EVIDENCE

Harm Reduction - Alcohol

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Harm Reduction - Alcohol

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Harm Reduction – Alcohol (Vulnerable Groups)

Introduction

Most of the content in the Prevention and Education Model focuses on harm reduction approaches linked to alcohol and drugs, e.g. community and environmental approaches, consideration of risk and protective factors, education and parenting approaches etc. This chapter focuses on examples of harm reduction alcohol approaches for some of the particularly vulnerable groups living in our society.

This includes those individuals who are particularly vulnerable to the consequences of alcohol related harm, or whose own or another's alcohol use can make them vulnerable to other negative consequences. For example, individual's involved in or affected by issues such as youth offending, criminality, homelessness, drink driving, fetal alcohol spectrum disorder and domestic violence.

The current chapter discusses two of these issues in more detail–

1. fetal alcohol spectrum disorder, and
2. the link between alcohol, crime and offending.

Harm Reduction – Alcohol (Vulnerable Groups)

Fetal Alcohol Syndrome Disorder (FASD)

Despite warnings that drinking during pregnancy is unsafe, many women are still at risk for an alcohol-exposed pregnancy. Alcohol consumption in pregnancy has been associated with miscarriage, premature birth, stillbirth, and low birth weight. It may cause many health problems for the child, one of which is fetal alcohol spectrum disorder (FASD). FASD is the term used to describe the range of physical and neurodevelopmental problems that may be associated with frequent or heavy maternal drinking during pregnancy. Fetal alcohol syndrome (FAS) is a leading cause of birth defects and developmental disabilities, but as they are directly linked to consumption of alcohol during pregnancy, they are completely preventable. Since FASD is incurable, actions to prevent the occurrence of the disability by targeting women who consume alcohol have high importance. Effective prevention strategies for both pregnant and non pregnant women who might be at risk of an alcohol-exposed pregnancy are required. However, preventing the negative consequences of prenatal exposure to alcohol remains an unmet challenge.

Many health and allied health professionals are in prime positions for primary prevention of FASD through work with women of childbearing age and secondary prevention through work with affected individuals whose lives can be greatly improved via tailored interventions.

FASD prevention efforts are informed by understanding the prevalence of such alcohol use, and the characteristics of those who drink.

Characteristics and interventions

Research has investigated the characteristics of women with children diagnosed with FAS and also opinions of both pregnant and non-pregnant women towards alcohol consumption during pregnancy, in order to create targeted interventions for these groups.

Mothers of children diagnosed with FASD

Research on mothers of children diagnosed with FAS has involved the identification of factors common within this group, in order to identify the target group for intervention work. Coyne et al (2008) reviewed pregnancy records in Australia where children were subsequently diagnosed with FAS. They found that mothers were older, smoked more cigarettes, attended fewer antenatal visits and experienced more antenatal and delivery complications than mothers of controls. There was also a significant difference between the two groups in self-reported alcohol consumption both before and during pregnancy and in numbers of women who decreased alcohol consumption once they became aware of their pregnancy. Cannon et al (2012) used population-based data from the US FAS Surveillance Network (FASSNet) to identify characteristics of mothers of children with FAS. Compared to other mothers, mothers of children with FAS were significantly more likely to be older, minority ethnic, unmarried, unemployed, to smoke during pregnancy, to have a lower educational level, and to have more live born children. A significant proportion of mothers (9-29%) had another child with suspected alcohol effects. Compared to other mothers, they were also significantly more likely to have received treatment for alcohol misuse, to have confirmed alcoholism, to have used marijuana or cocaine during pregnancy, to have their baby screen positive for alcohol or drugs

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Salmon (2008) conducted qualitative research in order to describe the experiences of women in New Zealand who have a child/ren diagnosed with FASD. All women were of middle to high socio-economic status. The mothers had a range of concerns for both their child/ren and themselves relating to health, social, educational, judicial systems, lack of knowledge by professionals and problems in diagnosis, and stigmatisation. All women feared for their child's future. A high proportion of the women were either married to or partners of individuals considered to be alcoholics when they conceived their offspring with FASD (with most experiencing family breakdown as a result of alcohol consumption by the father), all had been drinking alcohol before becoming pregnant, and most came from drinking families. Most mothers continued to consume alcohol because they were unaware that they were pregnant, and all were unaware of the concept of FASD and the effects of alcohol consumption on the unborn child. It was concluded that the range of key stakeholders involved in the support and care of these families need to understand and be educated in the daily realities and complex problems that they face.

