans are used to prevent alcohol consumption in public areas associated with alcohol-related disorder such as town and city centre streets. Such bans have also been implemented on a temporary basis for specific festivals (e.g. Cape Town, South Africa beaches during Christmas) *(86)*.

(Continues next page)

BOX 4: Interventions to prevent alcohol-related violence

(Continued from previous page)

Reduce access to alcohol by young people

At an individual level, early age of first alcohol use is related to increased risk of violence. Where laws exist, minimum legal age of alcohol purchase ranges from 15 (e.g. Slovenia) to 21 (e.g. USA) yet underage sales can be common *(98)*. These sales can be reduced through server training programmes and strict enforcement of age of purchase legislation (e.g. through test purchasing and penalties including license revocation [99]).

Modifying drinking settings

Drinking venues that are poorly managed are associated with higher levels of violence *(90)*. Interventions to improve management practice include training programmes for managers and staff *(91)*, use of licensing legislation to enforce change (e.g. door supervisor training) and implementation of codes of practice. In Australia, a community-based initiative to improve management practice of drinking venues in North Queensland led to a reduction in arguments (by 28%), verbal abuse (by 60%) and challenges or threats (by 41%) within those premises *(92)*.

Screening and brief interventions

Alcohol screening (e.g. AUDIT [100]) and brief interventions *(101)* in health settings can be effective in reducing alcohol consumption among victims of alcohol-related violence *(102)*. Screening can also be used to identify victims of alcohol-related violence. Key locations for screening include emergency departments and pre-natal services. In the USA, a cost benefit analysis of brief interventions to reduce levels of alcohol consumption among patients with alcohol-related trauma estimated that $3.81 in health care costs would be saved for every $1.00 spent on screening and interventions *(103)*.

Treatment for alcohol dependence

Treatment for alcohol dependence can be effective in reducing levels of alcohol consumption and associated problems such as violent behaviour. For instance, a USA study found that treatment for alcohol dependence among males significantly decreased both husband-to-wife physical and psychological violence, and wife-to-husband violence six and 12 months later *(104)*.

Legal interventions

Legal interventions can be employed to deter individuals from excessive drinking and related violence. These include the use of fines for alcohol-related disorderly conduct or being intoxicated in public, and banning orders preventing troublemakers from using licenced premises. However, there are few evaluations of such measures and their preventive value is unclear.

Improving the wider night-time environment

Large concentrations of intoxicated individuals in town and city centres can lead to violence, while intoxicated individuals are vulnerable to assault when walking home on dark streets *(105)*. Interventions such as the provision of safe late-night transport *(92)*, improvements to street lighting *(106)* and the use of closed circuit television (CCTV) *(107)* can help reduce alcohol-related violence around licenced premises.

The role of public health

In all countries, health services have a central role to play in the prevention of alcohol-related violence (Box 5).

BOX 5: The role of health services

- Collating and disseminating information on the size of the problem and at-risk groups.
- Identifying, supporting and treating victims of alcohol-related violence.
- Catalysing multi-sectoral collaboration for prevention.
- Advocating for policy to reduce risky drinking and violence.
- Identifying, informing, implementing and monitoring effective interventions.
- Promoting, conducting and evaluating research on the links between alcohol and violence and the costs to society.

Information systems and data

Health services are ideally placed to collate and disseminate a wide range of information on drinking patterns and the use of health service settings for violence-related injury and alcohol problems. Whilst much of this information is available to varying degrees in many high-income countries, there is often a lack of infrastructure in place to assess the role of alcohol in violence elsewhere *(85)*. However, such information is essential to describing the extent of the problem and identifying population groups and geographical areas most at risk of alcohol-related violence. Recognising that different countries have varying levels of resources and infrastructure in place to monitor alcohol consumption and related harm, the World Health Organization published international guidelines in 2000. These provide information to assist countries in developing an epidemiological monitoring system to inform effective policy and to improve global and regional comparability of data on alcohol use and associated harm *(108)*.

Services for victims of violence and alcohol misusers

In high-income countries, brief interventions in health settings have proven effective in reducing risky drinking among victims of alcohol-related violence while screening for exposure to violence can enable victims to be identified and supported. Staff in trauma departments, for example, are well placed to screen for hidden victims of child maltreatment *(109)*, elder abuse *(110)*, sexual violence *(111)* and intimate partner violence *(112)*. Such interventions should be widely implemented but require investment in training and support for health staff. Moreover, so that victims can be offered support, adequate effective services must be available to cope with the resulting increases in demand.

