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Brief Report

C. Gilligan *et al.*

Alcohol initiation and acceptability of supply

Acceptability of alcohol supply to children – associations with adults' own age of initiation and social norms

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Issue addressed: The aim of this study was to investigate predictors of adults' perceived acceptability of introducing alcohol to children less than 18 years of age.

Methods: An online survey. Logistic regression analyses were used to examine the association between demographic characteristics, alcohol consumption, and social norms and adults' own age of initiation.

Results: Alcohol consumption, age of initiation and perception of the acceptability of drunkenness were all correlated with the acceptability of introducing children to alcohol. The strongest predictor was adults' own age of initiation.

Conclusions: Adults who began drinking before the age of 18, and those who drink more heavily, are more likely to perceive the provision of alcohol to children as acceptable.

So what? Policy and research should continue to focus on and monitor efforts to delay adolescent alcohol initiation and reduce consumption levels among adults. A shift in awareness and perceptions about alcohol use among adults has the potential to influence initiation and heavy drinking among adolescents.

Key words: parents, adolescents, drinking

[Brief summary]

The age at which adults started drinking alcohol is strongly associated with the age at which they believe it is acceptable to introduce children to alcohol at home. This phenomenon has the potential to perpetuate a cycle of early initiation and risk of alcohol-related problems.

Introduction

Despite a legal purchase age of 18 years and National Health and Medical Research Council (NHMRC) recommendations against consumption before age 15,¹ 62% of 13-year-olds have at least tried alcohol.² By age 17, 59% of young people report drinking in the last month and 37% in the last week. Eighteen per cent report risky drinking (>4 standard drinks) in the last week.² Predictors of youth risky drinking include social, peer and family factors, including early initiation to drinking,^{3,4} parents' drinking behaviours,^{5,6} community socioeconomic advantage⁷ and household income.⁸ Australians who had their first drink by age 13 are almost twice as likely to engage in very high risk drinking when aged 16 to 24.⁹

Parents are one of the most common sources of alcohol for underage drinkers.^{2,9} Most parents who supply alcohol do so with the intention of introducing their children to alcohol safely.¹⁰ However, the impact of parental supply is unclear and depends on age group and amount of alcohol supplied (sips¹¹ versus full serves).¹² While 70% of Australians believe the practice is harmful, 13% have knowingly provided alcohol to a person aged under 18, with 45% of these respondents supplying to their own son or daughter.¹³

Social norms are the collectively understood standards that guide social behaviours.¹⁴ Two-thirds (67%) of Australians believe that it is okay for someone to get drunk, including 28% who believe that it is okay to get drunk at least once a month.¹⁵ Moreover, 45% of Australians over the age of 14 approve of the regular use of alcohol, but 43% regard excessive alcohol use as the most concerning form of drug use in the general community.¹⁶ Given the relationship between parental supply and adolescent initiation to alcohol, and the acceptance of alcohol use among Australian adults and adolescents, it is pertinent to explore how the combination of these factors relates to early initiation to alcohol.

Socialisation to alcohol and age of initiation to drinking are influenced by young peoples' perceptions of social norms for both adults and their peers.^{17,18} However, assessments of social norms in population surveys to date have not included items relating to the acceptability of early initiation to drinking, or the perceived norms regarding age of initiation.

We investigated the predictors of perceived acceptability of parents introducing children to alcohol before the age of 18. We hypothesised that adults' own alcohol consumption, their age of initiation and social norms about alcohol consumption would be associated with the perceived acceptability of introducing alcohol to children at home before age 18.

Methods

In 2013, Cancer Council New South Wales conducted an online survey measuring adults' beliefs, intentions and attitudes related to cancer prevention, including questions about alcohol consumption

which are reported here. Further details of recruitment and survey completion rates are reported elsewhere.¹⁹

Measures

Demographic measures included gender, age, residential location, co-resident children, level of education and annual household income. Alcohol consumption was measured using AUDIT-C²⁰ and a standard drinks image.¹⁶ AUDIT-C score ranges from 0 (complete abstinence) to 12 (heavy daily drinking).

