

Literature Review: Social Supply of Alcohol to Minors

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Executive Summary

Introduction

- The aim of this literature review is to identify existing evidence and knowledge about social supply (alcohol supplied to minors from social sources such as parents, friends, siblings and strangers) to inform the planning of initiatives aimed at reducing the social supply of alcohol to young people.
- Teenage drinking is an important policy issue because young people are at increased risk of experiencing harm from alcohol use.
- Recent alcohol guidelines in Australia and Britain have recommended that no alcohol
 use is the safest option for anyone under the age of 18.
- Restricting the availability and affordability of alcohol are key elements of effective alcohol policy.
- A number of interventions have targeted young people's access to alcohol from licensed premises but less attention has been focused on access from social sources (which include parents/caregivers, friends, other adults and strangers).
- Currently the New Zealand legislation regarding social of supply of alcohol to minors
 is difficult to enforce and a bill before Parliament includes an amendment to the Sale
 of Liquor Act aimed at clarifying who can supply alcohol to young people and in what
 circumstances.
- The Law Commission is reviewing the entire Sale of Liquor Act.

Methodology

- Broad searches were made of the Social Sciences Citation Index and Medline using the following search terms: alcohol and (underage or minor* or adolesce*) and (access or source* or supply or availab*) and (parent* or friend* or adult* or sibling*).
- Other studies were identified by searching the bibliographies of relevant articles and we accessed unpublished literature reviews. Community workers and experts were also consulted.

Nature of social supply

- The social supply of alcohol by parents and caregivers, friends, relatives and others is an important source of alcohol for young drinkers both internationally and in New Zealand.
- Around 71% of drinkers aged 14-17 in New Zealand had obtained alcohol from a social source at least once in 2004.
- Young people have different sources of social supply and these differ as adolescents grow older.
- An Auckland study found that parents and friends were the most important sources of supply for both 14-15 year olds and 16-17 year olds.
- The same study found that friends supplied alcohol more often and in greater quantities when they supplied to 16-17 year olds than when they supplied to 14-15 year olds

Social supply and alcohol consumption

 Social supply has been found to be associated with alcohol consumption by younger people. This includes higher amounts consumed per typical occasion and higher frequency of consumption.

Social supply and age of onset of drinking

- One of the mechanisms by which social supply may influence alcohol-related problems is by decreasing the age of onset of drinking.
- Generally studies have shown that the age at which people start regular drinking is predictive of consumption and alcohol-related problems in subsequent years.
- A longitudinal study has found that the age of onset of drinking associated with parental supply of alcohol did predict problem drinking and other related problems for younger drinkers.

Social supply and social climate

 Willingness to provide alcohol to adolescents can imply or communicate approval of underage alcohol use. This is a significant issue as parents/caregivers are primary agents of socialisation and therefore play a role in shaping children's alcohol use.

Social supply and parental supervision

- Some studies have found that parental social supply, in particular when parents are present when alcohol is consumed, is protective against heavier drinking occasions.
- Other studies have found that parents who monitor young peoples' alcohol use and who implement house rules around alcohol use are less likely to have children who drink.
- Protective parental attitudes have been found to generally deter alcohol use among youth as has parent family connectedness.

Interventions

- There is evidence that community action can be an effective way of increasing public support for alcohol policies and can also be a way to encourage enforcement of such policies once they are introduced.
- A small number of studies have measured attempts to reduce the social supply of alcohol to minors. These included the "Think before you buy under 18's drink" campaign in New Zealand, the Communities Mobilising for Change on Alcohol (CMCA) in the United States and the Trelleborg project in Sweden.
- The "Think before you buy under 18's drink" initiative was a 6 week media campaign aimed at raising awareness of inappropriate supply to teenagers.
- The evaluation found no significant decrease in Supply for Unsupervised Drinking (SUD) in the last month post campaign.
- The CMCA organisers and strategy teams focused on changing policies and practices of major community institutions.
- The study found that 18-20 year olds significantly reduced their provision of alcohol to other teens and were less likely to try to buy or drink alcohol.
- The Trelleborg project was a multi-component programme and researchers found that parental supply decreased during the study period and there was a significant reduction in alcohol consumption by 15-16 year olds.
- Alcohol provided by parents also decreased during the study period but returned to baseline levels by the end of the study.
- In the United States and New Zealand a range of strategies have been used to reduce social supply but there is little research on the effectiveness of these approaches.

