Chapter 10

Alcohol harm reduction in Europe

Rachel Herring, Betsy Thom, Franca Beccaria, Torsten Kolind and Jacek Moskalewicz

Abstract

This chapter provides an overview of harm reduction approaches to alcohol in Europe. First, definitions ascribed to alcohol harm reduction are outlined. Then, evaluated alcohol harm reduction interventions in European countries are described and the evidence for their effectiveness examined. These include multi-component programmes, improvements to the drinking environment, and initiatives to reduce the harms associated with drink-driving. Third, harm reduction activities that have been recorded and described but not yet evaluated are briefly outlined. These include 'grassroots' initiatives and more formal local initiatives. To conclude, the chapter raises questions about how alcohol harm reduction is defined and put into practice, the evidence-base that is available for policymakers, and how information is shared. It highlights the need to develop systems to facilitate knowledge transfer on alcohol harm reduction between researchers, policymakers and practitioners in Europe but stresses the importance of respecting local and cultural diversity in the development and implementation of harm reduction initiatives.

Keywords: alcohol, harm reduction, Europe, evaluation.

Introduction

The consumption of alcohol is an integral part of many European cultures and is embedded in a variety of social practices. Whilst drinking alcohol is, for the most part, a pleasurable experience often associated with relaxation and celebrations, there are a number of societal and health harms associated with its consumption. The European Union (EU) is the heaviest drinking region of the world (Anderson and Baumberg, 2006) and alcohol is linked to multiple health and social problems. Health-related conditions include cancer, injury, liver cirrhosis and cardiovascular disease; it is estimated that in the EU alcohol is responsible for 7.4 % of all disability and premature deaths (Anderson and Baumberg, 2006, p. 401). At a global level, it is estimated that 3.8 % of all deaths and 4.6 % of disability-adjusted life years are attributable to alcohol (Rehm et al., 2009, p. 2223). There is also a broad range of societal harms associated with alcohol consumption including crimes, violence, unemployment and absenteeism, which place a significant burden on societies and economies (WHO, 2008a)

A wide array of measures are employed by European countries to reduce the harms associated with alcohol. These include restrictions on availability, taxation, education campaigns, laws on drink-driving, and a range of formal and informal interventions commonly referred to as 'harm reduction' or 'risk reduction' measures. Yet the concept of harm reduction is contested — as is the usefulness of this approach — and there is very little rigorous evaluation of harm reduction projects or programmes, including in Europe.

This chapter begins with a brief overview of alcohol consumption and alcohol-related harms in Europe. This will be followed by an examination of what is meant by the term 'harm reduction' in relation to alcohol. It then considers harm reduction interventions that have been evaluated in European countries, also drawing upon the broader published literature, much of which is North American or Australasian. We briefly outline harm reduction activities that have been recorded and described but not yet evaluated. These include 'grass roots' initiatives and more formal local initiatives. In conclusion, we argue for a clarification of what is meant by the term 'alcohol harm reduction', and the creation of more effective systems for sharing information and collecting data, alongside research to examine the extent to which harm reduction is seen as an appropriate approach to reducing alcohol-related harms in the different countries of Europe.

Alcohol-related harm in Europe

The relationship between alcohol consumption and health and social outcomes is complex and multidimensional. Key factors include: volume of alcohol drunk over time; pattern of drinking (for example, occasional or regular drinking to intoxication); and drinking context (e.g. place, companions, occasion) (WHO, 2008a). The countries with the highest overall alcohol consumption in the world are in eastern Europe, around Russia, but other areas of Europe also have high overall consumption (WHO Europe region 11.9 litres per adult; Rehm et al., 2009, p. 2228). In all regions worldwide, including Europe, men consume more alcohol than women, and are more likely to die of alcohol-attributable causes, suffer from alcohol-attributable diseases and alcohol-use disorders (Rehm et al., 2009; Anderson and Baumberg, 2006). Europe has the highest proportion of alcohol-attributable net deaths and within Europe the highest proportion is for the countries of the former Soviet Union (Rehm et al., 2009, p. 2229). Alcohol is thought to be responsible for 12 % of male and 2 % of female deaths in Europe (Anderson and Baumbera 2006, p. 3), and 25 % of male youth mortality and 10 % of female youth mortality (Anderson and Baumberg 2006). The health impact of alcohol is seen over a wide range of conditions (see Table 10.1 for examples) and includes acute harms (e.g. accidents and injuries as a result of intoxication) and harms associated with longer-term consumption (e.g. cirrhosis).

| Table 10.1: The impact o | f alcohol on health in Europe |
|-----------------------------|---|
| Harm | Impact |
| Road traffic accidents | 17 000 deaths per year (1 in 3 of all road traffic fatalities) |
| Homicides | 2 000 (4 in 10 of all murders and manslaughters) |
| Accidental deaths | 27 000 deaths |
| Suicide | 10 000 deaths (1 in 6 of all suicides) |
| Cancer | 50 000 deaths |
| Liver cirrhosis | 45 000 deaths |
| Neuropsychiatric conditions | 17 000 deaths |
| Depression | 200 000 episodes |
| Alcohol dependence | 23 million people in any one year (5 $\%$ men and 1 $\%$ women) |

Source: Compiled from data in Anderson and Baumberg 2006, pp. 3 and 6).

Alcohol consumption can negatively impact on an individual's work, their relationships and studies (e.g. absenteeism, breakdown of relationships) and consequently on other people (e.g. families, colleagues) and society as a whole. At a societal level the harms associated with the consumption of alcohol include public nuisance (e.g. disturbance, fouling of the streets), public disorder (e.g. fights), drink-driving and criminal damage. The tangible costs of alcohol to the EU (that is, to the criminal justice system, health services, economic system) were estimated to be EUR 125 bn in 2003; this included EUR 59 bn in lost productivity due to absenteeism, unemployment and lost working years through premature death (Anderson and Baumberg, 2006, p. 11); the intangible costs of alcohol (which describe the value people place on suffering and lost life) to the EU were estimated to be EUR 270 bn in 2003 (Anderson and Baumberg, 2006, p. 11).

What is alcohol harm reduction?

Although in recent times the term 'harm reduction' has mostly been associated with the illicit drug field, alcohol harm reduction strategies have been used for centuries (Wodak, 2003; Nicholls, 2009). For instance, in England, the idea that those serving alcoholic beverages should be legally responsible for preventing customers from getting drunk can be traced back to James I's 1604 'Act to restrain the inordinate haunting and tipling of inns, alehouses and other victualling houses'; in practice the law was largely ignored, but it did establish an important principle (Nicholls, 2009, p. 11). Examples of similar formal and informal constraints on behaviour can be found in other European countries and, indeed, worldwide. In sixteenth century Poland an innkeeper was supposed to make sure that farmers had no dangerous objects with them in a pub, as they often became violent after drinking and then would try to use drunkenness as an excuse for their behaviour (Bysto, 1960). Thus, those who served alcohol combined their profit-oriented job with harm reduction. Women have often served as social control or harm reduction agents; in Patagonia, Indian Tehuelche young women, not yet of drinking age, collected all weapons, including knives and axes, prior to a drinking party to prevent severe injures in a case of alcohol-induced violence (Prochard, 1902).

Measures to ensure the safety of alcoholic beverages (that is, free from harmful adulteration or contamination, regulation of the alcohol content of drinks) are also long-standing and remain important. Austrian wine adulterated with diethylene glycol (found in antifreeze) to make it taste sweeter was withdrawn from sale across the world in the mid-1980s (Tagliabue, 1985). Regulation of the sale and size of containers of medicinal (pure) alcohol has reduced the harms associated with its consumption in Nordic countries (Lachenmeier et al., 2007). Research in Estonia (Lang et al., 2006) examining the composition of illegally produced (such as home-produced) and surrogate alcohol products (e.g. aftershave, fire lighting fuel) found high levels of alcohol by volume (up to 78.5 %) and various toxic substances (e.g. long chain alcohols). Moreover, it is likely that the consumption of surrogate alcohol and illegally produced alcohol contributes to the high mortality and morbidity associated with alcohol consumption in other countries in transition (see, for example, McKee et al., 2005; Leon et al., 2007 on Russia).

Harm reduction principles were central to the influential 'Gothenburg System', named after the Swedish city that first adopted the approach in 1865 (Pratt, 1907). Under Swedish law private companies could be established that were empowered to buy up the sprits trade in specific localities and run it on a not-for-profit basis, thus removing the financial incentive to sell large quantities of spirits. Managers whose salaries were not dependent on high sales of spirits (the law did not cover sales of beer or food) were employed to run the pubs. Although the effectiveness of the Gothenburg System in reducing excessive consumption was not entirely clear (Nicholls, 2009), it was an idea that attracted much interest and was adopted in other places, including Bergen, Norway. The Gothenburg system also inspired the system of 'disinterested management', established in late nineteenth century England, whereby companies were formed that bought up pubs and employed salaried managers; shareholders, in return for their investment, received a capped dividend on their investment. However, the impact of this scheme was limited by the small number of establishments run on these lines (Nicholls, 2009).

