

ABSTRACT

Modelling data has provided good evidence to support the efficacy of a minimum pricing policy for alcoholic beverages as a means to reduce alcohol consumption and risky and harmful drinking. The aim of the present study was to investigate attitudes and beliefs towards a minimum price policy for alcohol among members of the general public in Western Australia (WA). The study also explored what factors might promote acceptance of the policy. Eleven focus groups, comprising participants from a broad range of backgrounds in WA, were conducted. Using a facilitator-administered semi-structured interview schedule participants discussed their beliefs about the policy and how its acceptability might be promoted. Transcriptions of discussions were analysed using qualitative inductive content analysis for emergent themes. Three major themes emerged: attitudes toward the policy, beliefs about effectiveness, and strategies to increase acceptability. Participants expressed negative attitudes toward the policy and thought that it would lead to increased crime, drug use, and financial strain. Participants identified the policy as unfair on disadvantaged groups, and suggested individuals would find a way to procure alcohol regardless of minimum pricing policies. Suggestions to make the policy more acceptable included increasing alcohol education and directing the revenue toward alcohol reduction initiatives. Participants' negative views and perceived lack of effectiveness corroborate research conducted in the UK. Information and education campaigns aimed at reducing misunderstanding of the policy and highlighting its effectiveness may help to promote greater acceptability.

Key words

Minimum price policy, floor price, alcohol policy, attitudes, public opinion

Attitudes and Beliefs Toward Minimum Alcohol Pricing in Western Australia

INTRODUCTION

Excessive alcohol consumption is associated with deleterious health, economic, and social consequences. Health-related consequences include increased risks of liver cirrhosis, heart disease, cancer, and greater risk of acute injury (Britton and Marmot, 2004). Economic consequences include increased costs of emergency services, hospital treatment, and rehabilitation services with estimates that excessive alcohol consumption costs Australian health services approximately \$33 million per annum (AIHW, 2011). Social consequences of excessive alcohol consumption include increased incidence of drink-driving, violence, street disorder, and criminal behaviour (Miller *et al.*, 2012). Governments have therefore developed policies to curb excessive drinking such as raising the price of alcoholic beverages. The aim of the current research is to examine the attitudes and beliefs of people from a broad cross-section of the Western Australian (WA) public toward a proposed minimum price per standard drink policy; a pricing policy aimed at curbing excessive alcohol consumption. The proposed policy would set a minimum or ‘floor’ price per standard alcoholic drink and has been shown in modelling studies to be very effective in reducing alcohol consumption (Brennan *et al.*, 2008). The current research will make a unique contribution to knowledge on the potential consequences of minimum pricing by providing in-depth views and attitudes of the WA public in terms of its immediate impact, acceptability, and likely outcomes. As previous research has indicated a lack of support for a minimum price policy (Chalmers *et al.*, 2013, Lonsdale *et al.*, 2012), the aim of the current research is to explore attitudes toward the policy in WA including views on its effectiveness and acceptability. Findings are expected to inform the development of educational activities that will help to increase the acceptability of the policy, and reduce potential opposition, in advance of its possible introduction.

Excessive alcohol consumption “causes a large disease, social and economic burden in societies” (World Health Organization, 2014, p. xiii). Given recent data indicating that 18.2% of Australians consumed alcohol at levels that placed them at increased lifetime risk of an alcohol related disease or injury and 26% consumed alcohol at a level that increased their injury risk on a single occasion at least once a month (AIHW, 2014), policymakers and public health advocates have recommended that pricing policies that focus on raising the price of cheap alcohol, rather than, or as well as, alcohol in general, should be considered. This is particularly pertinent for Australia, which has a complex system of taxation on alcohol, including idiosyncratic policies such as the Wine Equalization Tax, described as “incoherent” and “not well suited to reducing social harm” in a recent governmental report (Commonwealth of Australia, 2010). A focus on alcohol pricing is, therefore, considered important given the strong evidence for a causal association between alcohol cost and consumption (Booth *et al.*, 2008, Chalmers, *et al.*, 2013, Wagenaar *et al.*, 2009).

Increasing alcohol prices by imposing duty on alcoholic beverages has been shown to be effective in reducing alcohol consumption (Booth, *et al.*, 2008), but still allows for the sale of heavily-discounted alcoholic beverages through various means such as multi-buy (e.g., ‘buy one get one free’) or ‘happy hour’ promotions. In addition, there is evidence that increasing tax on alcohol is seldom transmitted to increasing the cost of beverages in the cheapest price category, which tend to be the products most important from a public health perspective (Mäkelä, 2014). An alternative pricing policy based on the alcohol content or ‘strength’ of beverages has been suggested (Brennan, *et al.*, 2008, Commonwealth of Australia, 2010). The minimum price per standard drink

(also known as ‘floor’ price policy) has already been proposed in other countries such as Scotland, Ireland and United Kingdom, recommended by a recent governmental report in Australia (Commonwealth of Australia, 2010), and has been introduced in Canada. Modelling studies conducted in Scotland and the United Kingdom have indicated that introducing a minimum price policy would lead to substantial population-level decreases in levels of alcohol consumption (Booth, *et al.*, 2008, Purshouse *et al.*, 2011). Recent evidence from the introduction of minimum pricing in Saskatchewan, Canada, has indicated that a 10% increase in average minimum price per standard drink was associated with an 8.4% reduction per capita consumption (Stockwell *et al.*, 2012b) and reductions in morbidity and mortality attributed to alcohol (Stockwell *et al.*, 2013).