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Fetal Alcohol Syndrome Disorder (FASD)

Research with pregnant women

Grant et al (2009) examined pregnancy alcohol use among screened hospitalised postpartum women for alcohol and drug use in the month prior to and during pregnancy (n = 12,526) between 1989 and 2004. They found a substantial decrease in pregnancy alcohol use between 1989 and 2004 (from 30% to 12%) across almost all demographic categories. The authors suggested these findings indicate that public health messages about the potential risks to the fetus of maternal drinking during pregnancy may have been effective, with most women who drink alcohol quitting when they recognise they are pregnant. However, binge drinking in the month prior to pregnancy increased significantly. They suggested that these increased pre-pregnancy binge drinking rates may estimate alcohol use during very early gestation before pregnancy recognition, creating potential for FASD. Further suggested implications were heavy drinking women who are not pregnant having unprotected sexual encounters that result in unintended pregnancy; and women who are not planning a pregnancy or who do not know that they have conceived, having no pregnancy-related reason to limit their alcohol intake. In terms of FASD prevention, it was recommended that physicians should routinely screen every woman of childbearing age about her alcohol use and her risk for becoming pregnant; that women who are not pregnant should be questioned about their use of contraception, and educated about the potential risks of frequent or binge drinking at conception and throughout pregnancy; and that women who drink while pregnant should be advised to stop.

Chung et al (2010) assessed the influence of adverse childhood experiences on risky health behaviours among pregnant women. They conducted a prospective survey of women at the first prenatal care visit and two follow up stages (n = 1,476). Results indicated that 72% had one or more adverse childhood experiences and 7% reported alcohol use during pregnancy. It was concluded that adverse childhood experiences were associated with risky health behaviours, and as such it was suggested that prevention should target lowering the risk for adverse health behaviours that have serious consequences for adults and their children.

Bakhireva et al (2011) conducted research with pregnant women in Ukraine (n = 166) and found that heavy paternal drinking was significantly associated with both continuing maternal drinking in the most recent 2 weeks and being a risky drinker only around conception. In addition, women who consumed alcohol during pregnancy had lower mean scores for satisfaction with their partners' relationship and ability to discuss problems compared with light drinkers/abstainers. Thus, the authors concluded that partner-based interventions, as opposed to those solely focused on maternal drinking, might be warranted as a strategy to prevent FASD.

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Research with non-pregnant women

Special Interest Article - Peadon et al (2010)

Peadon et al (2011) conducted a cross-sectional survey with non-pregnant Australian women of childbearing age (teenagers under 18 were omitted from the study) (n = 1,103) to ascertain women's knowledge and attitudes regarding alcohol consumption in pregnancy and its effects on the unborn child.

Results indicated that 62% had heard about effects of alcohol on the fetus and 55% had heard of FAS. Although 93% agreed alcohol can affect the unborn child, 16% disagreed that the disabilities could be lifelong. Most agreed that pregnant women should not drink alcohol and reported having negative feelings towards pregnant women drinking alcohol (80% and 79% respectively). Women with higher education levels were more likely to know the effects of alcohol consumption in pregnancy but education level and knowledge were not associated with attitude. One in three women did not know any adverse effects of alcohol consumption in pregnancy.

Thus, the research highlighted an important difference between knowledge and attitude. The authors called for FASD prevention approaches to use this data to inform the development of effective health promotion campaigns and identify groups who require targeted strategies. The results were said to indicate the need for a combination of strategies at community and society levels to both inform knowledge and influence attitudes about alcohol and pregnancy. Suggested strategies included education in schools, social marketing campaigns, governments disseminating clear guidelines about alcohol consumption in pregnancy to health professionals, and legislation for compulsory labelling of alcoholic beverages. However, it was noted that interventions based on a theoretical model of health behaviour which address past experience, social influence, risk perception and identified gaps in knowledge and misconceptions may be more successful than the traditional educational approaches. Finally, the need for public health campaigns, national policy and guidelines to be underpinned by a regularly reviewed scientific evidence base of the influences on women's alcohol behaviour in pregnancy and effective prevention strategies was highlighted.

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Fetal Alcohol Syndrome Disorder (FASD)

Research with non-pregnant women

Preventative interventions among this group focus on reducing the risk of an alcohol exposed pregnancy (AEP). Parackal et al (2008) analysed data from a cross-sectional survey of non-pregnant women of child bearing age in New Zealand (n = 1,109). Overall, 44% of women indicated that no alcohol is safe in pregnancy. Women who drank more than two standard drinks of alcohol on a typical occasion and/or who binged were more likely to be of the opinion that 'more than one standard drink' of alcohol is safe on a typical drinking day during pregnancy. It was concluded that the association of drinking style with opinions about the safety of alcohol consumption in pregnancy accentuates the need for public health education to reduce risky drinking behaviours in this population which also address the risk associated with unintentionally drinking in early pregnancy. Tenkku et al (2011) examined the effectiveness of a web-based, self-guided change intervention designed to lower the risk for AEP in a community. Results indicated that among participants at risk for an AEP (n = 458), 58% were no longer at risk for such a pregnancy at the 4-month follow-up. It also appeared to be the case that mail and online versions of the intervention were equally effective. Thus, the strength of the intervention was said to be the community-wide reach due to the Internet platform. Rasmussen et al (2010) evaluated 'First Steps' in Canada – an intervention for women at-risk for giving birth to a child with FASD by conducting a retrospective analysis of data on 70 participants. Results in relation to outcomes were positive from pre- to post-programme, with there being a significant increase in contraception use. At the end of the programme, many participants were abstinent from alcohol and/or drugs, and the majority did not experience a subsequent pregnancy.