Discussion

- The current evidence base suggests that not drinking alcohol is the safest option for young people.
- Evidence from community interventions in the United States shows that the introduction and/or enforcement of policies can restrict the social supply of alcohol from older teens to younger drinkers.
- As legislation regarding social supply in New Zealand is difficult to enforce, an important outcome of initiatives to reduce the social supply of alcohol to young people should be to increase support for effective policy changes.
- Community action and media advocacy have been shown to be effective tools for increasing community support for policy change.
- Community action and media advocacy could also support families, whanau and local organisations to develop and implement their own policies and rules focused on restricting the social supply of alcohol to young people.

Conclusion

- It is likely that effective approaches to reducing social supply in the New Zealand will
 need to include multiple components that are directed towards achieving a clear
 policy change that allows enforcement of the legal provisions regarding social supply.
- Different strategies will be needed to mobilise community members and it is important that these approaches are appropriate for diverse populations.

Introduction

Alcohol use is a key determinant of physical and mental health and is strongly related to harm among young people. Teenage drinking is a particularly important policy issue for a number of reasons. The age at which people start regular drinking is predictive of consumption and alcohol-related problems in subsequent years (Grant, 1997, Swandi, 1998, Fergusson et al., 1996, Casswell and Zhang, 1997, Chou and Pickering, 1992, Fillmore et al., 1991, Hingson et al., 2009). Drinking by younger people results in higher levels of harm relative to the same amounts consumed by older people (Jernigan, 2001, NHMRC, 2009) and there is also evidence of brain impairment associated with intoxication in the teenage years (Hart, 2007); including areas associated with making judgements, learning and memory (Draw the Line, no date, NHMRC, 2009).

Restricting the affordability and availability of alcohol are key elements of effective alcohol policy (Babor et al., 2003). A consistent finding across many studies is that increased alcohol availability from commercial and social sources is associated with increased youth drinking and related problems (Treno et al., 2008). Considerable attention has been paid to reducing the availability of alcohol to minors from licensed premises in New Zealand (Huckle et al., 2007, Huckle et al., 2005, Conway and Casswell, 2003) and overseas (Holder, 2004, Wagenaar and Wolfson, 1994, Wolfson et al., 1996). Less attention has been directed at reducing young people's access to alcohol from social sources and there is limited research evidence about effective strategies (Holder, 2004, Komro and Toomey, 2002).

New Zealand legislation regarding the social supply of alcohol to minors is difficult to enforce. Currently it is an offence to purchase alcohol with the intent of supplying to a minor. However it is not an offence for a parent or guardian to supply to their own children or for any other person to supply alcohol to a minor at a private social gathering (New Zealand Government, 1989, S160). The definition of a private social gathering is open to interpretation and makes legal consequences difficult to enforce (New Zealand Drug Foundation, 2005, Personal communication, 2009). Another difficulty with enforcement is the potential time lag between a supplier purchasing alcohol and providing it to a minor. It may be challenging to prove that a person *intended* to supply alcohol to a minor when they made the purchase.

There have been proposals to clarify and tighten legislation covering the supply of alcohol to minors by others (i.e. from non-licensed sources) and to make provisions more enforceable.

These proposals include tightening the exemption for supply by a parent or guardian and including a requirement to supervise consumption by the child (Alcohol Healthwatch, 2004). Currently the Sale and Supply of Liquor and Liquor Enforcement Bill is before Parliament. The bill includes amendments to the Sale of Liquor Act and the Summary Offences Act aimed at "enhancing the responsibility of people who supply alcohol to minors" (New Zealand Parliament, 2008:34). The proposed amendments include changes to the exemptions so that under 18 year olds can only be supplied alcohol by a parent or guardian or at a private social gathering when the supplier has the consent (express or implied) of a parent or guardian of a young person (New Zealand Parliament, 2008). The New Zealand Law Commission is also reviewing the entire Sale of Liquor Act (Law Commission, 2008).