While there is a wealth of evidence and governmental support for the introduction of a minimum price per standard drink policy, public reaction is less clear. A recent study examining reactions to a minimum price policy in the UK indicated that participants held generally negative attitudes, or were simply unsure of minimum price policy (Lonsdale, *et al.*, 2012). Some participants thought the policy would be ineffective, with a large percentage agreeing that people who want to drink alcohol excessively will find a way to do so. In particular, participants were reluctant to endorse a policy that they perceived would increase the costs of drinking. However, participants did not recognise that the minimum price policy would have little effect on alcohol spending among those drinking at moderate levels, as indicated by recent modelling data (Sharma *et al.*, 2014). It appeared that participants did not fully understand the minimum pricing policy and tended to equate it to volumetric taxation that increases costs of alcohol beverages uniformly. These findings notwithstanding, there is a relative dearth of data on the views of the general public of the introduction of a minimum price for alcoholic beverages.

The present research

The aim of the present research was to investigate attitudes and beliefs toward a proposed minimum price per standard drink policy in a sample of people representing a cross-section of WA society. We aimed to examine the immediate reaction of people to the policy, as well a consideration of likely outcomes, positive and negative, and conditions that might increase the acceptability and success of the policy. We adopted a qualitative approach to gain in-depth data on participants’ views of the policy. Our research design was inductive and data-driven based on participants’ views expressed in focus group discussions facilitated by a researcher. However, based on previous research we anticipated that people would hold largely negative attitudes towards a minimum price policy in WA (Lonsdale, *et al.*, 2012). This may reflect a general bias toward rejecting policies perceived as likely to affect personal finances. There is evidence that a minimum price policy would have little effect on overall expenditure for the majority of alcohol drinkers (Sharma, *et al.*, 2014) and may ultimately reduce costs to the taxpayer through reduced public expenditure on managing and treating the social and health consequences of harmful and hazardous drinking (Brennan, *et al.*, 2008). However, people may not fully understand minimum pricing and, therefore, equate it with uniform price increases (Chalmers, *et al.*, 2013, Lonsdale, *et al.*, 2012). The current study will assess people’s initial knowledge of the policy, and provide clear definitions and guidance. We also investigated factors that might make minimum pricing more acceptable. This information would be of considerable practical importance to organisations aiming to introduce measures to reduce alcohol-related harm. Governments will likely be cautious about introducing policies that are unpopular with the general public. Information on how to make a policy

acceptable to the general public may allay fears of public disapproval, increase the likelihood of government support, and remove a major barrier to its introduction.

METHOD

Procedure and interview schedule

Prior to data collection, ethical approval was gained from the Curtin University Human Research Ethics Committee (approval #PSYCH-SP-2013-08). Eleven focus groups were conducted to investigate people's attitudes in WA towards a potential minimum price per standard drink policy and what measures could be put in place to make such a policy more acceptable. Each focus group followed a semi-structured interview schedule developed a priori. The focus group schedule was developed in conjunction with a project steering group comprising the authors, who have expertise in the areas of behavioural medicine and public health policy and advocacy with specific knowledge on alcohol pricing. The group provided feedback on the suitability of the question protocol in terms of clarity, topics of discussion, and sufficiency for exploring attitudes toward minimum pricing. The finalised schedule is provided in Appendix A as online supplemental materials.

The groups were guided by a trained facilitator who provided structure to discussions using the interview schedule without unnecessary disruption or intrusion. The facilitator provided participants with a brief standardized introduction to the topic of drinking behaviours and then asked them whether they had knowledge of minimum pricing to evaluate awareness of the policy. A description of the policy and its implications concerning pricing was then provided, supported by posters outlining how prices for well-known and cheaper brands of alcoholic beverages would be affected by the policy. Information on the posters was gained from a search of current prices of beers, wines, and spirits on off-license alcohol retailers' websites and promotional materials. The posters depicted current retail prices of examples of brands of different types of alcoholic beverages. Alongside the retail prices, the revised prices under the minimum price per standard drink policy (set as \$1 per standard drink) were shown. The posters are provided in Appendix B as online supplemental materials. Participants were informed that the policy would most likely affect alcoholic beverages sold at very low or discounted prices rather than brand-name beverages or beverages sold for full price (i.e., not as part as promotions) or on-trade establishments (e.g., bars, pubs etc.). The facilitator stressed that he did not endorse any particular view and encouraged participants to express their personal views. Following this, participants were asked for their reactions and encouraged to discuss in further detail why they supported the policy, or not; what positive or negative outcomes the policy might have; who or which groups would be most affected and the implications; and what could be done to make the policy more acceptable. Focus groups typically lasted between 40 and 60 minutes. The first part of the focus group discussions was aimed at introducing participants to the topic of alcohol and harmful drinking and to initiate discussion on their experiences with alcohol before moving on to the discussion on minimum pricing. Participants were informed that, with consent, the discussions would be recorded and transcribed in full to facilitate analysis but no names or other identifying information would be used. The study protocol for the current research has been published elsewhere (Keatley *et al.*, 2015).