Research by Parackal et al. (2010) found that a majority of women of childbearing age surveyed in New Zealand gave a high rating for an alcohol warning label as a source of information on alcohol consumption in pregnancy. Interestingly, women younger than 30 years of age were more likely to give a high rating to the beverage warning label than women older than 30.

Cismaru et al (2010) conducted a qualitative review of health communication campaigns in Canada aimed at preventing alcohol consumption among women who are pregnant or attempting to become pregnant. They found that many of the campaigns focused on the threat variables of severity and vulnerability, as well as emphasising response efficacy (i.e. the extent to which people believe that a recommended response is effective at deterring or alleviating a health threat) and few campaigns focused on costs or self-efficacy. They recommended that future prevention initiatives should attempt to reduce perceived costs, as well as include self-efficacy messages in order to increase women's confidence that they can carry out the recommended actions.

Stade et al (2009) conducted a review of the effectiveness of psychological and educational interventions to reduce alcohol consumption during pregnancy in pregnant women or women planning pregnancy. The results from the limited number of studies was said to suggest that psychological and educational interventions may result in increased abstinence from alcohol, and a reduction in alcohol consumption among pregnant women. However, the inconsistent results and complexity of interventions among other methodological concerns was said to limit the possibility of determining the type of intervention which would be most effective in increasing abstinence from, or reducing the consumption of, alcohol among pregnant women.

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Fetal Alcohol Syndrome Disorder (FASD)

Training in FASD

There is a need to educate professionals in regard to FAS and FASD across many health and related fields, given their important role in providing care and support for pregnant women and the fact that much research has highlighted knowledge gaps among this group. For example, Thanh and Jonsson (2010) analysed data from the Canadian Community Health Survey and found that the use of general practitioners (GPs) or family physicians was associated with a decreased risk of drinking alcohol during pregnancy. Thus, they suggested that interventions that involve or increase the use of such health professionals can be effective in reducing drinking alcohol during pregnancy.

Research has highlighted the range of knowledge, and subsequent knowledge gaps, amongst different staff groups in relation to FASD. Johnson et al (2010) conducted surveys to explore differences in FASD knowledge, attitudes, and behaviours across different professional groups in a key position to provide prevention (physicians, educators, correctional staff, social workers, public health nurses, and substance misuse counsellors) (n = 2,292). Across groups, findings revealed ample FASD knowledge and willingness to confront and recommend treatment to alcohol-consuming pregnant women. However, differences between groups were said to indicate the need for targeted, discipline-specific interventions so that all professionals provide a consistent public health message regarding maternal alcohol consumption. Brems et al (2010) conducted interviews with health professionals (n = 26) in order to develop educational guidelines for FASD prevention. Findings revealed that competence, especially when viewed separately in terms of knowledge versus capacity for application of information, in the area of FASDs is unevenly distributed among and throughout healthcare provider groups. Brimacombe et al (2008) conducted evaluations of educational programmes designed to assess knowledge, attitudes and beliefs in relation to FASD among health-related professional groups. Pre and post-test surveys were conducted with groups including nurses, social workers, counsellors, and therapists. Results indicated that participants generally had a good basic understanding of FASD, and a significant awareness of the importance of early diagnosis. However, there were some weaknesses specific to their discipline, with the authors suggesting that educational interventions need to be sensitive to the various health professionals engaged in preventing, diagnosing and treating FASD.

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Fetal Alcohol Syndrome Disorder (FASD)

Training in FASD

Jones et al (2011) conducted research with midwives and pregnant women in Canada (n = 12 and 12) and found that both agreed that conversations about alcohol are generally limited to brief screening questions at the first visit, and the risks are not discussed or explained (except for high-risk women). However, both groups were open to discussing alcohol consumption, but lacked knowledge of the risks and recommendations. Thus, it was recommended that there is a need to provide midwives with accurate information about the risks of alcohol consumption during pregnancy and effective communication tools to encourage them to discuss the risks and recommendations with their patients. Holmqvist and Nilsen (2010) conducted a survey of midwives (n = 2,106) in Sweden to determine their knowledge and what available tools they had for assessing alcohol intake during pregnancy. Results indicated that nearly all midwives reporting having excellent or good knowledge concerning the risks associated with drinking during pregnancy, but considered themselves less knowledgeable about detecting pregnant women with risky alcohol consumption before pregnancy.