Whilst not a new idea, harm reduction was not particularly formulated as a concept for policy intervention until it came to prominence in the illicit drugs field in response to HIV/AIDS in conjunction with the spread of HIV through sexual intercourse and drug injecting (Stronach, 2003). There was a recognition that sexual abstinence and stopping injecting drugs was not a feasible option for many people, so realistic and pragmatic strategies were required that focused on managing the outcomes of behaviour rather than eliminating or changing the behaviour (Stronach, 2003). As Stockwell (2006) notes, what made harm reduction distinctive when it emerged in the drugs field was the practice of encouraging safer behaviour (e.g. not sharing injecting equipment and using condoms for sex) without necessarily reducing the occurrence of the behaviour (see, for example, Lenton and Single, 1998 and box below).

World Health Organization definition of harm reduction

In the context of alcohol or other drugs, describes policies or programmes that focus directly on reducing the harm resulting from the use of alcohol or drugs. The term is used particularly of policies or programmes that aim to reduce the harm without necessarily affecting the underlying drug use; examples includes needle/syringe exchanges to counteract needle-sharing among heroin users, and self-inflating airbags in automobiles to reduce injury in accidents, especially as a result of drinking-driving. Harm reduction strategies thus cover a wider range than the dichotomy of supply reduction and demand reduction.

(WHO, 1994)

With respect to alcohol, Robson and Marlatt (2006) have argued that the World Health Organization (WHO) has emphasised total population measures, such as restricting supply, almost to the point of discounting other approaches. However, the WHO are in the process of drafting a global strategy to reduce the harmful use of alcohol (to be considered by the World Health Assembly in May 2010) and harm reduction has been identified as one of nine possible strategy and policy element options (WHO, 2008a). At the same time, whilst

acknowledging the positive contribution of harm reduction measures, the WHO note that the evidence base is not, as yet, as well established as that for regulating the availability and demand for alcohol (WHO, 2008a).

However, since the 1990s harm reduction has become increasing influential in the alcohol field; indeed Robson and Marlatt (2006, p. 255) contend that 'it is now, up to a point, the conventional wisdom'. So what is alcohol harm reduction? As is common with such terms it will depend on whom you ask or where you look. Stockwell (2006) has shown that the term is applied in many different ways, some of which rather push the boundaries of 'harm reduction'. For Stockwell, what distinguishes harm reduction from other approaches is that it does not require a reduction in use for effectiveness, rather it is about seeking to 'make the world safer for drunks' (2004, p. 51). On their website the International Harm Reduction Association (IHRA) state, 'Alcohol harm reduction can be broadly defined as measures that aim to reduce the negative consequences of drinking' (IHRA, n.d.), whilst Robson and Marlatt (2006, p. 255) suggest that the common feature of harm reduction interventions is that they do not aim at abstinence.

These broader definitions encompass interventions that do not attempt to reduce consumption, such as the provision of safety (shatterproof) glassware in drinking venues, 'wet' shelters, 'sobering up' stations, and which often focus on specific risk behaviours (e.g. drink-driving), particular risk groups (e.g. young people) and particular drinking contexts (e.g. clubs, bars). They also encompass interventions that implicitly or explicitly do aim to reduce alcohol consumption, for example server training, brief interventions and controlled drinking. But the labelling of approaches that aim to reduce alcohol use as 'harm reduction' has been challenged, with Stockwell (2004, 2006) arguing that such interventions would be better described as 'risk reduction' as they require the reduction of alcohol intake to less risky levels. Furthermore, a recent round-table discussion involving health professionals and non-governmental organisations about harmful alcohol use, concluded that: 'Brief interventions are not considered to constitute a harm reduction approach because they are intended to help people drink less' (WHO, 2008b, p. 8).

Stronach (2003, p. 31) identified five key elements that should underpin alcohol harm policies and interventions:

- Harm reduction is a complementary strategy that sits beside supply control and demand reduction.
- Its key focus is on outcomes rather than actual behaviours per se.
- It is realistic and recognises that alcohol will continue to be used extensively in many communities, and will continue to create problems for some individuals and some communities.
- Harm reduction is non-judgemental about the use of alcohol, but is focused on reducing the problems that arise.
- It is pragmatic it does not seek to pursue policies or strategies that are unachievable or likely to create more harm than good.

Thus, within policy and research discourse, the notion of 'alcohol harm reduction', although influential, has not gone unchallenged or without controversy. Indeed, there has been a tendency, particularly within the media, to dismiss or even ridicule harm reduction approaches. Within the United Kingdom, recent harm reduction interventions, including handing out 'flip-flops' to women drinkers to prevent injuries caused by falling over in high heels or walking barefooted, have attracted negative headlines (Hope, 2008; Salked, 2008).

This lack of consensus can be reflected in the responses of service and policy providers across Europe. To capture how harm reduction is understood and how related strategies are implemented in practice in Europe, we conducted a brief survey of the 30 European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) Heads of Focal Groups. We received responses from Austria, Belgium, Croatia, the Czech Republic, Cyprus, Estonia, Finland, Latvia, Netherlands, Norway, Portugal, Slovakia, Spain and Sweden.

We asked our survey informants what they understood by the term 'harm reduction'. The definitions they gave were anchored around the concept of limiting or reducing the negative health, social and economic consequences of alcohol consumption on both individuals and communities. A key idea was that harm reduction approaches do not seek to convince individuals to abstain or to introduce prohibition but rather take a 'pragmatic' approach to reducing harms associated with drinking.

Distinctions were made between harm reduction initiatives, which aimed to minimise harm once it has actually been caused, and risk reduction initiatives, which aimed to prevent harm being caused. Several respondents placed qualifiers; for example, the respondent from Norway did not classify 'responsible host' or educational campaigns as harm reduction measures. Similarly the Swedish respondent classified as 'harm reduction' only those measures that aimed to reduce harm that already exists to some extent.

Such variations were not unexpected but do highlight the fact that, whilst there might be a shared language, the meaning attributed to the term 'harm reduction' can differ from one European country to another. While the meaning of harm reduction varies by country, it is important that the measures used are based on evidence and focused on outcomes (WHO, 2008b, p. 14). Evidence, however, is scanty.

Reducing alcohol-related problems: the international evidence

According to findings from international research, the most effective interventions include alcohol taxes, restrictions on the availability of alcohol and measures to reduce drink-driving; interventions identified as the least effective include alcohol education, public awareness programmes and designated driver schemes and many of the 'harm reduction' approaches (Babor et al., 2003; Anderson, et al., 2009). Stockwell (2004, p. 49) argues that the most effective interventions to prevent alcohol-related harm require

reduction in the amount of alcohol consumed on a single occasion but suggests that other measures can be employed alongside measures to reduce total population consumption.

There is some international evidence about 'what works' to reduce alcohol-related harm as defined in this chapter. The impact of screening and brief intervention (sometimes referred to as 'identification and brief advice'), particularly in primary care settings, in reducing harmful alcohol consumption has been extensively evidenced as effective (Babor et al., 2003; Kaner et al., 2007), although, as mentioned earlier, the inclusion of brief interventions as a harm reduction measure is contested.

Graham and Homel (2008, pp. 196–238) provide a useful overview of the problems of reducing alcohol-related aggression in and around pubs and clubs and review the evidence for prevention and harm reduction measures. As they report, only a small number of interventions have been evaluated with sufficient rigour to draw conclusions. They mention a large randomised controlled trial of the Safer Bars Programme (a 'stand-alone' programme in Ontario, Canada), which consists of a risk assessment component, a training component and a pamphlet outlining legal responsibilities, as having a modest but statistically significant effect on incidents of aggression. Police enforcement trials did not provide sufficient evidence to make recommendations but the Alcohol Linking Programme (Australia) indicated the success of using place of last drinks data as the basis for targeted enforcement. Community action models to implement local policy depend heavily on partnerships but have demonstrated some success. This approach, evaluated largely in North America, Australia, New Zealand and Scandinavia, has been described as 'any established process, priority, or structure that purposefully alters local social, economic or physical environments to reduce alcohol problems' (Holder 2004, p. 101); it is discussed more fully below.

In a comprehensive synthesis and assessment of the international evidence, Babor et al. (2003) offer a menu of interventions, which they have rated on four major criteria: evidence of effectiveness, breadth of research support, extent of testing across diverse countries and cultures, relative cost of the intervention in terms of time, resources and money. The assessment reflects a consensus view of the 15 expert authors. For illustration, Table 10.2 (adapted from Babor et al., 2003) shows ratings for two of the criteria: interventions that were rated on effectiveness from none (zero) to highest (three), and interventions rated on breadth of research support from none (zero) to highest (three). The table tells us, for example, that alcohol education in schools has five or more studies of effectiveness but that there is no good evidence of effectiveness. It clearly indicates that typical harm reduction measures such as warning labels on alcohol, designated driver schemes and voluntary codes of practice are judged as least effective, although, as illustrated in the second column, many harm reduction measures have few well-designed evaluation studies. However, increasing attention has been given to the potential of programmes of projects rather than stand-alone initiatives to achieve change. These 'multicomponent' programmes, which include many of the harm reduction interventions rated as least successful, are discussed in the following sections.