Participants

An important aspect of the current research was to solicit the views and opinions on minimum pricing from individuals across a range of demographic groups from the WA population. We recruited 11 focus groups (FG) comprising individuals from several key demographic groups within WA: (a) blue-collar/manual workers (3 groups: FG1, n = 8; FG3, n = 7; FG6, n = 7); (b) older people (1 group: FG2, n = 8); (c) white-collar workers, including secretarial, managers and professional (2 groups: FG4, n = 6; FG5, n = 8); (d) low socioeconomic status and unemployed people (2 groups: FG7, n = 7; FG11, n = 9); (e) University students (2 groups: FG8, n = 6; FG9, n = 5); and (f) all female group (1 group: FG10, n = 8). We recruited a wide variety of groups from different backgrounds according to socio-economic status (i.e., blue collar and white collar, unemployed), age (i.e., University students older people), and gender in order to capture perceptions of the proposed policy from diverse groups within the WA population. The groups each comprised between 5 and 9 participants and were recruited from community groups, local companies, social clubs and societies, and community outreach organisations. The total sample comprised 79 participants (38 male, 41 female; $M_{\text{age}} = 39.49$, $SD = 18.51$, range = 18 – 89) from 11 focus groups. All focus groups were conducted in the Perth metropolitan area, WA. Participants self-reported their ethnicity with the profile of ethnic groups as follows: White Australian (n = 58); North-west European (n = 8); Southern or Central Asian (n = 3); North American (n = 2); Pacific Islander (n = 2); Southern or Eastern European (n = 2); North African or Middle Eastern (n = 1); South-east Asian (n = 1); South American (n = 1); White New Zealander (n = 1). Prior to the commencement of discussions, focus group participants completed the Fast Alcohol Screening Test (Hodgson *et al.*, 2002) to screen for hazardous drinking and used to describe levels of alcohol consumption of the sample. Twenty-three percent of participants were classified as hazardous drinkers. The level of risky drinkers is slightly higher than the most recent data in Western Australia of the percentage of people drinking alcohol at levels that put them at elevated risk of single occasion or lifetime harm (15.5%; AIHW, 2014).

Analytic approach

Audio recordings of focus group discussions were transcribed verbatim and served as the primary data source. An inductive approach to data analysis was used to identify key emergent themes. Qualitative inductive content analysis (Braun and Clarke, 2006) was used to identify the key themes within the data. An iterative approach was adopted with multiple readings of the transcripts undertaken with themes identified on each reading noted until theme saturation occurred. Theme saturation is the point at which no new information is gained through further readings of the data (Sparkes and Smith, 2014).

RESULTS

Our analysis of participants' views and attitudes towards a minimum price per standard drink in WA produced three major themes: attitudes toward minimum pricing, beliefs about effectiveness, and strategies to increase acceptability. Each major theme was linked to a number of sub-themes. During the focus group sessions, participants were asked whether they had prior knowledge of the minimum price per standard drink policy. Only one participant indicated any prior knowledge of the minimum price policy; the participant had a general idea of the policy, but did not have specific knowledge of its effects. Therefore,

participants in the present sample were almost entirely naïve to the policy. In the next sections we outline the evidence of each theme with illustrative quotes¹ and implications for each theme.

Attitudes toward minimum pricing

Although participants were informed of its potential to reduce harmful effects of excessive alcohol consumption, most participants in the focus groups indicated a negative response to minimum pricing. Reasons given for their negative attitudes fell under five sub-themes: (1) increased crime; (2) increased drug use as an alternative to alcohol; (3) financial strain on families and individuals; (4) concerns regarding market reaction to the policy; (5) beliefs that factors other than price are the main causes of excessive alcohol consumption; and (6) a view that the policy is unfair and unequally affects those from a lower social economic status.

Increased crime

Many participants believed an increase in alcohol pricing would lead to a rise in criminal activity to either steal alcohol directly, or steal things to sell in order to purchase alcohol: “The policy leads to crime increase because they’re going to get the money [for alcohol]” (FG10, All female); “It’s just a case of stealing money [for alcohol]” (FG6, Blue collar). One participant suggested that people from poorer communities may have few alternatives if they view alcohol as a necessity alongside other pressures on family income: “You’re not going to feed your kids as much, you’re going to maybe have to do a crime, do something” (FG3, Blue collar).