Payne et al (2011a) conducted research with Australian health professionals in 2002, and subsequently developed educational resources on prenatal alcohol exposure and FAS which were distributed to professionals (n = 3,348) in 2007. Results indicated that 70% of the responding professionals (n = 1,001) had seen the resources; of these 77% had used them and 49% said the resources had assisted them to change their practice or their intention to change their practice. Comparing the results of 2002 and 2007, 15.8% knew the essential feature of FAS (increase of 3.9%) and 7.3% had diagnosed FAS (from 4.8%). These educational resources developed for health professionals may be ordered as hard copies and downloaded directly from the internet http://www.ichr.uwa.edu.au/alcoholandpregnancy. Payne et al (2011b) evaluated the educational resources specifically for paediatricians by conducting surveys in 2004 and 2007.

Of the participants (n = 82), 66% had seen the resources, 67% had used them and 30% said the resources had helped them change, or influenced their intent to change their practice. There was no change in the proportion that knew all the essential features of FAS or had diagnosed FAS. However, an increased proportion (from 49% to 76%) agreed that pregnant women should completely abstain from consuming alcohol, although only 22% (no increase from 2004) routinely asked about alcohol use when taking a pregnancy history.

Mwansa-Kambafwile et al (2011) evaluated a short training intervention to improve service providers' screening, identification, and management of women at risk for alcohol-exposed pregnancies in South Africa (n = 86). Results indicated that the intervention appeared to have been effective in building service provider capacity to deal with preventing FAS, with knowledge that alcohol use during pregnancy is harmful to the fetus increasing after training (23% vs. 67%) and providers expressing significantly more confidence for skills indicators related to the identification and management of women at risk for an alcohol-exposed pregnancy.

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Fetal Alcohol Syndrome Disorder (FASD)

Training in FASD

Caley et al (2008) presented the results of a survey among human service professionals (i.e. professionals working in the fields of child welfare/ child protective services, foster care) to assess their knowledge, attitudes, and beliefs in relation to prenatal exposure to alcohol (n = 1,168). Results indicated that although human service professionals were knowledgeable about primary prevention, they lacked additional education and assertive assessment protocols. These resources are needed to help them work with families and children who are already affected by exposure to alcohol in pregnancy.

Research has indicated the need for training staff in screening pregnant women for alcohol use. Bailey and Sokol (2008) argue that implementing universal screening and appropriate intervention for pregnancy alcohol use should be a priority for prenatal care providers, as these efforts could substantially improve pregnancy, birth, and longer term developmental outcomes for those affected. Payne et al (2011b) suggested that asking about alcohol use during pregnancy should be emphasised in paediatric training. Floyd et al (2009) reviewed evidence supporting alcohol screening and brief intervention as an effective approach to reducing problem drinking and alcohol exposed pregnancies that can lead to FAS disorders. They conclude that utilising evidence-based alcohol screening tools and brief counselling for women at risk for an alcohol exposed pregnancy can help achieve future alcohol-free pregnancies.

Delrahim-Howlett et al (2011) argued for greater assessment and prevention aimed at accurately measuring and reducing alcohol consumption among vulnerable women before conception. They conducted a randomised controlled trial to test the effectiveness of an adapted web-based alcohol assessment and intervention tool among vulnerable, non pregnant women of reproductive age who reported currently drinking at a moderate risk level. Participants (n = 150) completed a web-based assessment and were randomly assigned to either receive a personalised feedback intervention or general health information about alcohol consumption and FAS. Follow-up assessments were conducted at 1 and 2 months post baseline (n = 131). Findings indicated that 70% reported a reduction in risky drinking occasions, with there being no significant differences between those who had received personalised feedback and those who had received general health information. This was said to suggest that assessments of alcohol consumption may be sufficient for the reduction of risky drinking within this population, without the need for personalised feedback.

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Special Interest Article - Dresser et al (2011)

Dresser et al (2011) supplemented responsible beverage service training for alcohol servers by training staff to discourage alcohol consumption by pregnant customers. They argued the importance of initiating public health interventions in selected environments in which high-risk women are found, as universal strategies have been shown to have minimal to no impact on those who drink most heavily during pregnancy (Armstrong et al., 2009). As such, it was suggested that public drinking establishments may provide a promising venue for cost-efficient, relatively simple selective prevention as staff are able to disseminate information on fetal alcohol exposure risks to the alcohol-consuming public and to directly intervene in the consumption of alcohol by pregnant women.

The intervention involved training staff to perform prevention functions. The training programme provided the following: (a) medical and social cost information for servers, managers, and licensees on the nature, causes, and consequences of FAS; (b) discussion of legal issues in service or service refusal to pregnant women; and (c) the development of skills necessary to avoid alcohol service to pregnant women. The training included in-person training and videotaped intervention techniques. A written manual to supplement the video was included in the training. Staff were encouraged to offer FAS information, promote non-alcoholic alternative beverages, respond respectfully to customer concerns with accurate information, enlist a pregnant customer's partner and peers to encourage her abstinence, invite customers to obtain additional information, and provide customers with informational brochures on FAS. Managers and owners were encouraged to expand and develop in-house policies for informing customers and declining alcohol to pregnant women, including provision by the project of model house policy and cautionary menu statements.