Advocacy, collaboration and promoting prevention

Public health professionals should promote a multi-sectoral approach to prevention with the roles of the contributors defined according to their capacity to alter one or more of the risk factors for alcohol-related violence. Potential stake holders include health services, criminal justice agencies, local authorities, the liquor industry, grass-roots organizations, media and local residents (See Box 6). Such an approach should highlight the links between harmful alcohol use and violence, their impacts on the targets of other agencies (e.g. education [113] and business profitability [114]) and the effectiveness and cost-effectiveness of interventions. Public health initiatives should promote a holistic prevention approach *(115)*, ensuring, for example, that efforts to reduce the availability of cheap alcohol in nightlife settings do not simply displace alcohol and violence problems to other areas. Such initiatives should also advocate for early developmental interventions, such as reducing maltreatment during infancy as a means of preventing the consequent development of harmful alcohol use and violent tendencies in later life. With such interventions some results can take years to materialize and health services can play a major role in securing the necessary longer-term political support to establish and maintain such prevention initiatives.

BOX 6: **Multi-component community-based violence prevention projects**

The DESEPAZ programme in Colombia

In response to increasing levels of violence in the city of Cali, Colombia the mayor led the development of the DESEPAZ programme, comprising a partnership of demobilized guerrillas, labour union representatives, church members and private sector leaders. The programme involved the development of an accurate information system for measuring violence and a wide range of measures to improve law enforcement (including education and training for police); increase communication between citizens and law enforcement agencies; and improve education and employment for residents and particularly high-risk youths. Recognizing the important role of alcohol in violence, alcohol sales were restricted with closing times imposed on bars and nightclubs. Both hospitals and traffic authorities reported reductions in injuries following this intervention *(116)*.

The STAD project in Stockholm

In Stockholm, Sweden, the 10-year STAD project (Stockholm prevents alcohol and drug problems) has, among other things, developed a programme together with local authorities and the hospitality industry. The programme incorporated community mobilization (e.g. establishment of an advisory group including the licenced trade, police, health services and the local council), responsible beverage service training (covering alcohol legislation, health effects of alcohol and conflict management) and enforcement activity (including formal warnings and licence withdrawals for failing to adhere to licencing legislation). Evaluation of the programme found a 29% reduction in violent crime in the intervention area *(117)*.

Policy

Both the harmful and hazardous use of alcohol and violence have been recognized internationally as key public health issues requiring urgent attention. At national and international levels, health organizations have a key role in advocating for policies that address the relationships between alcohol use and violence and in doing so promote prevention initiatives that will improve public health. The World Health Organization (WHO) runs comprehensive programmes on both issues to instigate and conduct research, identify effective prevention measures, and promote action by Member States to implement successful interventions and align policy towards reducing hazardous and harmful drinking and violence.

For alcohol, this includes collating and disseminating scientific information on alcohol consumption, developing global and regional research and policy initiatives on alcohol, supporting countries in increasing national capacity for monitoring alcohol consumption and related harm, and promoting prevention, early identification and management of alcohol use disorders in primary health care *(118)*. A World Health Assembly resolution on *Public health problems caused by harmful use of alcohol* (WHA58.26 [119]) of 2005 recognizes the health and social consequences associated with harmful alcohol use and requests Member States to develop, implement and evaluate effective strategies for reducing such harms, while calling on WHO to provide support to Member States in monitoring alcohol-related harm, implementing and evaluating effective strategies and programmes, and to reinforce the scientific evidence on effectiveness of policies.

For violence, this includes the WHO Global Campaign for Violence Prevention. Launched in 2002, the Campaign aims to raise international awareness about the problem of violence, highlight the role of public health in its prevention, and increase violence prevention activities globally, regionally and nationally. The approach to preventing violence is set out in the WHO *World report on violence and health (2)*. World Health Assembly resolution WHA56.24 *(120)* of 2003 encourages Member States to implement the recommendations set out in the report, and calls on the Secretariat to cooperate with Member States in establishing science-based public health policies and programmes for the implementation of measures to prevent violence and to mitigate its consequences. Complementary to this, the Violence Prevention Alliance has been established to provide a forum for the exchange of best practice information between governments and other agencies working to reduce violence around the world.