In Australia, the United States and Canada laws vary between states, territories and provinces. In Victoria and New South Wales it is illegal to supply alcohol to a minor unless it is bought by a partner (over the age of 18) or by a parent of guardian to have with a meal. In Victoria, it is also legal to supply alcohol to minors in a private home (DrugInfo ClearingHouse, 2008). In Canada it is illegal for anyone to buy alcohol for those under the drinking age with some exemptions for different settings. In the United States, it is illegal for anyone to supply alcohol to people under the legal drinking age and again there are exemptions for supply in private establishments or by parents (Larkin, 2007).

In other countries there is considerable concern about alcohol use by young people. Earlier this year the Australian Government issued alcohol guidelines which advise that for children and young people under 18 years of age, not drinking alcohol is the safest option (NHMRC, 2009:57). In particular, the guidelines point out that children under the age of 15 are at the greatest risk of harm and for 15 to 17 year olds the safest option is to delay the initiation of drinking for as long as possible (NHMRC, 2009). In England, the Chief Medical Officer of Health has made similar recommendations including advice that "for those aged 15 – 17 years old all alcohol consumption should always be with the guidance of a parent or carer or in a supervised environment" (Department of Health, 2009).

The aim of this literature review is to identify existing evidence and knowledge about social supply to inform the planning of initiatives aimed at reducing the social supply of alcohol to young people. A systematic literature review is outside the scope of this project.

Methodology

Findings from both international and New Zealand research are covered in this literature review. Initially, a broad search was done on social supply. The areas of interest were interventions to reduce the supply of alcohol to minors by parents/caregivers, friends, family members or strangers. It was hypothesised that interventions could include: attempts to engage directly with parents; to influence social norms via the media, policy changes and/or social advertising; and, interventions at licensed premises and at point of sale. There is interest in literature about parent/child relationships, for example communication and supervision issues surrounding social supply and alcohol-related harm. Another point of interest is interventions that have targeted older peers and friends as sources of supply.

Broad searches of the Social Sciences Citation Index and Medline were undertaken. The search terms used were: alcohol and (underage or minor* or adolesce*) and (access or source* or supply or availab*) and (parent* or friend* or adult* or sibling*). The time period searched was 1990 onwards. In addition, other studies were identified by searching the bibliographies of relevant articles. We also included unpublished reviews in the supply area. Other sources of information for this literature review came from consulting expert alcohol researchers and community workers in the field.

The nature of social supply

The social supply of alcohol by parents and caregivers, friends, relatives and others is an important source of alcohol for young drinkers both internationally and in New Zealand. Social supply refers to any alcohol that is supplied from a person as opposed to purchased directly from an outlet or licensed premise or obtained without permission, for example from a parent's supply. A number of studies from the U.S. and Canada have identified the importance of social sources of alcohol (Wagenaar et al., 1993, Harrison et al., 2000, Dent et al., 2005, Williams and Mulhall, 2005, Hearst et al., 2007, Smart et al., 1996, Fabian et al., 2008, Jones-Webb et al., 1997). Some studies report social sources as the most common source of alcohol for younger drinkers and that commercial sources become more important as underage drinkers get older (Harrison et al., 2000, Hearst et al., 2007, Williams and Mulhall, 2005, Hemphill et al., 2007). A national survey from New Zealand found that around 71% of drinkers aged 14-17 years had obtained alcohol from a social source at least once in 2004. Approximately 35% obtained alcohol socially at least monthly and 27% did so more than monthly (SHORE & Whariki, 2005, unpublished data).

Social supply comes from a range of sources and the source of supply as well as the frequency and amount of alcohol that is supplied socially varies at different stages of an adolescent's development. A study conducted in the Auckland region in 2005 found that caregivers and friends were more likely than siblings, other family members or strangers to supply alcohol socially for those aged 14-15 and 16-17 years. However while about 40% of 14-15 year drinkers were supplied by caregivers, 50% were supplied by friends. Among those slightly older drinkers, aged 16-17 years, parental supply had dropped to 42% and friends were supplying 67%. Friends also supplied alcohol substantially more often and supplied higher quantities when they supplied to 16-17 year olds than when they supplied to 14-15 year olds (SHORE & Whariki, 2005, unpublished data). In a small qualitative study with U.S. college students participants reported that it was easiest to get older friends to buy alcohol and in some cases older friends were paid to buy it (Fabian et al., 2008).