Two different locations in the US were chosen for the intervention (Oregon and New Mexico) as they are among the few states that mandate responsible beverage service training, with New Mexico perhaps being the only one to mandate the inclusion of an FAS component within the curriculum. Establishments included bars, restaurants, and nightclubs.

The evaluation consisted of pre- and post-tests of server responses to pregnant-appearing "pseudo-patron" actors ordering alcohol in intervention (n = 148) and comparison (n = 183) establishments at 3 follow up stages (longest was 12 months). Results indicated that no differences were found between intervention and comparison establishments at baseline at either location, but significant differences were found at each follow up stage in New Mexico (refusal rate increased from 9% - 39% at 6 months and 28% at 12 months). In addition, many staff were enthusiastically receptive to the information on FAS, interested in their legal right to refuse service, and motivated to develop skills and strategies to refuse service or offer alternative beverages. Staff also frequently provided the pseudo-patrons with verbal and written information on preventing FAS.

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Special Interest Article - Dresser et al (2011) Continued

Thus, it was concluded that enhanced training for staff in bars and restaurants can be effective in reducing the service of alcohol to visibly pregnant women. As the positive results were maintained even in the absence of ongoing training, this was said to suggest that the prevention methods became integrated into establishment policies that remained constant despite changing personnel in the workforce. However, it was suggested that to maintain and maximise public health benefits, it may be advantageous to provide booster training to prevent decreasing FAS prevention awareness and staff intervention skills.

Study limitations include the lack of significant difference between baseline and follow up results in Oregon, the fact that pseudo-patrons may not be the best or only way to evaluate this method, and the substantial variation across sites in the effectiveness of the training. Differences between the two locations were said to be perhaps linked to differences in the state-mandated training under which subjects had been previously certified, and possible differences in emphases by the trainers.

Alcohol, Violence and Offending

The link between alcohol, violence and offending is well established in the literature. Chassin et al (2009) outline the relationship between substance misuse and offending:

Multiple mechanisms likely underlie...[the]....relations between substance use and offending, including both shared risk factors and mutual influences. Substance use itself involves illegal behaviours, and these activities may also maintain adolescents' membership in an antisocial peer network, within which social norms and opportunities support criminal offending. Substance use may also create a need for income that can be met through criminal activity. Moreover, the pharmacological effects of substance use may impair judgment and decision-making, and thus increase participation in illegal behaviours. Finally, substance use may interfere with adolescents' abilities to successfully occupy and fulfil adult roles which prevent them from "maturing out" of criminal behaviour.....Not surprisingly, then, substance abuse treatment is often seen as a potentially useful intervention to achieve reductions in both substance use and in criminal offending.

Alcohol-related violence is of major concern to society. Around half of all violent crimes are alcohol related, and yet interventions to reduce alcohol-related violence are under-developed. Often, offenders receive treatment for substance use or violence, but not the two in tandem (McMurran, 2012). As substance misuse constitutes an obvious risk factor for violent behaviour, the role of substance misuse in prevention work for violence has been highlighted.

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Alcohol, Violence and Offending

Much research has indicated the long term consequences of adolescent alcohol use in relation to violence and crime. Schroder et al (2008) gathered data from randomly selected young people aged 13-19 years old who had attended a youth alcohol or drug treatment service in New Zealand (n = 184). Results indicated that these young people had a range of complex needs including substance use, family conflict and criminality (56% had criminal convictions). Green et al (2011) examined the relationship between adolescent alcohol use and adult violence. Data was analysed from a longitudinal study where respondents were followed from age 6 to 42 (n = 702). Results indicated that frequent adolescent drinking was associated with an increased risk of violence in young adulthood (in particular assault) but not with other types of crime, self-directed violence, or violence in midlife. Heavy episodic drinking in adulthood seemed to account for some of the association between frequent adolescent drinking and adult assault. The results of this study were said to suggest that preventing frequent adolescent drinking could potentially decrease adult assault. Elonheimo et al (2009) examined the psychosocial correlates of youth crime in a sample of Finnish boys (n = 2,330) and found that independent correlates of crime included parents' low educational level and divorce, daily smoking, and weekly drunkenness.

Rodway et al (2011) described the characteristics of convicted perpetrators of homicide aged 17 and under in England and Wales (n = 363). They found that a history of alcohol and/or drug misuse was common, as was the prevalence of family dysfunction, abuse, educational difficulties or discipline problems. They concluded that earlier intervention targeting social and psychological adversity and substance misuse could help to reduce the level of risk for future violence, and may reduce homicide rates among juveniles. Bergman and Andershed (2009) analysed data from a longitudinal research programme in Sweden, where children were followed from the ages of 10 to 43 years for women and 48 years for men. Among results, was the finding that the prevalence of alcohol and psychiatric problems in adulthood for persistent offenders was high for males and extremely high for females.