Table 10.2: What works in reducing alcohol problems?

| Strategy or intervention | Effectiveness (1) | Research support (²) |
|---|-------------------|-------------------------|
| Alcohol taxes | +++ | +++ |
| Minimum legal purchase age | +++ | +++ |
| Government monopoly of retail sales | +++ | +++ |
| Hours and days of sale restrictions | ++ | ++ |
| Restrictions on density of outlets | ++ | +++ |
| Random breath testing | +++ | ++ |
| Lowered limits of blood alcohol concentration (BAC) | +++ | +++ |
| Low BAC for young drivers | +++ | ++ |
| Brief intervention for hazardous drinkers | ++ | +++ |
| Designated drivers and ride services | 0 | + |
| Advertising bans | + | + |
| Voluntary controls of advertising by alcohol industry | 0 | + |
| Alcohol education in schools | 0 | +++ |
| Alcohol education in colleges | 0 | + |
| Alcohol education targeting general public | 0 | +++ |
| Warning labels | 0 | + |
| Voluntary codes of bar practice | 0 | + |

Notes:

Source: Adapted from Babor, T. F., et al. (2003, Table 16.1, pp. 264-6).

Harm reduction approaches to alcohol in Europe: evaluated initiatives

Although the focus of this section is on harm reduction initiatives that have been evaluated in a European context, we also draw on the broader literature. Table 10.3 provides a summary of the evaluated alcohol harm reduction interventions we have identified either from the European literature or from international sources. Many evaluated harm reduction interventions are part of multi-component community programmes designed to prevent and reduce alcohol-related harm, whilst others are 'stand alone' interventions delivered at the local or national level. First, the multi-component approach will be outlined, followed by an examination of harm reduction interventions under two broad themes: improving the drinking environment and reducing the harms associated with drink-driving. Interventions that form part of multi-component programmes are summarised in the box on p. 288 and some will be considered in more detail under the relevant theme. Although brief interventions are often regarded as harm reduction, this chapter will not consider brief interventions, in part because such classification has been contested (as noted above) and because an extensive literature already exists and has been reviewed elsewhere (Nilsen et al., 2008).

^{(1) 0 =} lack of effectiveness, += evidence for limited effectiveness, ++ = evidence for moderate effectiveness, +++ = evidence for high effectiveness.

^{(2) 0 =} no well-designed study of effectiveness, + = only one study completed, ++ = from two to four studies completed, +++ = five or more studies completed.

| nmaries | Main findings | Statistically significant reduction in over-serving and serving to minors in both project and control area. Possible 'spill-over' effects from changes in alcohol policy in both areas. (Wallin et al., 2003a) 29 % reduction in police-reported violence (Wallin et al., 2003b) | 39 times higher savings than cost but caution needs to be exercised because of low response rate (35 %). (Månsdotter et al., 2007) | No reduction in serving to intoxicated patrons in trial or controls. Harder for youths to be served in control areas but differences not significant. (SNIPH, 2008) | Outline of research and discussion of methods. (Holmila and Warpenius, 2007) |
|--|---|--|---|---|---|
| Table 10.3: Examples of evaluations of alcohol harm reduction initiatives in Europe: summaries | Goal, intervention and outcome measures | Reduce over-serving and serving to minors. Reduce problems related to alcohol consumption in licensed premises, including violence. RBS, enforcement, partnership working. Test purchases. Police reported incidents of violence between 10pm—6am. Pre and post intervention measures, control area. | Calculate cost-effectiveness of 'restaurant intervention' from a societal perspective. Survey of victims of violence, costs, savings, quality adjusted life years (QALYS) | Reduce over-serving of alcohol to intoxicated individuals and sale of medium strength beer to those aged under 18. RBS, enforcement, partnership working. Six trial and six control municipalities. | Decrease under-age drinking, reduce heavy drinking occasion and related acute problems, develop a model for sustainable prevention structure at local level. RBS, enforcement, partnership working, public discussion. Two test communities and two control. Pre- and post-intervention measures |
| ions of alc | Country | Sweden | Sweden | Sweden | Finland |
| les of evalua | Start date | 88661 | 1998 | 2003 | 2004-08 |
| Table 10.3: Examp l | Name of project | 'Restaurant intervention' — responsible beverage service (RBS), Stockholm Prevents Alcohol and Drug Problems (STAD) | 'Restaurant intervention' — RBS, STAD | Alcohol and drug prevention in six municipalities | Local Alcohol Policy Project (PAKKA) |

| Table 10.3 (continued) | ued) | | | |
|--|------------|---------|---|--|
| Name of project | Start date | Country | Goal, intervention and outcome measures | Main findings |
| Responsible Hosts Programme: Trondheim | 2000 | Norway | Reduce alcohol-related violence, over-serving and Low participation in RBS training (12 % of licensed serving to minors. RBS. No impact: no changes in police-reported violence in/around licensed premises, underage sales, over-serving or attitudes/perceptions of staff. (Baklien and Buvik, 2006) | Low participation in RBS training (12 % of licensed premises) — intervention thus not fully exploited. No impact: no changes in police-reported violence in/around licensed premises, underage sales, over-serving or attitudes/perceptions of staff. (Baklien and Buvik, 2006) |
| Kirseberg project | 88 | Sweden | Reduce alcohol consumption in the population and decrease the incidence of alcohol-related problems. Consumption measures, problem measures, survey of exposure to project. | Consumption declined in men but not women. Alcohol-related problems showed a statistically significant reduction for men, and a decline for binge drinkers, but no reduction among women. High awareness (67 %) of project. (Hanson et al., 2000) |
| Alcohol-interlock programme | 66 60 | Sweden | To prevent drink-driving. Two programmes: driving while intoxicated (DWI) offenders (instead of licence revocation); and commercial drivers (buses/taxis/trucks). DWI: two-year programme, biomarkers/AUDIT. Control groups. Post-intervention measures. Commercial: Primary prevention. Blood alcohol concentration (BAC) tests. | DWI: Only 11 % of eligible DWI offenders participated. 60 % alcohol dependent/abusers. Reduced alcohol consumption during programme (Bierre, 2005). Post-treatment (when compared to five year period prior to treatment) recidivism 60 % lower and police-recorded accidents 80 % lower. Control – accident reduction similar but not DWI recidivism (Bjerre and Thorsson, 2008). Commercial: Among 600 heavy vehicles, 0.19 % of all starts prevented as BAC >0.02 % (20 mg/dl), mostly at weekends or mornings. |

| Table 10.3 (continued) | ed) | | | |
|--|------------|----------|---|--|
| Name of project | Start date | Country | Goal, intervention and outcome measures | Main findings |
| Reducing alcohol- related injury, violence and disorder in Glasgow city centre | 2004 | Scotland | Reduce alcohol-related injury, violence and disorder in the city centre. RBS, 'Best Bar None' (BBN), test purchasing. 'Nite Zone': transport/community safety improvements (e.g. relocation of bus stops, taxi wardens, extra CCTV with loudspeakers). Awareness raising (conference, radio campaigns and website, police custody cards). | Decrease (-9.7 %) in police-recorded crimes and decrease (-4.4 %) in ambulance incidents. Increase (+74.4 %) in police-recorded alcohol-related incidents, increase (+6.5 % in emergency department attendances. Nite Zone: decrease in road accidents (-11.4 %), violent crime (-19 %), serious assault (-4.4 %), robbery (-21.5 %). Awareness: >100 000 websites hits, >2 000 calls to radio station, 2 889 information packs supplied, 17 treatment referrals from 400 cards. (Mistral et al., 2007) |
| Multi-agency, community-based intervention to reduce excessive drinking in Cardiff city centre | 7007 | Wales | Reduce excessive drinking in the city centre. Improve regulation of licensed premises by feedback of individual risk assessments of premises and RBS. Awareness-raising. Community Safety Partnership focus on reducing crime and disorder. Test purchasing, police/National Health Service statistics, environmental audits. | Decrease (-25.7 %) in emergency department attendances, but increase (+33 %) in policerecorded crimes/incidents. = 9 % of city centre staff successfully trained. 30 % of premises failed test purchasing. Audits — minority heavily intoxicated, training targeted to problem premises, details of public litter. (Mistral et al., 2007) |
| 'Route 50' Project, Birmingham | 5000 | England | Reduce alcohol-related harm in the community using a multi-component approach. Focus on licensed premises. Engage in partnership working. RBS, strict enforcement, awareness-raising — publicity campaigns and partnership working. Test purchasing, police statistics, survey. | Public place wounding decreased by -29.5 % within 800m of project area and more than neighbouring police area (-17.2 %) (but caution as numbers small). Signs that awareness raised — e.g. Pubwatch established and active, community forum on alcohol. Partnerships established and active (e.g. police, licensees, local government). (Mistral et al., 2007) |