The willingness of adults to purchase on behalf of minors through shoulder tapping (where a minor asks an adult to buy them alcohol outside a licensed premise) has been investigated in the United States. Toomey et al. (2007) conducted pseudo-underage shoulder tap requests outside alcohol outlets in 19 Midwestern communities. In the first phase of the study 8% of the general population sample (an adult approaching an alcohol outlet on their own) were willing to buy alcohol for the shoulder-tappers. When the shoulder-tappers were asked to only approach young men aged between 19 to 30 years the proportion of successful shoulder taps increased to 19% (Toomey et al., 2007). Shoulder tap surveys have been conducted on a small scale in New Zealand as part of a community action initiative in Hawera. In the latest survey in 2007, three out of six requests by a shoulder tapper were successful (Mathews, unpublished data). Shoulder tap operations have also been used as an enforcement tool in Waitakere (Personal communication, 2009).

The social supply of alcohol, particularly by friends and acquaintances, may be easier in some settings compared to others. In a U.S study, Mayer et al. (1998) found strong associations between situation and drinking behaviour. Adolescents who reported having five or more drinks on one or more occasions in the last 30 days were more likely to report drinking with friends and strangers and less likely to report drinking with parents. They also reported drinking in larger groups where most people were underage and in someone else's home or an open field (Mayer et al., 1998). Furthermore about half of all the drinkers in the study reported drinking with someone over the age of 21 and the most common source of alcohol was an adult aged 21 years or older (Mayer et al., 1998). In some situations such as parties, in college dorms and at sports stadiums, participants reported that social supply was

easier because there was no one to observe an older friend buying on behalf of an underage drinker (Fabian et al., 2008).

Relationship between social supply and heavier drinking

Social supply has been found to be associated with heavier alcohol consumption by younger people. Some international studies have found associations between social sources of alcohol and binge or heavier drinking occasions (Dent et al., 2005, Warner and White, 2003, Smart et al., 1996). A recent Auckland study also found that social supply was one of the most important factors to predict the consumption of higher quantities of alcohol per typical occasion among 12- 17 year old drinkers (Huckle et al., 2008). Some international studies have also found an association between the social supply of alcohol and higher frequency of drinking among young people (Dent et al., 2005, Lundborg, 2002, Smart et al., 1996). The Auckland study also found that social supply of alcohol was one of the most important variables predicting higher drinking frequency among 14-17 year old drinkers (Huckle et al., 2008).

Social supply and age of onset of drinking

One of the mechanisms by which social supply may influence alcohol-related problems is by decreasing the age of onset of drinking. Generally studies have shown that the age at which people start regular drinking is predictive of consumption and alcohol-related problems in subsequent years (Grant, 1997, Swandi, 1998, Fergusson et al., 1996, Casswell and Zhang, 1997, Chou and Pickering, 1992, Fillmore et al., 1991, Hingson et al., 2009, Wells et al., 2004). A longitudinal study from New Jersey looked at parental supply related to age of onset. The age of onset of drinking associated with parental social supply of alcohol was found to predict problem drinking and other related problems. Context (initiating drinking at a family gathering vs. outside of a family gathering) alone was not significantly associated with problem drinking and a greater proportion of early onset drinkers had problems compared with late onset drinkers (Warner and White, 2003). The risk for developing alcohol use problems was significantly higher when respondents felt drunk the first time they used alcohol regardless of context. The authors note that further research is needed on the impact of the context in which adolescents first start drinking (Warner and White, 2003).

¹ Further analysis in this New Jersey study showed that a key element was feeling drunk at age of onset. Analysis conducted controlling for psycho-socio risk factors found that feeling drunk at age of initiation was the only variable to predict problems when risk factors were controlled for.