Alcohol and drugs have been linked to severe violent offending amongst women as well as men. Lewis (2010) examined a sample of females who had been arrested for violent crimes (n = 130) and found that alcohol dependence was independently associated with violent offending. Putkonen et al (2008) examined changes over times in homicides by women in Finland and found a significantly higher frequency of alcohol misuse/dependence in more recent homicides, and of women being under the influence of alcohol during the crime. The authors argued that preventing substance misuse and marginalisation are likely to be important ways of preventing homicide by both female and male perpetrators. Similarly, Weizmann-Henelius et al (2009) examined violent behaviour among female offenders in Finland (n = 60), and found that 82% had been intoxicated at the time of index offences. The prevalence of substance misuse or dependence, and a history of criminality were significantly higher among the intoxicated than among the non-intoxicated women.

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Alcohol, Violence and Offending

af Klinteberg et al (2011) analysed data from the Stockholm Birth Cohort study, specifically respondents born in 1953 (n = 14,294). The results indicated that aspects of family psychosocial and individual problems associated with criminality varied by gender. The different indicators of family psychosocial characteristics (father's criminality, father's alcohol misuse and parents' mental health problems) were strongly associated with subsequent criminality in males.

Among females, however, having a father misusing alcohol appeared to be more important for their criminal behaviour than the father's criminality, or either of the parents having mental health problems. For both sexes, there was a link between individual problems at age 13-19 (such as alcohol and/or drug use and mental health problems) and criminality; thus indicating the link between early-onset alcohol problems and criminal behaviour, However, females' own alcohol and/or drug misuse was more significant than the effect of adverse family characteristics on criminality.

The practical implications of the findings were said to point to the importance of addressing the individual's alcohol and/or drug use in reducing criminal behaviour and subsequently lowering their mortality rates.

Bye and Rossow (2010) tested whether the association between alcohol consumption and prevalence of alcohol-related aggression in young people was stronger in countries where intoxication was relatively more prevalent. Data were analysed from school surveys (pupils at age 16) from 13 countries in the European School Survey Project on Alcohol and Other Drugs, 2003.

Results indicated that the prevalence of alcohol-related aggression varied considerably across countries, and was significantly higher in drinking cultures where intoxication was relatively more prevalent. The findings suggest that challenges for prevention of acute alcohol-related harms in young people may be larger in countries where adolescents drink to intoxication to a larger extent.

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Special Interest Article - Cunningham et al (2009)

Cunningham et al (2009) conducted a universal intervention involving a computer screening of teenagers at an emergency department (ED) followed by a brief intervention (BI) for violence and alcohol. Patients (ages 14–18 years) were approached to complete a computerised survey. Adolescents reporting alcohol use and violence in their past year were randomised to a control group, or a ~35 minute BI delivered by a computer or therapist as part of the SafERteens study.

Of those 2,423 participants screened, 637 adolescents (26%) screened positive; 533 were randomised to participate while in the emergency department. Of those 533 participants, 349 were randomised to intervention conditions. Results indicate that the BIs were well received, with 97% of participants reporting that they found one intervention section "very helpful". In particular, the sections, "Reviewing the reasons to change drinking and fighting", and "Role plays" were the most well "liked" elements of the interventions, with 30% of adolescents rating both these sections "extremely helpful.

Results also indicate a positive impact of the BIs. At post-test, significant reductions in positive attitudes towards alcohol use and violence had decreased and there were significant increases in self-efficacy related to alcohol/violence among both the therapist and computer BI conditions. At 3-month follow-up, compared to the control population, participants in both BI groups showed significant reductions in positive attitudes to alcohol use and violence and significant increases in self-efficacy related to violence; alcohol self-efficacy improved in the therapist BI condition only. Thus, although participants responded most positively to the therapist condition, the computer condition was also well received. It was hypothesised that using a computer to standardise the structure of a therapist BI is a feasible delivery strategy that could be applied to BIs for other content areas and age ranges.

The authors concluded that the evaluation of the SafERteens study showed that universal computerised screening and BI for multiple risk behaviours among adolescents is feasible, well received, and effective at altering attitudes and self-efficacy. For example, screening and interventions were feasible, with most adolescents completing the computerised screening and interventions prior to ED discharge with little or no impact on clinical care. The study was also seen to address the issue of the acceptability of ED-based interventions for alcohol and violence, regardless of the reason for seeking ED care, as well as the concept that the intervention focuses on more than one risk factor, both alcohol and violence.