| Table 10.3 (continued) | (per | | | |
|--|------------|---------------------|---|---|
| Name of project | Start date | Country | Country Goal, intervention and outcome measures | Main findings |
| The Ringsted Project | 2001 | Denmark | A controlled experiment in a provincial town, focusing on normative misperceptions/exaggerated beliefs amongst Danish youth in relation to the use of tobacco, alcohol and drugs. | Statistically significant reduction in the use of alcohol and general risk behaviour. (Balvig et al., 2005) |
| 'Caschiamoa' | 2005 | ltaly A | To prevent drink-driving: information campaign during a beer festival in Arezzo province in 2005. During the festival social and health workers offered information and the opportunity to measure BAC using alcohol tests. | More than 50 % of people who did the alcohol tests were positive (more than 0.5g/l BAC). (Ranieri et al., 2007) |
| 'Questa sera chiamatemi Bob' — a designated driver campaign | 2005 | Italy (Piedmont) | To prevent drink-driving: social campaign on drink-driving (radio, poster, free cards, disco events with information and alcohol testing). Evaluation of the campaign: 1 451 questionnaires, 1 235 interviews, 1 focus group, 11 health worker diaries. | Positive evaluation of the campaign. Positive evaluation of information activities in the discos (10), both about methods (gadget, alcohol testing) and quality of information. Positive evaluation about security driving course award. Suggestion for future campaign. (Beccaria and Marchisio, 2006) |

Multi-component programmes

Multi-component programmes involve the identification of alcohol-related problems at the local level and implementation of a programme of coordinated projects to tackle the problem, based on an integrative design where singular interventions run in combination with each other and/or are sequenced together over time; the identification, coordination and mobilisation of local agencies, stakeholders and community are key elements (Thom and Bayley, 2007). Furthermore, as Thom and Bayley (2007) note, evaluation is an integral part of multi-component programmes; both the overall programme and the individual projects within it should have clearly defined aims, objectives and measures of effectiveness. Another key element is that projects and the programme as a whole should have a strategic framework underpinned by a theoretical base.

The 'systems theory approach', which is closely associated with the work of Holder and colleagues in the United States (Holder, 1998), and the 'community action' approach have been particularly influential (see Thom and Bayley, 2007, pp. 35–9). The United States, Australia and New Zealand were at the forefront of the development of multi-component programmes in the alcohol field and influenced the establishment of such programmes in Europe (e.g. Holmila, 2001). Multi-component programmes have been conducted in Scandinavia, Italy, Poland and the United Kingdom (see box on p. 288 and Table 10.3) and have included a range of harm reduction projects. Whilst the specific targets of the multi-component programmes vary, the majority aim to influence community systems and change drinking norms, and most aim to mobilise local communities with the intention of securing sustainable, long-term change. For example, STAD (Stockholm prevents Alcohol and Drug problems), a multi-component community programme in Sweden that ran 1996–2006, included responsible beverage service training, community mobilisation and strict enforcement of alcohol laws (Wallin, 2004; Wallin et al., 2003a; Wallin et al., 2003b; Wallin et al., 2004; Månsdotter et al., 2007).

So, do multi-component programmes work? There is, as Thom and Bayley (2007) conclude, 'no simple answer' to this question. Whilst there is evidence from international research as to what is likely to work at a 'stand alone' level (see Table 10.2), what is less clear is how they work in combination or what kind of combinations may result in an effective multi-component programme. This is in part because of the expected synergistic effect of the components and also the possible cumulative effects over time; furthermore, it has not been possible to identify the contribution of particular components to programme outcomes as a whole (US Department of Health and Human Services, 2000). For example, educational and awareness-raising campaigns are often cited as ineffective in changing behaviour (see Table 10.2) but are seen as a crucial element of most multi-component programmes. Anderson and colleagues (2009) argue that although the evidence shows that information and education programmes do not reduce alcohol-related harm, they do play a key role in providing information and in increasing awareness of the need to place alcohol issues firmly on public and political agendas (Anderson, et al., 2009).

Examples of multi-component programmes in Europe

| Name of project | Country | Start date |
|---|----------|------------|
| Aquarius South Birmingham Community Alcohol Action Project ('Route 50' project) (UKCAPP) | England | 2004 |
| Lahti Project | Finland | 1992 |
| Metropolitan Suburbs Project | Finland | 1997 |
| Local Alcohol Policy Project (PAKKA) | Finland | 2004 |
| Florence (Rifredi) Community Alcohol Action Project | Italy | 1992 |
| Florence (Scandici) Community Alcohol Action Project | Italy | 1999 |
| Drinking and driving related injuries, Florence | Italy | 2004 |
| Community Action Project, Malczyce | Poland | 1994 |
| Reducing alcohol-related injury, violence and disorder in the city centre: Glasgow (UKCAPP) | Scotland | 2004 |
| The Kiresberg Project (demonstration) | Sweden | 1988 |
| Kungsholmen Project | Sweden | 1990 |
| Stockholm Prevents Alcohol and Drug Problems (STAD) | Sweden | 1996 |
| Six Communities Project | Sweden | 2003 |
| Multi-agency, community-based intervention to reduce excessive drinking in Cardiff city centre ('Lion's Breath') (UKCAPP) | Wales | 2004 |
| ource: Adapted from Thom and Bayley, 2007, pp. 62–3. | | |
| | | |

Although evaluation is integral to multi-component programmes, in reality these evaluations are complex and it is not only difficult to untangle the effects of the interventions from each other, but also from other activities in the locality. In relation to the evaluation of the three projects in the United Kingdom Community Alcohol Prevention Programme (UKCAPP), Mistral et al. commented:

The UKCAPP projects were part of a multi-faceted web of other local projects, partnerships, and interventions ... The complexity of these partnerships meant that it was impossible to consider any UKCAPP project as a discrete set of interventions, clearly delineated in space, and time, the effects of which could be evaluated independently of other local activities.

(Mistral et al., 2007, p. 86)

Another important issue highlighted by the UKCAPP evaluation was the inadequacy of statistical datasets, which meant that it was impossible to judge the effectiveness of interventions over time (Mistral et al., 2007). This was in part due to the different methods of data collection, analysis and retrieval used by police, ambulance service and emergency care departments, which made data validity hard to verify and comparison across sources or sites highly problematic (Mistral et al., 2007). In addition, local issues (e.g. timing of intervention, funding delays, getting agreement from all partners) can make systematic local evaluation challenging.

In summary, whilst some programmes have reported considerable successes (e.g. Community Trials Project, reported by Holder, 2000), others have yielded more mixed results, including the Lahti project in Finland (Holmilia, 1997), Kiresberg project (Hanson et al., 2000) and STAD (Wallin et al., 2003a) in Sweden. However, Thom and Bayley (2007) in their overview conclude that the evidence suggests that a multi-component approach has a greater chance of success than stand-alone projects.

Harm reduction interventions

Improving the drinking environment

Observational studies indicate that the drinking environment of licensed premises can impact on the risk of violence and injury. A lack of seating, loud music, overcrowding, unavailability of food are considered risk factors (Graham and Homel, 2008; Homel et al., 2001; Rehm et al., 2003). A variety of initiatives to improve the drinking environment have been implemented. These include server training, awards to well-managed licensed premises and the use of safety glassware (or plastic). A recent systematic review concluded that there was no reliable evidence that interventions such as these in the alcohol server setting are effective in preventing injuries (Ker and Chinnock, 2008). Nevertheless, we look at some of the research findings for each of these interventions in turn.

Server training

A number of European countries including Spain, United Kingdom, Ireland and the Netherlands have developed national responsible beverage service (RBS) training and accreditation schemes (EFRD website, 2009). Responsible beverage service is a key feature of many Scandinavian and United Kingdom multi-component programmes (see Table 10.3), with the aim of reducing sales to minors, over-serving and violence in and around licensed premises. These interventions usually involve formal training of staff and strict enforcement of existing alcohol laws; outcome measures include test purchasing and police statistics.

Results have been mixed. The STAD project in Sweden took a quasi-experimental approach with a control area, also located in central Stockholm, but not adjacent to the project area. In

relation to both over-serving and serving to minors there was a statistically significant reduction in both the control and project areas, although in the project area the improvement in relation to over-serving was slightly higher (but not statistically significant) (Wallin et al., 2003a). Wallin et al. (2003a) note that during the time of research the Stockholm Licensing Board (which covers both areas) altered practices and policy, and this might be one explanation for why there were changes in alcohol service in both the project and the control area (i.e. spill-over effects).