Social supply and social climate

Willingness to provide alcohol to adolescents indicates approval of underage alcohol use. This is a significant issue as parents/caregivers are primary agents of socialisation and therefore play a role in shaping children's alcohol use (Jackson et al., 1999). Differences in levels of approval of underage drinking varies across households and cultural differences may play a part (Foley et al., 2004).

Social supply and parental supervision

Some studies (generally cross sectional) have found that parental social supply, in particular drinking while parents are there, is protective against heavier drinking occasions (Dent et al., 2005, Foley et al., 2004). Other studies have found that parents who monitor young peoples' alcohol use and who implement house rules around alcohol use are less likely to have children who drink (Baumrind 1982, Jackson et al. 1999, Beck & Lockhart 1992, Beck et al.1999, Baumrind & Moselle 1985, Yu 2003 cited in Foley et al., 2004). Protective parental attitudes (such as my mother doesn't want me to drink alcohol) have been found to generally deter alcohol use among youth (Ary et al. cited in Foley et al. 2004) as has parent family connectedness (Resnick et al., 1997).

Jackson et al. (1999) identified three factors were important predictors of alcohol use among young people: 1) the children thought that their parents would not know if they were drinking alcohol; 2) the children had permission to have a drink at home; and 3) there was a lack of parental demandingness (an aspect of monitoring children more generally). The authors recommend that prevention programmes focus on parental monitoring of their children's alcohol use, family norms about children using alcohol at home and increasing parents ability to enforce behavioural rules (Jackson et al., 1999).

A systematic review of parenting programmes to reduce alcohol use among young people under 18 years of age found that there was some evidence that school based and parenting programmes can be effective in reducing substance use, including alcohol use, particularly among pre teens and adolescents. The most effective interventions were those that focused on building social skills and personal responsibility among the children (as well as dealing with substance issues) and those that included active parental involvement (Petrie et al., 2007).

Interventions to reduce social supply

Over the last three decades there has been considerable focus on effective policies and strategies for reducing alcohol-related harm. There is evidence that community action can be an effective way of increasing public support for appropriate alcohol policies and can also be a way of encouraging enforcement of such policies once they are introduced (Babor et al., 2003). Researchers have identified a number of factors that support the effectiveness of community action approaches and these include: development of respectful partnerships between researchers and local community organisations which draw upon research evidence and local knowledge to develop prevention efforts (Conway and Casswell, 2003); use of media advocacy² to raise awareness of community members and decision makers (Conway and Casswell, 2003, Holder and Treno, 1997); focusing on specific environmental strategies to influence the way community systems operate (Conway and Casswell, 2003, Holder, 2000); and a supportive national policy framework (Conway and Casswell, 2003).

A number of community action projects have focused on reducing alcohol-related harm experienced by young people (Holder, 2000, Komro and Toomey, 2002, Rehnman et al., 2005, Stigler et al., 2006, Moewaka Barnes, 2000, Grube, 1997, Conway and Casswell, 2003, Wagenaar et al., 1999, Perry et al., 2000, Holder et al., 1997). Multiple strategies have been used to reduce young people's access to alcohol particularly from licensed premises. Our review of the literature has identified a small number of studies that have measured attempts to reduce the social supply of alcohol to minors (Kypri et al., 2005, Stafström et al., 2006, Wagenaar et al., 1999, Wagenaar et al., 2000) and these are discussed below.³

In New Zealand the 'Think before you buy under-18s drink' campaign was aimed at raising awareness of the inappropriate supply of alcohol to teenagers (Kypri et al., 2005). The six week campaign included: advertisements and interviews in local media (radio and newspaper) about the risks of supplying to teenagers; awareness raising events for adults

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² Defined as the strategic use of news media to advance a social or public policy initiative TRENO, A. J. & HOLDER, H. D. (1997) Community Mobilization, Organizing, and Media Advocacy: A Discussion of Methodological Issues. *Evaluation Review*, 21, 166-190.