Increase in drug use

Common to all focus groups was the view that people may turn to illegal drugs (e.g., cannabis, ecstasy) as an alternative to alcohol. The participants indicated that people’s desire to go out, have a ‘good time’ and become intoxicated will lead to alternatives being found if they were ‘priced out’ of alcohol: “I don’t think that is going to change people are just going to find ways around it and will turn to other alternatives” (FG5, White collar). Participants suggested that younger drinkers would be more likely to switch to drug use: “They’ll go to drugs if they cannot buy alcohol” (FG3, Blue collar); “If you now start putting alcohol up, do people look for other things like drugs to get their kicks” (FG6, Blue collar). Proposed reasons for switching to drugs were financial considerations and increases in ease of access to drugs: “The only thing I think is that they’ll turn to cheaper drugs... (FG3, Blue collar); “(If) it’s expensive to drink, but if someone wants to get crazy to do something – to get happy, to enjoy, to go to a party they can try something different, you know? Because drugs are... more accessible” (FG9, Students).

Financial strain

Most participants expected such a policy to exacerbate strain on family finances in the context of the aftermath of the global economic downturn. Participants highlighted the increased financial burden that would likely be caused by the introduction of a minimum pricing policy: “People who live in the lower SES [socioeconomic status] tend to forego food and things rather than lose their Sky TV and cigarettes and alcohol” (FG6, Blue collar). Many participants saw excessive alcohol consumption as an addiction

¹ Additional representative quotes for each theme are provided in Appendix C as online supplemental materials.

and expressed concern that such a policy would likely increase family poverty as a greater proportion of household income would be spent on alcohol: “If you want to do something you’ll find a way...they may decide to not spend money on the kids clothes or schooling and spend it on alcohol” (FG4, White collar). Participants suggested that people would rather give up other commodities than reduce their alcohol intake. Some participants expressed the view that among heavy drinkers alcohol is viewed as more important than other daily household purchases: “We went three days once without food – he used every dollar for booze” (FG2, Older adults).

Market reaction

Several participant groups raised concerns about how the market economy would react. In particular, there were fears that other alcohol brands that are already sold above minimum price would be compelled to raise their prices to maintain the gap between the lower and higher ends of the market: “They’re [alcohol producers] just going to simply market their product at higher cost” (FG4, White collar). One participant suggested potential implications of the policy on the wider market and the price of premium brands: “I just reckon it’ll just push the price of the cheaper products up... So on the basic level you have the increase and that looks good but you don’t know how the market will react, there’s always going to be a top, a middle and a bottom, but I don’t think these brand names will accept themselves being classed with the lower end brands” (FG4, White collar). There were also concerns that producers of the alcoholic beverages affected by a minimum price would raise the price of their brand to keep the profits themselves, rather than lose the increased revenue to government: “They’re [alcohol producers] going to change their recommended retail price to be the normal price and claim they didn’t have any increase” (FG5, White collar).

Other causes of excessive alcohol consumption

There was a consensus across all focus groups that factors other than cost were implicated in excessive alcohol consumption. Most participants indicated that in their view, price was not the main factor influencing excessive alcohol consumption and identified a ‘drinking’ culture and influence of others as major factors: “I don’t think this [minimum price] is the answer... I think it’s a cultural thing” (FG1, Blue collar). One participant identified the kinds of causes that she believed would not be affected by the price change and needed to be addressed: “The problems are things like low self-esteem, bad life events, and then it’s the drinking is a way of dealing with that, and you need to get to the actual family problems” (FG7, Low SES).

Unfair policy

While most groups acknowledged that people in lower SES strata are more likely to have problems associated with alcohol, several participants also believed that this would target lower earners and people with less money, and would therefore be unfair: “I think it’s unfair...it targets the lower earners” (FG1, Blue collar); “The main negatives are for the low SES sections of society” (FG5, White collar); “You’re essentially saying you can drink as long as you can make this much money...you’re entitled to drink because you make this much per year, whereas you are not...there is nothing on the market for you anymore because you don’t make enough money” (FG5, White collar). Others felt that the policy was unfair on those who drank responsibly: “Other people just want maybe a nice glass of wine so instead of paying six bucks I pay ten. So it hits everybody, and it probably won’t stop the problem drinkers, who will keep drinking” (FG2, Older adults).

Beliefs about effectiveness

A major theme emerging from the focus group discussions was the view that the minimum price policy would not be effective in reducing excessive alcohol consumption. There were two sub-themes reflecting participants' rationale for the perceived ineffectiveness of the policy: (1) people will find a way to procure alcohol, and (2) a bigger increase is needed, across all alcohol types.