In contrast, there was a reduction in violence only in the project area, with a 29 % reduction in police-reported violence in and around licensed premises (Wallin et al., 2003b). The authors put forward several explanations for this result. First, there were a greater number of large nightclubs in the project area and changes in practice in large establishments may have a greater impact than changes in smaller establishments. Second, it may be a synergy effect, with improved serving practices and increased enforcement combining to produce a positive effect (Wallin et al., 2003b; SNIPH, 2008). Although it did appear to be harder for youths to get served in the project site than the control, the differences were not statistically significant (SNIPH, 2008).

Other studies, for example in Trondheim, Norway, experienced a low uptake of the intervention, and not surprisingly no impact was observed (Baklien and Buvik, 2006). The 'Route 50' project in Birmingham, an area with no history of partnership working, faced similar challenges, but boosted uptake by providing incentives (e.g. waived the course fee) (Mistral et al., 2007). Whilst there were decreases in police-recorded statistics compared to the adjacent area, the number of crimes was low and thus no inferences could be safely drawn (Mistral et al., 2007).

Awards for management of premises

In 2003, as part of a broad, multi-agency programme to reduce alcohol-related crime and disorder in the city centre area, Manchester developed a scheme, called 'Best Bar None' (BBN), to identify and recognise the best-managed licensed premises in the area (Home Office, 2004) (see box on p. 291 for details). The scheme has since been rolled out nationally, but despite this BBN has yet to be fully evaluated. Although 'a detailed assessment' of the impact of BBN on reducing disorder is planned (Harrington, 2008), a small-scale evaluation concluded that there was 'a lack of credible evidence to suggest that the implementation of the BBN scheme in Croydon has specifically had an impact on the reduction of crime and disorder in the town centre on its own' (GOL, 2007, p. 2). Whilst acknowledging there were benefits for those who implemented the scheme, these benefits were difficult to measure and 'largely amount to perception rather than evidenced reality' (GOL, 2007, p. 2). The report recommended that if the BBN is to continue, then an agreed measuring tool (that is, set of indicators) is required, so that the impact of the schemes can be assessed and can provide credible evidence for other areas considering its implementation (GOL, 2007).

From pilot project to national scheme — Best Bar None

2003

BBN developed within Manchester's 'City Safe Scheme'.
Quickly adopted by other towns in the United Kingdom.

2007

Agreement reached between Greater Manchester Police, the Home Office and British Institute of Innkeeping (the professional body for the licensed retail sector), to develop the scheme nationally.

2008

Over 90 schemes in place (Harrington, 2008).

Features of the BBN scheme:

- *Involves*: partnership with the licensing industry, police, local and central government, health workers and other agencies.
- Aims: to make licensees and the public aware of safety levels within premises, and reduce alcohol-related crime and irresponsible drinking.
- Sets: national standards of good practice in the management of licensed premises.
- Awards: the best-managed licensed premises in an area gold, sliver and bronzerepresent the levels to which the premises are assessed as meeting the standards.

Premises gaining an award display a plaque.

Use of safety glassware

Research in the United Kingdom identified that bar glasses were being used as weapons to inflict injuries, in particular to the face (Shepherd et al., 1990b). Further research concluded that the use of toughened glass would reduce injuries (Shepherd et al., 1990a; Warburton and Shepherd, 2000). This research led to the replacement of ordinary glassware with toughened glassware in licensed premises and there is evidence from the British Crime Survey that this change resulted in a significant reduction of violent incidents involving the use of glasses or bottles as weapons (Shepherd, 2007). However, Shepherd (2007) notes that reductions in glass injury have not been sustained — probably because of the increased availability of bottled drinks and the use of poorly toughened glass. Despite repeated calls, there is, as yet, no manufacturing standard but the use of alternative materials, particularly plastics, is seen as a way forward.

In 2006, as part of its approach to reducing alcohol-related violence and disorder in the city centre, Glasgow city council banned the use of glassware (other than special 'safety' glass) from venues holding an entertainment licence — which in practice meant nightclubs (Forsyth, 2008). However, individual premises could apply for an exemption for

champagne/wine glasses (Forsyth, 2008). The study, based on naturalistic observations and interviews, reported that exemptions to the ban had allowed some premises to continue to serve in glass vessels, and this resulted in injuries. Although disorder in all-plastic venues was observed, it incurred less injury risk and Forsyth (2008) concluded that the research demonstrated the potential of such policy to reduce the severity of alcohol-related violence in the night-time economy. Earlier initiatives, for example 'Crystal Clear' in Liverpool, aimed to remove glass from outdoor public places in the city centre in order to reduce glass injuries; a high-profile awareness campaign was mounted and action taken by bar and door staff to prevent glass being removed (Young and Hirschfield, 1999). The evaluation found that there was high recognition of the campaign and police and hospital data showed a reduction in glass injuries during the campaign (Young and Hirschfield, 1999).

Reducing the harms associated with drink-driving

Systematic reviews and meta-analyses have found that highly effective drink-driving policies include lowered blood alcohol concentration (BAC), unrestricted (random) breath testing, administrative licence suspension, and lower BAC levels and graduated licenses for novice drivers (Babor, et al., 2003; Anderson, et al., 2009). Less effective are designated driver schemes and school-based education schemes (Babor et al., 2003). We look at three examples — BAC measures, 'alcolocks' (or alcohol-interlocks, which are devices that prevent a motor vehicle from starting when a driver's BAC is elevated) and designated driver schemes.

BAC measures

All European countries place legal limits on the BAC of drivers and the 2001 European Commission Recommendation on the maximum permitted blood alcohol concentration (BAC) for drivers of motorized vehicles called for all Member States to adopt a BAC of 0.5 g/L, lowered to 0.2 g/L for novice, two-wheel, large vehicle or dangerous goods drivers; in addition, random breath testing was recommended so that everyone is checked every three years on average (Anderson, 2008). There are currently three Member States of the EU-27 that have a BAC limit of greater than 0.5 g/L (Ireland, Malta and the United Kingdom) (ETSC, 2008). There is evidence that the reduction in BAC limits supported by strict enforcement and publicity can reduce drink-driving at all BAC levels. For example, Switzerland reduced the legal BAC limit from 0.8 g/L to 0.5 g/L and introduced random breath testing in January 2005. The number of alcohol-related road deaths in 2005 reduced by 25 per cent and contributed to an overall 20 % reduction in the number of road deaths (ETSC, 2008).

Alcolocks

Alcolocks (or alcohol-interlocks) are devices that prevent a motor vehicle from starting when a driver's BAC is elevated. Sweden introduced two alcolock programmes in 1999,

which have been evaluated. One programme involved commercial drivers (of taxis, lorries and buses); in 600 vehicles, 0.19 % of all starts were prevented by a BAC higher than the legal limit and lock point of 0.2 g/L, mostly during weekends and mornings (Bjerre and Kostela, 2008). Another was a voluntary two-year programme for drinking while intoxicated (DWI) offenders, which included regular medical monitoring designed to reduce alcohol use and was offered in lieu of having licence revoked for a year. There were two control groups; one group had revoked licences but did not have the opportunity to participate in an interlock programme, and the other comprised DWI offenders who had declined the opportunity to participate in the programme (Bjerre and Thorsson, 2008). Only 11 % of eligible drivers took part in the programme. The intervention group were significantly more likely to be re-licensed two and three years after the DWI offence than the control groups and also, according to Alcohol Use Disorder Identification Test (AUDIT) scores, had lower rates of harmful alcohol consumption. In the post-treatment period the rate of DWI recidivism was about 60 % lower, and the rate of police-reported traffic accidents about 80 % lower than during the years before the offence. Among the controls being re-licensed, a similar reduction in traffic accidents was observed but not in DWI recidivism. Bjerre and Thorsson (2008) conclude that these results suggest that the alcolock programme was more effective than the usual licence revocation and also that it was a useful tool in achieving lasting changes in the alcohol and drink-driving behaviour of DWI offenders. To date systematic reviews of research indicate that alcolocks are only effective whilst in situ (Willis et al., 2004; Anderson, 2008) and further work is required into what steps need to be taken to prevent recidivism and ensure behaviour changes are sustained.

Designated driver schemes

The designated driver concept was first initiated in Belgium in 1995, jointly by the (industry-funded) Belgian Road Safety Institute and Arnouldous (EFRD, 2007). Designated driver campaigns are currently running in 16 European countries (EFRD, 2009) and were co-financed by the European Commission for five years (ETSC, 2008). Table 10.3 provides a summary of an evaluated designated driver scheme in Italy (Beccaria and Marchisio, 2006). There is no universal definition of a 'designated driver', but the most common definition requires that the designated driver does not drink any alcohol, be assigned before alcohol consumption, and drive other group members to their homes (see Ditter et al., 2005). Other definitions adopt a risk and harm reduction strategy, in which the main goal is not necessarily abstinence, but to keep the designated driver's blood alcohol content (BAC) at less than the legal limit. The evidence is that although the BACs of designated drivers are generally lower than those of their passengers they are still often higher than the legal limit for drinking and driving. Furthermore, an increase in passenger alcohol consumption is often found when a designated driver is available. To date, no study has evaluated whether the use of designated drivers actually decreases alcohol-related motor vehicle injuries (Anderson, 2008). Anderson (2008) argues that existing designated driver campaigns should be evaluated for their impact in reducing drink-driving accidents and fatalities before financing and implementing any new campaians.