³ The PAKKA project (2004-2008) in Finland is a multiple component programme including community mobilisation and policy change; youth social alcohol access, consumption and problems and responsible beverage service and selling. The project is taking a system-level approach with the aim of developing sustainable structures for local alcohol policy; creating alcohol policy discussion with decision-makers and citizens through media advocacy and political lobbying; reducing sales to minors and intoxicated patrons through training and enforcement and fostering co-operation between young people and parents through local events and discussion evenings on social availability and alcohol problems. Outcome evaluation data is not yet available HOLMILA, M. & WARPENIUS, K. (2007) A study on the effectiveness of local alcohol policy: Challenges and solutions in the PAKKA project. *Drugs: education, prevention and policy,* 14, 529-541.

and youths; and provision of information in bottle stores and supermarkets warning against supplying to minors (for example, shop window displays, notices on checkout mats security camera warning notices, warning stickers in store and, warning badges worn by staff). There were also billboards, postcards, bumper stickers and letterbox flyers warning against supplying to minors (Kypri and Dean, 2002). The evaluation of the campaign found a non significant trend to reduced supply for unsupervised drinking (SUD) in the last month post campaign and levels of binge drinking by young people decreased (Kypri and Dean, 2002).

The CMCA (Communities Mobilising for Change on Alcohol) was a community organizing intervention aimed at reducing the availability of alcohol to underage adolescents, including the availability from non-commercial sources. The interventions employed depended on each community's needs. They focused on changing community policies and practices and increasing community awareness (Wagenaar et al., 1999, Wagenaar et al., 2000). Some strategies targeted underage purchasing of alcohol by increasing enforcement. These included regular compliance checks of alcohol outlets and placing plain-clothes police officers in liquor stores to monitor underage purchase attempts. Some communities introduced new legislation and drafted model ordinances to support enforcement practices.

Efforts were also focused on the settings in which young people may access alcohol from social sources. Strategies included banning beer kegs at the local university's homecoming and restricting drinking to a small, monitored area. New policies were established at motels to discourage underage drinking parties and security was reinstated at high school dances following reports of readily available alcohol. A flier targeted graduating seniors and their parents discussed summer time drinking and alcohol consumption at prom and graduation parties. This was distributed by either law enforcement officers or by schools and delivered with the local newspaper (Wagenaar et al., 1999). Other strategies focused on increasing community awareness and included warning fliers about the legal consequences of purchasing for youth. These were widely distributed in the community, alcohol stores and inserted into local newspapers and bank statements. There were also weekly CMCA columns for the local newspapers (Wagenaar et al., 1999).

Researchers found that the CMCA intervention initiated changes in institutional polices and practices, improved compliance at alcohol outlets and significantly changed the behaviour of 18-20 years (Wagenaar et al., 1999). The authors argued that "younger teens often obtain alcohol from older teens who purchase from outlets. Therefore, the intervention also worked to reduce provision of alcohol to younger teenagers by older teenagers" (Wagenaar et al., 2000:91).

The Trelleborg Project in Sweden was a multi-component programme aimed at reducing alcohol consumption by young people and the prevalence of alcohol being provided by parents (Stafström et al., 2006). Strategies included: the city council's instigation of policy and action plans on alcohol management for the community and schools; enforcement of black market sales in grocery and convenience stores; introduction of an evidence-based curriculum in all primary and secondary schools; a leaflet mailed out to parents of 7th graders containing basic information on promoting alcohol-free teenage years; piloting of a curriculum for parents of 7th to 9th graders; and publicity of teenage alcohol use surveys in the local mass media (Stafström et al., 2006).

The intervention appears to have made a temporary impact on parental provision of alcohol to young people. Alcohol provided by parents decreased during the study period but subsequently returned to baseline levels. A comparison of the Trelleborg findings with other Swedish data sources shows that the prevalence of 'alcohol provided by parents' was much lower at baseline than elsewhere. This variable dropped by 50% between 2000 and 2001 which was a large decrease especially taking the relatively low prevalence at baseline into account. However, there was an increase in the number of teenagers who were provided alcohol by their parents and who bought it for themselves between 2001 and 2003. During the same time period, the adult population in Sweden (aged 16 - 80) also increased its consumption by 15%. This increase was mostly due to the relaxation of Swedish policy toward alcohol (Leifman & Gustafsson 2003, Room 2005, SoRAD 2004 in Stafström et al., 2006).