A strength of the current intervention was that it involved selective prevention for young people's risky drinking, whereas most interventions consist of school-based multi-session prevention programmes or community-based health promotion campaigns. In addition, the fact the BI was focused on one individual and consisted of a single session was seen to offer advantages as group approaches for interventions designed to reduce delinquency and other problem behaviours can actually increase these problems when at-risk adolescents are grouped together.

Limitations of the study included the fact that the sample reflected the composition of the study ED and that behaviours were obtained via self-report.

Harm Reduction – Alcohol (Vulnerable Groups)

Interventions

McMurran (2012) conducted a rapid evidence assessment of interventions with a focus on treating non sexual violence in the context of alcohol use. In terms of implications, it was concluded that teaching skills for coping with perceived provocation is one option, so that non violent options are available and accessible to people under the influence of alcohol. In order to counteract alcohol's effect on reducing self-awareness, teaching mindfulness techniques and the ability to 'act sober' in provocative situations is a positive intervention. Setting individual implementation intentions was seen to facilitate harm avoidance in high-risk social situations through preplanning of specific sensible behavioural strategies.

Patra et al (2011) estimated the avoidable burden and costs of alcohol-attributable criminality in Canada based on the impact of six alcohol policy interventions: taxation increases, lowering the blood alcohol concentration (BAC) legal limit from 0.08% to 0.05%, zero BAC restriction for all drivers under the age of 21, increasing the minimum legal drinking age from 19 to 21 years, a Safer Bars intervention, and brief interventions. The effectiveness of the interventions at lowering different types of criminality was estimated as follows:

- The most effective intervention in preventing drinking and driving incidents was lowering the BAC level (estimated to reduce this type of alcohol-attributable crime compared with the baseline scenario by 19.1%).
- The Safer Bars programme was the most effective measure to avoid homicide and other violent crimes (reduction of 3.4%).
- Brief interventions were the most effective measure to avoid other alcohol-attributable criminal activities (reduction of 2.6%).

The results were said to demonstrate that the implementation of proven effective population-based interventions can reduce alcohol-attributable criminal burden and its costs to society to a considerable degree.

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Special Interest Articles – The Team Games Tournaments - Wodarski (2010)

The Teams-Games-Tournaments (TGT) is a Social Learning Theory-based intervention that comprises the essential components of health education including cooperative learning, skills training and practice in applying skills (Wodarski and Feit, 2011). The TGT intervention is based on the premise that children and young people from various backgrounds in classrooms or small groups can work together for one another. The intervention employs peers as teachers. TGT has been applied successfully in areas such as adolescent development, psychoactive substance misuse education, and anger control.

Wodarski (2010) described TGT in relation to alcohol misuse and violent behaviour prevention. The intervention targeted young people aged 16-21 years who had high levels of anger, or were victims/perpetrators of violence, and their families. Participants who were known to have conduct disorder and a history of substance misuse were recruited from local community centres (n = 210) where the intervention took place over a seven week period. The goals of the study were to help adolescents reduce their alcohol use, to increase productive family interaction, and ultimately to reduce the adolescents' aggression levels and subsequently reduce the possibility of their becoming victims or perpetrators of a violent crime.

The participants took part in a two-pronged intervention, using a parental involvement cohort with approximately half the participants. The intervention had two follow up stages and encompassed: anger control, alcohol/substance misuse, and family interactive education.

The intervention made use of adolescents as peer counsellers, which means that it can be easily implemented in a range of settings. The data was said to provide support for a hypothesis of social learning theory, that is: interventions using multiple components are more effective than single treatments on their own.

Harm Reduction – Alcohol (Vulnerable Groups)

Interventions

Ho et al (2012) reported on the effectiveness of a one day youth injury awareness education programme - Prevent Alcohol and Risk-related Trauma in Youth (P.A.R.T.Y.) in Australia. The aim of the programme was to reduce risk taking behaviours and injuries of juvenile justice offenders. The research involved a pre and post survey of juvenile justice offenders (n = 225) referred to the P.A.R.T.Y. education programme. The programme provided relevant information to young people to improve their awareness of injury-producing situations, make informed prevention-oriented choices, and adopt behaviours and actions to minimise risk of injuries. After attending talks on pre-hospital care and the vulnerability of the brain and spinal cord to injuries, participants visited the Emergency Department, Intensive Care Unit, and Trauma wards. The participants were shown why and when a serious injury is more likely to occur and then they were given the opportunity to talk to trauma patients about their experiences. Participants also attempted to mobilise using a wheelchair and crutches. Results indicated that a significant proportion of participants stated that they were more receptive to modifying their risk-taking behaviour after the intervention (21% before vs. 57% after). Using police data, the incidence of subsequent traffic or violence-related offences was significantly lower for those who had attended the programme compared to those who did not, as were injuries leading to hospitalisation and alcohol or drug-related offences. Thus, the evidence appeared to indicate that participation in the programme was associated with a reduced subsequent risk of committing violence- or traffic-related offences, injuries, and death for juvenile justice offenders.