Alcohol harm reduction in Europe: non-evaluated harm reduction initiatives

In this section, we look at examples of harm reduction initiatives that have been recorded and described in the literature but not thoroughly evaluated, and also at examples given by our key informants (see box below). Harm reduction initiatives often begin as practical responses to a problem rather than as a research question and thus are not usually formally evaluated, at least not in the first instance. Information about such initiatives at the local level is often difficult to come by. This indicates that there is a need for systematic pooling of information, particularly for dissemination of knowledge about smaller local or regional initiatives. One attempt at systematic collection of data is being promoted in the United Kingdom. The Hub of Commissioned Alcohol Projects and Policies (HubCAPP) is an online resource of local alcohol initiatives focused on reducing alcohol-related harms to health throughout England (www.hubcapp.org.uk) launched in 2008. The focus of HubCAPP is on identifying and sharing local and regional practice in relation to reducing alcohol harm, and it is constantly expanding. Although not exclusively a database of harm reduction initiatives, many of the projects can be classified as such, for example, the 'Route 50 Project' a multicomponent, community-based initiative in Birmingham (Goodwin and McCabe, 2007).

Harm reduction initiatives: some examples that have been recorded and described

- 'Flip-flops' (simple flat shoes) given to women who are experiencing difficulties walking in high heels (to prevent injuries from falling over or from walking barefoot). United Kingdom towns including Torquay, Bognor, Rugby.
- Lollipops (sweets) given to people as they leave venues by door staff (to keep them quiet and to raise blood sugar so that they are more alert and less inclined to violence). United Kingdom towns including Southampton, Manchester, Guildford, London.
- Bubble blowers (which double as pens) handed out (focus on having fun blowing bubbles, reduce anti-social behaviour and violence). Bolton, United Kingdom.
- Parent volunteers known as natteravnene (Night Owls) walk the streets at night in distinctive
 yellow jackets. They do not intervene in the night life but believe that their presence can
 reduce trouble, fights and vandalism. They also hand out sweets, water, sandwiches and
 condoms. Denmark.
- First aid assistance provided for young people at open air drinking gatherings. Spain.
- Alcohol testing for drivers leaving a three-day music festival. Slovakia.
- SMS service text what you have drunk and get back an estimate of BAC. Czech Republic.
- Parent-organised youth parties for 14- to 18-year-olds. Young people bring their own beverages and drink under the supervision of parents. Denmark.
- Public transport runs until the early morning at the weekends and provided free on New Year's Eve. Poland.
- Sobering up stations safe places where intoxicated drinkers are taken to sober up (i.e. away from the cold and threats of violence). Poland, Czech Republic, Russia and other former Soviet nations.

Some of the non-evaluated initiatives can be described as 'grassroots' interventions, that is, they have been devised and initiated by lay people (e.g. parents, members of a local community) to reduce alcohol-related harm within the local community. For example, in provincial Denmark, parents have organised parties where young people drink alcohol under adult supervision, with the aim of reducing harmful drinking in unsupervised outdoor areas (Kolind and Elmeland, 2008). In similar vein, in Slovakia, in an attempt to supervise the behaviour of young people coming home from parties, pubs and discos, local people and police formed patrols to guide young people home safely and with minimal disturbance to the community. Grassroots initiatives are generally pragmatic and reactive and they may also be very specific to a time and place. However, if such initiatives appear to be 'successful' they may over time be subject to formal evaluation and also be implemented in other areas.

Other initiatives have been developed by agencies such as police, local government, health and welfare agencies, often working in partnership, and like the 'grassroots' initiatives they are aimed at reducing alcohol-related harm in the local area. Such initiatives are often innovative, for example, giving out 'goody bags' containing items including sweets, 'flip-flops' (simple flat shoes), water, condoms and information leaflets on alcohol and safer sex, as part of campaigns to reduce alcohol-related harm and disorder in town centres (*Chichester Observer*, 2008; Hope, 2008; Lewisham Drug and Alcohol Strategy Team, 2007). The innovative nature of these interventions generates media coverage, much of which is negative or cynical (e.g. Hope, 2008; Salkeld, 2008; Smith, 2008 — on bubble blowers, flip-flops and lollipops), and some groups (e.g. Taxpayers' Alliance, United Kingdom) dismiss these harm reduction measures as 'gimmicks' and a 'waste of money'.

Whilst most of these measures have been introduced relatively recently, other interventions have a longer history. For example, the first 'sobering up station' (záchytka) opened in Czechoslovakia (now the Czech Republic) in 1951. It provided a place for intoxicated people to sober up. It was a model that was soon adopted by other countries, including Poland which established sobering up stations following the decriminalisation of public drunkenness in 1956 (Moskalewicz and Wald,1987). Facilities that serve a similar function are dotted across Europe; for example Scotland has two 'designated places' (in Aberdeen and Inverness), which provide an alternative to custody for persons arrested for being drunk and incapable; they are monitored in a safe environment until fit to leave, and further help is available. There have been calls for a comprehensive system of 'designated places' to provide a safe place for intoxicated people to sober up and to divert them from the criminal justice and health systems (BBC, 2007).

There are a number of routes by which knowledge of successful interventions is spread, both informal and more formal, including identification, dissemination and awards for 'best practice' (e.g. by government agencies, interest groups), fact finding visits, web resources (e.g. HubCAPP in the United Kingdom), stakeholder networks and organisations (e.g. Global Alcohol Harm Reduction Network — GAHRA-Net). The Internet plays a key role in the exchange of information globally through websites, online publications, and virtual networks.

Policy and knowledge transfer can be aided by thorough evaluation of interventions. But whilst it is straightforward to find a description of a simple 'evaluation' of a particular intervention, as we have seen in the case of BBN, robust, comprehensive evaluation is often lacking. However, it is not merely a question of the evaluation of interventions. What works in provincial Denmark may not work in inner city Paris, and care needs to be taken not to simply 'cherry pick' interventions. Cultural and local contexts are important factors in transferring intervention models and are often ignored when apparently successful projects or programmes are 'rolled out'.

Conclusion

Current usage and definition of the concept of harm reduction derives from the drugs field rather than from the long history of formal and informal regulation of alcohol-related harm. The lack of consensus regarding the definition and a tendency to include within the definition initiatives that are contested as being 'prevention' and not really 'harm reduction', suggests both a risk that the adoption of a very broad definition may result in loss of meaning and usefulness of the concept for policy and practice and an opportunity to debate and clarify the concept and its application in differing national, local and cultural contexts. Apart from the distinction between measures that aim to reduce consumption, and measures that tackle only associated harms, approaches to reduce or minimise harm once it has happened (harm reduction) can be distinguished from risk reduction measures, which aim to prevent harm being caused in the first place. These nuances of meaning have important implications for the development of strategy, the adoption of specific projects and programmes, the evaluation of policies and initiatives and for the effectiveness outcomes researchers choose to measure. Although the evidence base for harm reduction approaches appears less solid than the evidence for measures to reduce consumption, there has been far less research and fewer evaluated studies of measures that address the harms without necessarily requiring lower consumption. This would be useful, both in designing locally appropriate multi-component programmes and in providing a 'menu' of evaluated initiatives to run alongside measures aimed at consumption levels.

It is also essential to establish the boundaries of inclusion in 'harm reduction' if more effective systems for information sharing and data collection in Europe are to be agreed. Information on harm reduction approaches — especially those that emerge from local or grassroots activity — is hard to come by. Descriptions on websites are often ephemeral, and this is a reflection also of the origins of harm reduction activity, which is frequently rooted in transient local concern and crises. As the crisis or concern recedes, the initiatives fade away. At the same time, most harm reduction activity appears to be semi-official (as opposed to grassroots or lay), emerging at regional or local levels from professional and local authority action. Sometimes a particular initiative catches the policy and public attention and is transferred from one area to another, based more on the perception of success rather than on any evaluation or formal assessment of effectiveness or of the appropriateness of transfer from one setting to another. The development of information sharing systems, nationally and possibly on a European scale, would be a step forward in providing the field with a more comprehensive overview of harm reduction measures, settings in which they have been implemented and with what results, and measures of effectiveness.

While harm reduction 'thinking' has joined the raft of policy strategies and local initiatives in most European countries, remarkably few initiatives have been fully described, let alone scientifically evaluated with any degree of rigour. This in itself may be one reason why assessments of effectiveness based on international research result in harm reduction measures being reported as less effective. However, before demanding conformity to 'gold standard' evaluation studies, it is worth considering the nature and uses of many harm reduction approaches. If, as appears to be the case, harm reduction requires flexibility and immediacy in its reaction to locally defined need, there is a case for arguing that descriptions of the approach and narratives of the implementation and perceived outcomes are more useful than formal (expensive) evaluation. Such narratives are largely missing and could be an important addition to information banks such as the United Kingdom's HubCAPP.