People will find a way to procure alcohol

There was consensus across all focus groups that regardless of cost, people will find a way to procure cheap alcohol: "Drinkers will drink anyway, they'll find a way around it" (FG2, Older adults). Another participant indicated that people would pay to maintain their current level of consumption regardless of cost: "It won't make much difference really. If you look at cigarettes, they keep on putting the prices up for cigarettes every few months and it makes no difference in the rates of consumption" (FG11, Low SES). These views show participants had a lack of accurate information on the effectiveness of price in changing consumer behaviour for public health benefits (e.g., tobacco pricing) (Bader *et al.*, 2011) and many such misunderstandings were evident in the current analysis. This is closely tied with the previous sub-theme relating to locating alcohol on the black market or turning to alternatives. There was also a concern that consumers would change their alcohol choices based on the minimum price policy by switching to stronger drinks like spirits: "They [may] decide to upgrade to spirits, then they're doing potentially more damage to the body" (FG10, All female). Another participant also referred to the likelihood that individuals will switch drinks: "I don't think so, it'll have a negligible impact, people will just switch what they're drinking to something a bit more premium" (FG5, White collar). Some participants indicated that people would be unlikely to change their excessive patterns of drinking, rather they would limit themselves to drinking on fewer occasions but continue to drink excessively on those occasions: "What you might do instead of binge drinking 4 times a month you'll do it 2 times a month...it may have some impact admittedly, but I don't think it'll stop binge drinking, it'll just maybe reduce it" (FG6, Blue collar). These statements suggest that participants would likely continue excessive patterns of drinking under minimum pricing, but do so less frequently.

A bigger increase is needed

Participants indicated that the minimum price policy needed to be developed to increase prices of all alcohol beverages: "I think across the board increases" (FG1, Blue collar); "If there is a policy, it should be generally for all of them" (FG9, Students). Some participants suggested that relatively large increases in price would be acceptable: "Make it across the board, even if it was a 20% increase across the board, it's still fair" (FG10, All female). The issues of fairness mainly arose from previous considerations that the policy unfairly affected people from lower social economic status. This is not in conflict with previous (sub-) themes as participants are responding to two separate issues: first, initial thoughts about minimum pricing, and second, whether it will be effective.

Strategies to increase acceptability

Participants were asked to consider ways in which the minimum pricing policy may be made more acceptable or favourable, and ways in which its effectiveness could be increased. Despite their negative views of the policy, participants expressed opinions on its

possible value in reducing alcohol consumption and associated risks and maladaptive outcomes. Options for increasing acceptability formed two main sub-themes: (1) education and information; and (2) transparency and positive use of the revenue.

Education and information

Several participants expressed the need for money raised from the policy to be used for education in schools and health centres: “If they did this and did education as well it would work” (FG1, Blue collar). In addition, participants thought that the minimum price policy could be introduced alongside other information and procedures, to increase its acceptability and effectiveness: “Alone it [minimum pricing] won’t work, but in conjunction with advertising the negative side effects of harmful alcohol consumption it’ll work” (FG8, Students).

Transparency and positive use of the revenue

There was a general consensus that if the revenue recovered from the introduction of a minimum price was ring-fenced and used to help pay for other initiatives to manage the costs and consequences of excessive alcohol consumption (e.g., healthcare, policing), the policy would be more acceptable. In particular, participants wanted transparency over how and where the money generated from the minimum price policy would be used: “As long as there’s transparency over where it’s [the money raised] is going” (FG5, White collar). One participant describes how it would be important to show that the revenue recouped from minimum pricing went into other initiatives: “If they could show this money was going to helping the community and dealing with the alcohol problem I think it would get a lot better reception... like health lines, alcoholics” (FG2, Older adults).

DISCUSSION

The present study investigated attitudes and beliefs towards a minimum price per standard alcoholic drink policy in focus groups in WA. A major theme emerging from the focus groups was a general negative attitude toward the policy and scepticism over its effectiveness. Participants expressed views that people would continue to drink excessively regardless of the pricing policy if it were introduced. The largely negative views expressed by participants towards the policy were consistent across the groups. This finding supports previous research on the views of the general public toward minimum pricing in the UK (Lonsdale, *et al.*, 2012). In our study, while participants acknowledged the problems related to excessive consumption and agreed that it needed addressing, the consensus was that a minimum pricing policy will not lead to reduced alcohol consumption. This finding is in contrast to modelling data and data from countries that have introduced the policy, demonstrating substantive and consistent reductions in per capita alcohol consumption (Booth, *et al.*, 2008, Purshouse, *et al.*, 2011, Stockwell *et al.*, 2012a). It seems that participants had a limited understanding of the link between alcohol cost and consumption. It is likely that participants’ misunderstandings stem from personal anecdotal and occasional observation rather than an understanding that overall population-level changes that can only be captured by analysis of population data and are not readily observed in everyday experience. It should come as no surprise that participants expressed the view that minimum pricing would be ineffective given that they had not observed changes in alcohol consumption from their own anecdotal experiences. In the absence of information or data on population-level changes, individuals tend to rely on lay observations of cause and effect to establish their attitudes and beliefs. There is also evidence that the alcohol industry and representative organisations have engaged in marketing exercises to downplay the effects of price on

alcohol use (Miller *et al.*, 2011). An important implication of this finding from the current research is that governments and policymakers have the responsibility to make the effects of pricing policies like minimum price on population-level alcohol consumption clear to the general public (Chalmers, *et al.*, 2013, Lonsdale, *et al.*, 2012).