The United Nations also conducts a range of programmes to address the different forms of violence globally, with alcohol recognized as a major risk factor. For example, UNIFEM, the United Nations (UN) Development Fund for Women, provides financial and technical assistance to programmes that promote women's empowerment and gender equality and works with countries to formulate and apply laws and policies to eliminate violence against women. Through UNICEF, the United Nations Children's Fund, the UN Study on Violence Against Children aims

to urge governments across the world to fulfil their duty to end such violence, and the UN Guidelines for the Prevention of Youth Delinquency (The Riyadh Guidelines) specifically state that attention be given to strategies to prevent alcohol and drug use among young people.

Challenges

Already in some countries dangerous drinking patterns have become embedded especially in youth culture, with people routinely drinking at hazardous levels (e.g. Denmark, Ireland, UK [121]). Successfully changing hazardous drinking patterns is a substantial challenge. However, in a number of countries patterns of alcohol use are, in general, less hazardous and relationship between alcohol consumption and violence is less pronounced. In countries that traditionally have not used alcohol but where, partially due to globalization alcohol use is now rapidly increasing, a major challenge is to develop culturally appropriate social norms and other mechanisms to control the hazardous and harmful use of alcohol. Such variations in patterns of alcohol use and alcohol-related violence provide the opportunity to examine and exchange information (for instance through the Violence Prevention Alliance) on how and why it is curbed in some regions but increasing in others. Low- to middle-income countries face additional challenges for reducing alcohol-related violence. Here, relatively unregulated alcohol production and sales call for the enactment and enforcement of laws to regulate alcohol availability, and there is little evidence for what alternative interventions may be successful. Even in high-income countries implementation of evidence-based interventions and policy is often complicated by major economic interests in the production and sale of alcohol. Consequently, minimizing alcohol-related violence requires strong leadership and the political will to tackle a substance used widely throughout populations. However, the interests of communities and companies alike are served when the threats to public health posed by interpersonal violence and alcohol are minimized. While there are no easy solutions to addressing alcohol-related violence, the growing body of international research means that a clearer picture is developing of how alcohol and violence are related and what strategies can be effective in prevention.

Priorities for Action

Interventions that address the public health effects of harmful use of alcohol in general should form the framework for more specific interventions designed to prevent alcohol-related violence. Priorities for specific actions on alcohol-related violence include the following:

- Policies and strategies for addressing alcohol-related violence should concentrate expenditure on evidence-based interventions. Where evidence is lacking investment in novel interventions should be accompanied by rigorous evaluation.

- Best practice for the reduction of alcohol-related violence in a number of settings should be developed and disseminated.
- Investment is required in international research on the links between alcohol and all forms of interpersonal violence, their costs to society and effective prevention measures, particularly for low- to middle-income countries.
- Sustained efforts should be made to increase awareness of the links between alcohol and violence for both victims and perpetrators.
- International approaches to alcohol taxation should consider public health priorities and not only the trade and economic aspects.
- Countries and regions should aim to improve and standardise recording of alcohol involvement in violence in both health and criminal justice settings.
- At all levels policy should aim to reduce any alcoholic beverage promotions or other efforts that increase alcohol consumption or encourage the rapid consumption of high levels of alcohol.
- Regional and international efforts should aim to address the significant immediate and long-term costs of alcohol consumption among young people, particularly through multi-sectoral initiatives to delay the onset of drinking, reduce illegal purchase and decrease overall consumption levels.

Useful Resources:

WHO global status report on alcohol 2004. Geneva, World Health Organization, 2004.

Global status report: alcohol policy. Geneva, World Health Organization, 2004.

Krug EG et al., eds. *World report on violence and health.* Geneva, World Health Organization, 2002.

Babor T et al. *Alcohol: no ordinary commodity.* Research and public policy. New York, Oxford University Press, 2003.

Room R et al. *Alcohol in developing societies: a public health approach.* Helsinki and Geneva, Finnish Foundation for Alcohol Studies and World Health Organization, 2003.

World Health Organization. *International guide for monitoring alcohol consumption and related harm.* http://whqlibdoc.who.int/hq/2000/WHO_MSD_MSB_00.4.pdf. Accessed 10th October 2005.

Violence Prevention Alliance: http://www.who.int/violenceprevention/en/index.html.

United Nations Development Fund for Women (UNIFEM): http://www.unifem.org/

United Nations Children's Fund (UNICEF): http://www.unicef.org/

All references used in this document are available at:

http://www.who.int/violence_injury_prevention/publications/violence/en/index.html

For further information please consult:

http://www.who.int/violence_injury_prevention

http://www.who.int/substance_abuse/en

http://www.who.int/substance_abuse/terminology/who_lexicon/en

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