In the United States a number of initiatives have been introduced aimed at restricting social sources of supply. These include laws against adult provision of alcohol to minors and the creation of enforcement mechanisms that allow police to enter private premises where underage drinking is happening (Prevention Research Center, 2004). There have also been efforts to register beer kegs so that police can trace the adult purchaser of alcohol provided to underage drinkers (Prevention Research Center, 2004, Komro and Toomey, 2002). Some states have also introduced social host laws that allow third parties to sue social providers when the provision of alcohol to a minor results in death or injury (Komro and Toomey, 2002). Shoulder tap operations have been used to enforce the illegal purchase of alcohol by minors (Prevention Research Center, 2004). As noted above little research has been undertaken to assess the effectiveness of these approaches and they may not be applicable to the New Zealand context.

In New Zealand, small community action projects have used a range of approaches to raise awareness about and reduce social supply. These have included the development of parent packs (Bijoux and Collie, 2007), community events for parents and teenagers aimed at increasing communication about alcohol use (Personal communication, 2009), shoulder tap surveys (Mathews, unpublished data) and operations (Personal communication, 2009) and the 'Think Before you Buy Under 18s Drink' (Kypri 2002) campaign. Again a robust evaluation of the impacts of these efforts on reducing social supply has not been undertaken.

Discussion

The ability of minors to access alcohol via social sources is an important public health concern. This is because social supply of alcohol is an important source of alcohol for younger drinkers and may be linked to early consumption. While there is research that suggests that initiating drinking in a family context where parents are present may have a protective effect for young people, the knowledge base about the ways this might work is limited. There is also a growing evidence base that shows that the early onset of drinking is associated with the development of alcohol-related problems. This has led to health authorities in Australia and England adopting the precautionary principle and recommending that no drinking under the age of 18 years is the safest option for young people.

Previous research does provide guidance for the development of initiatives to reduce young people's access to alcohol from social sources. Evidence from community interventions in the United States shows that the introduction and/or enforcement of policies can restrict the social supply of alcohol from older teens to younger drinkers. This is important because friends are a common source of alcohol for young drinkers and also tend to supply more often and in greater quantities thereby increasing the risk of alcohol-related harm.

Approaches to reduce drink driving and illegal alcohol sales to minors have found that enforcement of legal restrictions, along with increasing the perception that enforcement is likely (anywhere, anytime), has led to a reduction in target behaviours (Homel, 1993, Holder et al., 2000). In the case of social supply enforcement is difficult because of ambiguities in the current Sale of Liquor Act and because social supply can occur in private homes. Therefore a key strategy will be to increase community awareness and support for policy changes that clarify the legal consequences of social supply and open up opportunities to deliver these consequences. Illegal purchases are a source of social supply (for example

minors supplying other minors) so it is important that the enforcement of restrictions on sales to minors from licensed premises is consistent across New Zealand.

Evidence exists from many community action projects about tools that can be used to encourage policy change. These include having a clearly defined policy, utilising media advocacy to gain support from key decision-makers and community action to support policy change.

Strategies that might affect parents' willingness to supply alcohol to young people are less clear. However, research evidence about parenting behaviours associated with less alcohol use by young people is relevant. Recommended parenting practices include monitoring of children's alcohol use, setting family norms about children using alcohol at home and increasing parents' ability to enforce behavioural rules.

Community action focused on policy change may have an additional benefit through encouraging families, whanau and community organisations to set limits and rules regarding the social of supply of alcohol to minors. These rules could help to reinforce family norms that discourage underage drinking as well as decrease one social source of supply for young people.

Conclusions

It is likely that effective approaches to reducing social supply in the New Zealand context will need to include multiple components that are directed towards achieving a specific policy change that allows enforcement of the legal provisions regarding social supply. Community action and media advocacy are likely to increase the support for such policy change and enforcement by key decision-makers and the wider community. Mobilising community members is likely to have multiple benefits as this approach could support family members to set limits and establish protocols around social supply. It is likely that different strategies will be needed to mobilise community members and it is important that these approaches are appropriate for diverse populations.

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