Evaluation and research findings are, of course, only one element in decisions to adopt or reject harm reduction as a legitimate goal for policy and in decisions about which initiatives are suitable for implementation nationally or locally. Success or failure of harm reduction initiatives can depend as much on media and public perceptions (as in the case of 'flip-flops') or on gaining the collaboration of stakeholders (as in the case of server training) or the willingness of volunteers (as in the Danish 'Night Owls' and the Danish parents' parties) as on the evaluated effectiveness of a particular strategy or activity. This is especially the case if the evaluations emerge from projects located in very different social, cultural and political systems. So questions arise as to what extent harm reduction is seen as an appropriate approach to reducing alcohol-related harms in the different countries of Europe. Is harm reduction the 'conventional wisdom' in Europe or are there countries where harm reduction is thought to be inappropriate to that particular country's cultural context and consumption patterns? These are questions that deserve further exploration. In the drive towards a Europewide planned approach to tackling alcohol-related harm, this overview of harm reduction approaches highlights the need to develop opportunities and systems to facilitate knowledge transfer on alcohol harm reduction between researchers, policymakers and practitioners in Europe, but stresses the importance of respecting local and cultural diversity in the development and implementation of harm reduction initiatives.

References

Anderson, P. (2008), *Reducing drinking and driving in Europe*, Deutsche Hauptstelle für Suchtfragen e.V. (DHS), Hamm.

Anderson, P. and Baumberg, B. (2006), Alcohol in Europe: a public health perspective. A report for the European Commission, Institute of Alcohol Studies, London. Available at http://ec.europa.eu/health-eu/doc/alcoholineu_content_en.pdf (accessed 20 July 2009).

Anderson, P., Chisholm, D. and Fuhr, D. (2009), 'Effectiveness and cost-effectiveness of policies and programmes to reduce the harm caused by alcohol', *Lancet* 373, pp. 2234–46.

Babor, T., Caetano, R., Casswell, S., et al. (2003), *Alcohol: no ordinary commodity*, Oxford University Press, Oxford.

Babor, T. F. (2008), Evidence-based alcohol control policy: toward a public health approach, Conference on Tobacco and Alcohol Control — Priority of Baltic Health Policy, Vilnius.

Baklien, B. and Buvik, K. V. (2006), Evaluation of a responsible beverage service programme in Trondheim, Sirus-Reports 4 (English summary), SIRUS, Oslo. Available at http://www.sirus.no/internett/alkohol/publication/310. html (accessed 20 January 2010).

Balvig, F., Holmberg, L. and Sørensen, A-S. (2005), Ringstedforsøget. Livsstil og forebyggelse i lokalsamfundet [The Ringsted project: lifestyle and prevention in the local community], Jurist-og Økonomiforbundets Forlag, København.

BBC (2007), *Profits 'to aid alcohol problems'*, BBC News 10 October 2007. Available at http://news.bbc.co.uk/1/hi/scotland/north_east/7036806.stm (accessed16 July 2009).

Beccaria, F. and Marchisio, M. (2006), 'Progetto Bob. Vatutazione di una compagna di promozione del guidatore designato', *Dal fare al dire* 15 (2), pp. XII–XX.

Bjerre, B. (2005), 'Primary and secondary prevention of drink driving by the use of alcolock device and program: Swedish experiences', Accident Analysis and Prevention 37 (6), pp. 1145–52.

Bjerre, B. and Kostela, J. (2008), 'Primary prevention of drinking driving by the large-scale use of alcolocks in commercial vehicles', Accident Analysis and Prevention 40 (4), pp. 1294–9.

Bjerre, B. and Thorsson, U. (2008), 'Is an alcohol ignition interlock programme a useful tool for changing the alcohol and driving habits of drink-drivers?', Accident Analysis and Prevention 40 (1), pp. 267–73.

Bystoń, J. (1960), Dzieje obyczajów w dawnej Polsce. Wiek XVI-XVII. PIW, Warszawa.

Chichester Observer (2008), 'Police to hand out flip flops to clubbers in Bognor', 26 December.

Ditter, S. M., Elder, R. W., Shults, R. A., et al., (2005), 'Effectiveness of designated driver programs for reducing alcohol-impaired driving a systematic review', *American Journal of Preventative Medicine* 28 (5 Supplement), pp. 280–7.

EFRD (European Forum for Responsible Drinking) (2007), Guidelines to develop designated driver campaigns, EFRD, Brussels.

EFRD (2009), European Forum for Responsible Drinking website at www.efrd.org/main.html (accessed 9 March 2009).

ETSC (European Transport Safety Council) (2008), *Drink driving fact sheet*. Available at www.etsc.eu/documents/Fact_Sheet_DD.pdf (accessed 9 March 2009).

Forsyth, A. J. M. (2008), 'Banning glassware from nightclubs in Glasgow (Scotland): observed impacts, compliance and patrons' views', Alcohol and Alcoholism 43 (1), pp. 111–17.

Goodwin, P. and McCabe, A. (2007), From loose, loose to win, win: Aquarius Route 50 project. Report to the AERC. Available at: www.hubcapp.org.uk (accessed 9 March 2009).

GOL (Government Office for London) (2007), Best Bar None Croydon review, GOL, London. Available at http://ranzetta.typepad.com/Croydon_BBN_evaluation.doc (accessed 9 March 2009).

Graham, K. and Homel, R. (2008), Raising the bar: preventing aggression in and around bars, pubs and clubs, Willan Publishing, Cullompton.

Hanson, B. S., Larsson, S. and Rastram, L. (2000), 'Time trends in alcohol habits: results from the Kiresberg project in Malmo, Sweden', *Substance Use and Misuse* 35 (1 & 2), pp. 171–87.

Harrington, J. (2008), 'Sky's the limit for Best Bar None', *Morning Advertiser*, 16 June. Available at http://www.morningadvertiser.co.uk/news.ma/article/62912 (accessed 12 March).

Holder, H. D. (1998), Alcohol and the community: a systems approach to prevention, Cambridge University Press, Cambridge.

Holder, H. D. (2000), 'Community prevention of alcohol problems', Addictive Behaviours 25 (6), pp. 843-59.

Holder, H. D. (2004), 'Community action from an international perspective', in Müller, R. and Klingemann, H. (eds), From science to action? 100 years later – alcohol policies revisited, Kluwer Academic Publishers, Dordrecht, pp. 101–12.

Holmlia, M. (1997), Community prevention of alcohol problems, Macmillan Press, Basingstoke.

Holmlia, M. (2001), 'The changing field of preventing drug and alcohol problems in Finland: can community-based work be the solution?', Contemporary Drug Problems 28 (2), pp. 203–20.

Holmila, M. and Warpenius, K. (2007), 'A study on effectiveness of local alcohol policy: challenges and solutions in the PAKKA project', *Drugs: Education, Prevention and Policy* 14, pp. 529–41.

Home Office (2004), Alcohol audits, strategies and initiatives: lessons from Crime and Disorder Reduction Partnerships, Home Office Development and Practice Report 20, Home Office, London.

Homel, R., McIlwain, G. and Carvolth, R. (2001), 'Creating safer drinking environments', in Heather, N., Peters, T. and Stockwell, T. (eds), *International handbook of alcohol dependence and problems*, John Wiley & Sons Ltd, Chichester, pp 721–40.

Hope, C. (2008), 'Police give free goodie bags containing condoms, flip-flops and lollipops to drinkers', *Daily Telegraph*, 20 December. Available at www.telegraph.co.uk/news/newstopics/politics/lawandorder/3850898/Police-give-free-goodie-bags-containing-condoms-flip-flops-and-lollipops-to-drinkers.html (accessed 4 February 2009).

IHRA (International Harm Reduction Association) (n.d.), 'What is alcohol harm reduction?' Available at www. ihra.net/alcohol (accessed 4 February 2009).

Kaner, E. F. S., Dickinson, H. O., Beyer, F. R., et al. (2007), 'Effectiveness of brief alcohol interventions in primary care populations', Cochrane Database of Systematic Reviews 2007, Issue 2, Art. No.: CD004148. DOI: 10.1002/14651858.CD004148.pub3.

Ker, K. and Chinnock, P. (2008), 'Intervention in the alcohol server setting for preventing injuries', Cochrane Database of Systematic Reviews, Issue 3, Art No.: CD005244. DOI: 10.1002/14651858.CD005244.pub3.