An important rationale posed by the majority of participants as to why the policy would be ineffective was that it does not target 'drinking culture', a factor commonly cited across the focus groups as the main cause of excessive alcohol consumption. Participants disagreed with the policy as they believed people would continue to find ways and means to obtain alcohol; therefore, they believed that the proposed policy would not stop the problem but instead generate additional negative social consequences (e.g., crime, drug use, family strain). Most participants suggested that drinking culture and peer pressure were the main factors in deciding whether to go out and drink to excess (Park and Levenson, 2002, Park *et al.*, 2009, Tyssen *et al.*, 1998). However, this may also be a consequence of participants failing to fully understand the purpose and effects of a minimum price policy, which is one component of a comprehensive approach, focused particularly on high-risk and vulnerable groups, but is not expected to address all aspects of all alcohol problems.

A further related perceived negative consequence was that the policy unfairly targeted people of lower social economic status. Modelling data suggests that the policy targets primarily those who drink alcohol excessively, who tend to consume cheaper and heavily discounted alcoholic beverages (Woodhouse and Ward, 2012), but also has more global impact by decreasing overall alcohol consumption (Booth, *et al.*, 2008, Brennan, *et al.*, 2008, Stockwell, *et al.*, 2012a, Stockwell, *et al.*, 2012b). Generally, participants thought the policy would significantly affect their personal finances and lifestyle and lead to increased crime and drug use. The latter view, however, is not consistent with evidence that minimum price will have negligible effect on the cost of alcohol for moderate drinkers (Sharma, *et al.*, 2014) and research from Canada showing that minimum pricing was associated with a 9.39% reduction in total crime (Stockwell *et al.*, 2015).

During the course of the focus group discussions, participants were provided with full details on the policy, its rationale, and why it might be considered as a measure to reduce harmful drinking. However, it seems from their responses that participants were not convinced by, or did not assimilate, what they were told about how a minimum price policy, and public health policies in general, affected alcohol consumption at the population level. Instead, it seems that they generally fell back on their personal beliefs and attitudes toward alcohol and alcohol pricing. The lack of an in-depth understanding is consistent with previous research on people's views and attitudes towards minimum price policies (Chalmers, *et al.*, 2013, Lonsdale, *et al.*, 2012) and highlights the importance of developing more effective means to assist people to understand the policy. This might include, for instance, campaigns which dispel misinformation or contradictory messages (Miller and Kypri, 2009, Miller, *et al.*, 2011) and unambiguously communicate the benefits that such a policy will have for society (e.g. reduced violence, fewer drink-drivers) as well as for the individual (e.g. better personal safety, reduced insurance premiums).

In addition, a major theme emerging from the current analysis was that more information and transparency about the policy and its effects was needed before the general public would support it. The majority of participants were sceptical of the policy, with some seeing it as a government means of generating revenue. Participants agreed that if the money was used to assist with the economic, social, and health-related costs related to excessive alcohol consumption, the policy would be more likely gain

public support. However, there is recognition that recovering the increased revenue from the introduction of a minimum price policy would be extremely difficult and logistically unfeasible. For example, an alternative to raising increased revenue that could be direct to initiatives to support the direct and indirect harms of excessive alcohol consumption would be to enforce a levy on the alcohol industry.. However, a levy would likely be met with stiff resistance and raise the possibility of the industry passing the increased on to the customer resulting in a de facto rise in the prices of alcoholic beverages.

Strengths, limitations and implications

The present study had a number of strengths. One of the key strengths is that our sampling strategy enabled us to gain insight into the attitudes and beliefs of members of the general WA public toward the policy and their expected reactions. This is important given the likely diversity of views that may have been expressed depending on typical patterns of alcohol consumption among differing groups in WA. This diversity notwithstanding, we found considerable consistency in the themes and views expressed across the focus groups. An additional strength was the adoption of a qualitative method and analytic approach that enabled a rich and detailed overview of participants' beliefs and attitudes toward minimum pricing. It also enabled us to discuss basic knowledge of, and subsequent reactions to, the policy by progressively structuring the interview schedule and introducing the definition of the policy and how it would affect alcohol prices if it were introduced. It is important to note that the levels of hazardous drinking reported by participants in the current sample (23%) are relatively close to those reported in the most recent data on the WA population (15.7%; AIHW, 2014). Although views expressed by participants in qualitative research should not necessarily be considered generalizable at a population level, it provides some context for the current research to illustrate that the views expressed are from a group whose drinking profile from the perspective of hazardous drinking is close to that of the wider WA population. We should also acknowledge that given that the research was conducted with groups of participants from WA alone, they should be interpreted in that context and cannot be considered representative of the general Australian population.