Implications for Practice

Early intervention is required with vulnerable groups

Given the negative consequences of alcohol consumption on vulnerable groups, e.g. in relation to alcohol exposed pregnancy or violence and crime, the need for early intervention is critical. To illustrate, preventing frequent adolescent drinking could potentially decrease criminal behaviour such as adult assault and homicide.

Targeting of tailored interventions is vital

The need for interventions to be tailored to the target group appears to be even more important for vulnerable groups. Much research has been undertaken identifying the demographic and other characteristics of those individuals vulnerable to particularly risky drinking (and consequently other harmful behaviour) which should be used to target interventions.

For example, research on the characteristics of women more likely to have an alcohol exposed pregnancy has indicated these women are more likely to be older, unmarried, unemployed, smoke more cigarettes, attend fewer antenatal visits, and have higher alcohol consumption before pregnancy (or to have received treatment for alcohol misuse or to have a confirmed problem with alcohol). The identification of these factors should help make it possible to identify the target group and then tailor intervention work to make it more effective.

Harm Reduction – Alcohol (Vulnerable Groups)

Implications for Practice

There is a need for the use of selective interventions with some vulnerable groups

Research has called for selective prevention of risky drinking among vulnerable groups rather than universal programmes such as school-based sessions or community based health promotion campaigns, in order to reach those individuals who are not captured by such interventions. An example of this would be, initiating public health interventions in selected environments in which high-risk women are found, as universal strategies have been shown to have minimal to no impact on those who drink most heavily during pregnancy.

Interventions should focus on multiple risk factors specific to alcohol related harms

The results of this chapter highlight the need for interventions that focus on more than one risk factor, such as both alcohol and violence or drinking specifically during pregnancy.

A multi-component approach which encompasses a range of interventions is required when working with vulnerable groups

Once again, the need to avoid a one fits all approach is highlighted by the current chapter. In particular, given the needs of vulnerable groups, it is necessary to develop a range of interventions involving different mediums in order to engage vulnerable groups. For example, it has been suggested that a combination of strategies at community and society levels are required to both inform knowledge and influence attitudes about alcohol and pregnancy. Specifically, interventions based on a theoretical model of health behaviour addressing past experience, social influence, risk perception and identified gaps in knowledge and misconceptions may be more successful than the traditional educational approaches.

Examples of interventions include web and computer based programmes that have a community-wide reach, the use of educational approaches to, for example, make women aware of the harmful impact of drinking while pregnant on their baby, and the use of peer counsellers so that interventions can be implemented in a range of settings, The need for partner-based interventions, as opposed to those solely focused on maternal drinking, has also been suggested as a strategy to prevent FASD.

A variety of interventions is also required to respond to the range of criminal activity such as the Safer Bars programme for violent crimes, and brief interventions for other alcohol-attributable criminal activities.

Focus should be on protective factors

Research has indicated the need for individuals to be provided with skills which will protect them from the harmful impact of alcohol. For example, skills for coping with perceived provocation and encouraging nonviolent options, teaching mindfulness techniques and the ability to 'act sober' in provocative situations, teaching sensible behavioural strategies that may facilitate harm avoidance in high-risk social situations, and including self-efficacy messages in marketing approaches on FASD in order to increase women's confidence that they can carry out the recommended actions.

Harm Reduction – Alcohol (Vulnerable Groups)

Implications for Practice

Engaging involvement from a range of key stakeholders

Ensuring that a range of key stakeholders are involved in interventions and are communicating with the individual and each other is extremely important when dealing with vulnerable groups, given the range of support agencies and health professionals that can be involved in providing care and support. Many of these staff groups are in prime positions for undertaking prevention work as they have established relationships with these individuals. However, this necessitates stakeholders having the necessary skills and knowledge to deal with the daily and often multiple interlinked complexities that many vulnerable groups face.

Training for stakeholders is a key component to successful implementation

Given the role staff can play in the prevention of alcohol related harm among vulnerable groups, they should be provided with training on potential alcohol related issues. In particular, research has highlighted knowledge gaps in relation to FASD, indicating the need for targeted, discipline-specific interventions so that all professionals provide a consistent public health message regarding maternal alcohol consumption.

Routine screening women of childbearing age about their alcohol use

In terms of FASD prevention, it is recommended that health professionals should be trained to screen pregnant women for alcohol use, including the use of a standardised screening tool and then they should routinely screen every woman of childbearing age about her alcohol use and her risk for becoming pregnant; so that women who are not pregnant should be questioned about their use of contraception, and educated about the potential risks of frequent or binge drinking at conception and throughout pregnancy; and women who drink while pregnant should be advised to stop.

Link to other Core Elements

This chapter has links to all the other core elements as it encompasses harm reduction approaches.