Kolind, T. and Elmeland, K. (2008), 'New ways of socializing adolescents to public party-life in Denmark', in Olson, B. and Törrönen, J. (eds), *Painting the town red: pubs, restaurants and young adults' drinking cultures in the Nordic countries*, Vol. 51, NAD (Nordic Centre for Alcohol and Drug Research), Helsinki, pp. 191–219,

Lachenmeier, D., Rehm, J. and Gmel, G. (2007), 'Surrogate alcohol: where do we know and where do we go?', Alcoholism: Clinical and Experimental Research 31910, pp. 1613–27.

Lang, K., Väli, M., Szűcs, S., Ádány, R. and McKee, M. (2006), 'The composition of surrogate and illegal alcohol products in Estonia', *Alcohol and Alcoholism* 41 (4), pp. 446–50.

Lenton, S. and Single, E. (1998), 'The definition of harm reduction', Drug and Alcohol Review, 17 (2), pp. 213-19.

Leon, D. A., Saburova, L.,Tomkins, S., et al. (2007), 'Hazardous alcohol drinking and premature mortality in Russia: a population based case-control study', *Lancet* 369 (9578), pp. 2001–9.

Lewisham Drug and Alcohol Strategy Team (2007), Don't binge and cringe evaluation: Lewisham 2007 anti-binge drinking festive campaign. Available at www.alcoholpolicy.net/files/dont_binge_and_cringe_evaluation.pdf (accessed 4 February 2009).

Månsdotter, A. M., Rydberg, M. K., Wallin, E., Lindholm, L. A. and Andréasson, S. (2007), 'A cost-effectiveness analysis of alcohol prevention targeting licensed premises', *European Journal of Public Health* 17, pp. 618–23.

McKee, M., Suzcz, S, Sárváry, A., et al. (2005), 'The composition of surrogate alcohols consumed in Russia', Alcoholism Clinical and Experimental Research 29, pp. 1884–8.

Mistral, W., Velleman, R., Mastache, C. and Templeton, L. (2007), UKCAPP: an evaluation of 3 UK Community Alcohol Prevention Programs. Report to the Alcohol Education and Research Council. Available at www.aerc.org.uk/documents/pdfs/finalReports/AERC FinalReport 0039.pdf (accessed 10 February 2009).

Moskalewicz, J. and Wald, I. (1987), 'From compulsory treatment to the obligation to undertake treatment: conceptual evolution in Poland', *Contemporary Drug Problems* Spring, pp. 39–51.

Nicholls, J. (2009), The politics of alcohol: a history of the drink question in England, Manchester University Press, Manchester.

Nilsen, P., Kaner, E. and Babor, T. F. (2008), 'Brief intervention, three decades on: an overview of research findings and strategies for more widespread implementation', *Nordic Studies on Alcohol and Drugs* 25 (6), pp. 453–67.

Pratt, E. A. (1907), Licensing and temperance in Sweden, Norway and Denmark, John Murray, London.

Prochard, H. (1902), 'Through the heart of Patagonia, London', quoted in Horton, D. (1943), 'The functions of alcohol in primitive societies: a cross-cultural study', *Quarterly Journal of Studies on Alcohol* 4.

Ranieri, F. et al. (2007), 'Prevenzione ad una festa della birra?', S&P: Salute e Prevenzione: La Rassegna Italiana delle Tossicodipendenze 22 (45), pp. 59–68.

Rehm, J., Room, R., Monteiro, M., et al. (2003), 'Alcohol as a risk factor for global burden of disease', *European Addiction Research* 9, pp. 157–64.

Rehm, J., Mathers, C., Popova, S., et al. (2009), 'Global burden of diseases and injury and economic cost attributable to alcohol use and alcohol-use disorders', *Lancet* 373, pp. 2223–32.

Robson, G. and Marlatt, G. A. (2006), 'Harm reduction and alcohol policy', *International Journal of Drug Policy* 17, pp. 255–7.

Salkeld, L. (2008), 'Flipping madness! Police offer free flip-flops to binge drinkers who keep falling over in heels', Daily Mail, 27 November. Available at www.dailymail.co.uk/newsarticle-1089919/Flipping-madness-Police-offerfree-flip-flops-binge-drinkers-falling-heels.html (accessed 4 February 2009).

Shepherd, J. (2007), 'Preventing violence — caring for victims', Surgeon 5 (2), 114-21.

Shepherd, J. P., Price, M. and Shenfine, P. (1990a), 'Glass abuse and urban licensed premises', *Journal of the Royal Society of Medicine* 83, pp. 276–7.

Shepherd, J. P., Shapland, M., Pearce, N. X. and Scully, C. (1990b), 'Pattern, severity and aetiology of injuries in victims of assault', *Journal of the Royal Society of Medicine* 83, pp. 75–8.

Smith, D. (2008), 'How to calm binge drinkers: get them all blowing bubbles', *Observer*, 30 November. Available at: www.guardian.co.uk/society/2008/nov/30/binge-drinking-bubbles (accessed 9 February 2009).

Stockwell, T. (2004), 'Harm reduction: the drugification of alcohol policies and the alcoholisation of drug policies', in Klingemann, H. and Müller, R. (eds), From science to action? 100 years later — alcohol policies revisited, Klewer Academic Publishers, Dordrecht, pp. 49–58.

Stockwell, T. (2006), 'Alcohol supply, demand, and harm reduction: what is the strongest cocktail?', *International Journal of Drug Policy* 17, pp. 269–77.

Stronach, B. (2003), 'Alcohol and harm reduction', in Buning, E., Gorgullo, M, Melcop, A. G. and O'Hare, P. (eds), Alcohol and harm education: an innovative approach for countries in transition, Amsterdam, ICAHRE, pp. 27–34.

SNIPH (Swedish National Institute of Public Health) (2008), Alcohol prevention work in restaurant and mediumstrength beer sales in six municipalities (English summary), Stockholm: SNIPH. Available at www.fhi.se/en/ Publications/Summaries/Analysis-of-alcohol-and-drug-prevention-work-in-six-municipalities/ (accessed 28 January 2009).

Tagliabue, J. (1985), 'Scandal over poisoned wine embitters village in Austria', *New York Times*, 2 August. Available at www.nytimes.com/1985/08/02/world/scandal-over-poisoned-wine-embitters-village-in-austria. html?sec=health (accessed 14 July 2009).

Thom, B. and Bayley, M. (2007), Multi-component programmes: an approach to prevent and reduce alcohol-related harm, Joseph Rowntree Foundation, York.

US Department of Health and Human Services (2000), 10th special report to the US Congress on alcohol & health, US Department of Health and Human Services, National Institute on Alcohol and Alcoholism, Washington, DC.

Warburton, A. L. and Shepherd, J. P. (2000), 'Effectiveness of toughened glassware in terms of reducing injury in bars: a randomised controlled trial', *Injury Prevention*, pp. 36–40.

Wallin, E. (2004), Responsible beverage service: effects of a community action project, Karolinska Institutet, Stockholm.

Wallin, E., Norström, T. and Andréasson, S. (2003a), 'Effects of a community action project on responsible beverage service', *Nordic Studies on Alcohol and Drugs* (English supplement) 20, pp. 97–100.

Wallin, E., Norström, T. and Andréasson, S. (2003b), 'Alcohol prevention targeting licensed premises: a study of effects on violence', *Journal of Studies on Alcohol* 64, pp. 270–7.

Wallin, E., Lindewald, B. and Andréasson, S. (2004), 'Institutionalization of a community action program targeting licensed premises in Stockholm, Sweden', Evaluation Review 28 (5), pp. 396–419.

Willis, C., Lybrand, S. and Bellamy, N. (2004), 'Alcohol ignition interlock programmes for reducing drink driving recidivism' (Review), Cochrane Database of Systematic Reviews 2004, Issue 3, Art. No.: CD004168. DOI:10.1002/14651858.CD004168.pub2.

Wodak, A. (2003), 'Foreword', in Buning, E., Gorgullo, M., Melcop, A. G. and O'Hare, P. (eds), Alcohol and harm education: an innovative approach for countries in transition, ICAHRE, Amsterdam, pp. 1–4.

WHO (World Health Organization) (1994), Lexicon of drug and alcohol terms. Available at http://www.who.int/substance_abuse/terminology/who_lexicon/en/index.html (accessed 24 June 2009).

WHO (2008a), Strategies to reduce the harmful use of alcohol: report by the Secretariat to the 61st World Health Assembly, 20 March 2008, A61/13, World Health Organization, Geneva. Available at http://apps.who.int/gb/ebwha/pdf files/A61/A61 13-en.pdf (accessed 24 June 2009).

WHO (2008b), Report from a roundtable meeting with NGOS and health professionals on harmful use of alcohol, Geneva, 24 and 25 November, World Health Organization, Geneva. Available at http://www.who.int/substance_abuse/activities/msbngoreport.pdf (accessed 24 June 2009).

Young, C. and Hirschfield, A. (1999), Crystal clear: reducing glass related injury. An evaluation conducted on behalf of Safer Merseyside Partnership, University of Liverpool, Liverpool.