The research has a number of important implications for future research and practice. We expect the current data to inform future research examining beliefs and attitudes toward minimum pricing in a larger population, perhaps using quantitative methods arising from the themes emerging from the current research. We anticipate that developing a survey based on the beliefs and attitudes expressed in the current sample would enable us to test whether these beliefs were endorsed in a broader spectrum of the population and whether they were invariant across key population-level demographic and social characteristics such as age, gender, socioeconomic status, and typical alcohol consumption. We would expect such research to provide further converging evidence that corroborates the attitudes and beliefs expressed in the current research. These data would also provide some important avenues for future research such as testing whether the effects of persuasive campaigns to change attitudes and beliefs toward minimum pricing and promote greater acceptability in the population would be effective. Such research may provide evidence that interventions highlighting the benefits and playing down the negative effects of minimum pricing in advance of its introduction would increase its acceptability. The findings will assist in demonstrating to governments that introducing the policy alongside persuasive messages will assist in preventing opposition to its introduction. Of course, we recognise that it is not always necessary for a public health policy to be widely 'popular' for it to be effective and to ultimately change attitudes toward the issue once

introduced. The demonstrated effectiveness of a policy after its implementation can change attitudes once its effects are noticed. Nevertheless, public support may help smooth the way for legislation on public health issues.

The current research also has important implications for current practice. Although the results are preliminary and are the first of their kind in Australia, they indicate that people hold generally negative views toward the policy but that this may be because they do not fully understand the public health effects of the policy on alcohol consumption at the population level and may be more amenable to its introduction if at least part of the revenue was selectively identified for funding alcohol reduction initiatives. This is consistent with other public health policy initiatives such as tobacco taxation. Market research demonstrated that public support for increased tobacco taxation increased markedly when the case for hypothecation was made with the revenue going toward worthy causes (Winstanley *et al.*, 2007). Nevertheless, there are considerable logistical challenges in funding such initiatives from government revenue recovered from minimum pricing and is likely to be unfeasible. Comprehensive information and education public health campaigns may, therefore, assist in paving the way for the introduction of the policy and make it more acceptable by allaying fears of its effects on individuals' pockets and highlighting the population-level effects on alcohol consumption.

CONCLUSIONS

The aim of the current study was to investigate beliefs and attitudes toward a minimum price per standard drink policy, and what conditions would make the policy more acceptable and effective among members of representative groups from the WA general public. Findings indicated that participants expressed negative attitudes toward minimum pricing stemming largely from the perceived adverse consequences arising from its introduction, including increased drug use and crime, and the view that it would not be effective in reducing alcohol consumption. Participants also expressed the view that they would be more likely to support the policy if the additional revenue generated from the policy was used to reduce costs associated with excessive alcohol drinking. However, participants did not appreciate the logistical challenges associated with revenue recovery. Researchers should aim to replicate current findings in a broader context and the effects of persuasive communications in changing attitudes toward minimum pricing. Current findings suggest that policymakers interested in introducing a minimum pricing policy may increase acceptability and reduce resistance to its introduction by the general public by implementing information and education campaigns to highlight the advantages and allay concerns regarding its effects.

REFERENCES

- AIHW (2011) *2010 National Drug Strategy Household Survey report*. Australian Institute of Health and Welfare, Canberra.
- AIHW (2014) *National Drug Strategy Survey 2013*. Australian Institute of Health and Welfare, Canberra, Australia.
- Bader, P., Boisclair, D. and Ferrence, R. (2011) Effects of Tobacco Taxation and Pricing on Smoking Behavior in High Risk Populations: A Knowledge Synthesis. *International Journal of Environmental Research and Public Health*, **8**, 4118.
- Booth, A., Meier, P., Stockwell, T., Sutton, A., Wilkinson, A. and Wong, E. R. (2008) *Independent review of the effects of alcohol pricing and promotion: Part A. Systematic Reviews*. ScHARR University of Sheffield and Department of Health, Sheffield, UK.
- Braun, V. and Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology*, **3**, 77-101.
- Brennan, A., Purshouse, R., Taylor, K. and Rachid, R. (2008) *Independent review of alcohol pricing and promotion: Part B. Modelling the potential impact of pricing and promotion policies for alcohol in England*. ScHARR University of Sheffield and Department of Health, Sheffield, UK.
- Britton, A. and Marmot, M. (2004) Different measures of alcohol consumption and risk of coronary heart disease and all-cause mortality: 11-year follow-up of the Whitehall II Cohort Study. *Addiction*, **99**, 109-116.
- Chalmers, J., Carragher, N., Davoren, S. and O'Brien, P. (2013) Real or perceived impediments to minimum pricing of alcohol in Australia: Public opinion, the industry and the law. *International Journal of Drug Policy*, **24**, 517-523.
- Commonwealth of Australia (2010) E5. Alcohol taxation. In Commonwealth of Australia (ed), *Australia's Future Tax System: Final Report*. Australian Government, Barton, ACT.
- Hodgson, R. J., Alwyn, T., John, B., Thom, B. and Smith, A. (2002) The fast alcohol screening test. *Alcohol and Alcoholism*, **37**, 61-66.
- Keatley, D. A., Carragher, N., Chikritzhs, T., Daube, M., Hardcastle, S. J. and Hagger, M. S. (2015) Study Protocol: Minimum pricing policy for alcohol: What does the Western Australian public think? *JMIR Research Protocols*, **4**, e127.
- Lonsdale, A. J., Hardcastle, S. J. and Hagger, M. S. (2012) A minimum price per unit of alcohol: A focus group study to investigate public opinion concerning UK government proposals to introduce of new price controls to curb alcohol consumption. *BMC Public Health*, **12**, 1023.
- Mäkelä, P. (2014) Commentary on Ally et al. (2014): Increasing the price of cheap alcohol would contribute to decreasing health inequalities. *Addiction*, **109**, 2003-2004.
- Miller, P. and Kypri, K. (2009) Why we will not accept funding from Drinkwise. *Drug and Alcohol Review*, **28**, 324-326.
- Miller, P., Diment, C. and Zinkiewicz, L. (2012) *The role of alcohol in crime and disorder*. Australian Drug Foundation, Melbourne, Australia.
- Miller, P. G., de Groot, F., McKenzie, S. and Droste, N. (2011) Vested interests in addiction research and policy. Alcohol industry use of social aspect public relations organizations against preventative health measures. *Addiction*, **106**, 1560-1567.
- Park, C. L. and Levenson, M. R. (2002) Drinking to cope among college students: Prevalence, problems and coping processes. *Journal of Studies on Alcohol and Drugs*, **63**, 486-497.
- Park, H. S., Klein, K. A., Smith, S. and Martell, D. (2009) Separating subjective norms, university descriptive and injunctive norms, and US descriptive and injunctive norms for drinking behavior intentions. *Health Communication*, **24**, 746-751.
- Purshouse, R. C., Meier, P. S., Brennan, A., Taylor, K. B. and Rafia, R. (2011) Estimated effect of alcohol pricing policies on health and health economic outcomes in England: an epidemiological model. *Lancet*, **375**, 1355-1364.
- Sharma, A., Vandenberg, B. and Hollingsworth, B. (2014) Minimum pricing of alcohol versus volumetric taxation: Which policy will reduce heavy consumption without adversely affecting light and moderate consumers? *PLoS ONE*, **9**, e80936.
- Sparkes, A. C. and Smith, B. (2014) *Qualitative research methods in sport, exercise and health*. Routledge, London.
- Stockwell, T., Auld, M. C., Zhao, J. and Martin, G. (2012a) Does minimum pricing reduce alcohol consumption? The experience of a Canadian province. *Addiction*, **107**, 912-920.
- Stockwell, T., Zhao, J., Giesbrecht, N., Macdonald, S., Thomas, G. and Wettlaufer, A. (2012b) The raising of minimum alcohol prices in Saskatchewan, Canada: impacts on consumption and implications for public health. *American Journal of Public Health*, **102**, e103-e110.
- Stockwell, T., Zhao, J., Martin, G., Macdonald, S., Vallance, K., Treno, A., Ponicki, W., Tu, A. and Buxton, J. (2013) Minimum alcohol prices and outlet densities in British Columbia, Canada: Estimated impacts on alcohol-attributable hospital admissions. *American Journal of Public Health*, **103**, 2014-2020.
- Stockwell, T., Zhao, J., Marzell, M., Gruenewald, P. J., Macdonald, S., Ponicki, W. R. and Martin, G. (2015) Relationships between minimum alcohol pricing and crime during the partial privatization of a Canadian government alcohol monopoly. *Journal of Studies on Alcohol and Drugs*, **76**, 628-634.
- Tysen, R., Vaglum, P., Aasland, O. G., Gronvold, N. T. and Ekeberg, O. (1998) Use of alcohol to cope with tension, and its relation to gender, years in medical school and hazardous drinking: a study of two nation-wide Norwegian samples of medical students. *Addiction*, **93**, 1341-1349.
- Wagenaar, A. C., Salois, M. J. and Komro, K. A. (2009) Effects of beverage alcohol price and tax levels on drinking: a meta-analysis of 1003 estimates from 112 studies. *Addiction*, **104**, 179-190.
- Winstanley, M., Gray, N., Reading, D., Hill, D., Woodward, S., Cotter, T., Cain, J., White, D. and Worland, P. (2007) *The Victorian Tobacco Act 1987 - the untold story*. VicHealth and Cancer Council Victoria, Carlton, Victoria, Australia.
- Woodhouse, J. and Ward, P. (2012) A minimum price for alcohol? *House of Commons Standard Note SN/HA/5021*. www.parliament.uk/briefing-papers/SN05021.pdf.
- World Health Organization (2014) *Global status report on alcohol and health 2014*. WHO Press, Geneva, Switzerland.