Age of initiation to alcohol was measured through responses to, 'About what age were you when you had your first standard-sized drink of alcohol?' with options of an age in single years or 'I have never had a full serve of alcohol'. Responses were coded as '<14 years', '15–16 years', '17 years', '≥18 years' or 'never had a full serve of alcohol'.

A personal norm of alcohol use was measured using a five-point Likert scale in response to, 'It is acceptable for adults to get drunk, as long as they are not putting other people in danger'. Responses ranged from 'strongly disagree' (1) to 'strongly agree' (5).

The dependent variable was based on responses to, 'At what age do you think it is acceptable for parents to introduce their children to small serves of alcohol (more than a sip) at home?' Response options were presented in age brackets from 0 to ≥ 18 years and were recoded as ≤ 17 or ≥ 18 years/never.

These items were devised and pilot tested for the survey.

Data analysis

Descriptive statistics and bivariate logistic regressions (models 1–9) were used to examine the relationship between predictor and outcome variables. All variables were entered into a main effects model (10) and were tested for interaction by adding individual pairwise interaction terms. Variables that were significantly ($p \leq 0.05$) associated with the outcome variable in model 10 were retained for the predicted probabilities for each category of the variables in model 11 (Table 1).

Results

The questions relating to alcohol were completed by 2351 adults. Table 1 shows demographic characteristics as well as odds ratios and 95% confidence intervals for each of the logistic regression analyses. All variables except sex and location were significantly correlated with the outcome variable in bivariate models (1–9).

In the first multivariate model (10), all variables apart from sex, age, location and co-resident children remained significantly associated in the same direction as the bivariate models. In the final model, alcohol consumption, initiation and social norms had the strongest associations with the

outcome variable. Each unit rise in AUDIT-C score was reflected in an odds increase of 8%. For those who had their first standard drink of alcohol at ≤ 14 years, the odds of nominating an age < 18 were 4 times those of respondents whose first drink was ≥ 18 , and 5 times those of respondents who reported never having had a standard drink of alcohol. Odds for those who strongly agreed with the acceptability of drunkenness were 2.5 times those of respondents who strongly disagreed. The outcome variable was also associated with education and household income (model 11, Table 1).

Predicted probabilities for model 11 indicate the scale of difference between the variable categories in selecting an age < 18 years. Seventy-one per cent of those whose own first drink was at ≤ 14 believed parental provision of small serves of alcohol was acceptable at < 18 , falling to 32.6% for those who had never had a full serve of alcohol. Of those who 'strongly disagreed' that it is acceptable to get drunk, 27.6% nominated an age < 18 at which parental provision of alcohol was acceptable, rising to 48.7% for those who 'strongly agreed'. Approximately 1/3 of abstainers from alcohol (AUDIT-C score of 0) believed it was acceptable for parents to introduce their children to small serves of alcohol at < 18 years, rising to 55.7% for the heaviest drinkers on the AUDIT-C scale. For different levels of education and household income, between 29.1% and 45.4% believed an age of < 18 was acceptable (Table 1).

Age at own first standard drink was strongly associated with selecting an age < 18 years as appropriate for introducing children to alcohol. Fig. 1 shows the bivariate relationship between respondents' own age at first drink and what they consider an acceptable age for parents to introduce their children to small serves of alcohol at home. The association is strong, with the peak value for each age category of the latter corresponding to the matching age category of the former. For example, of those who believe introduction to alcohol at age ≤ 14 is acceptable, the majority had their first drink at ≤ 14 , and so on (Fig. 1).

Discussion

A younger age of initiation to alcohol emerged as the variable most strongly associated with the perception that introducing children to alcohol under 18 is acceptable. This finding extends previous research highlighting parents' own drinking practices and attitudes towards alcohol as predictors of their alcohol-related parenting approaches²¹ and their children's drinking patterns.^{5,6} With previous research pointing to the association between early age of initiation and later risky drinking,^{9,22} as well as evidence for the intergenerational continuity of parenting behaviours such as monitoring and discipline,²³ these findings reinforce the importance of interventions and policies that discourage early alcohol initiation.

This study has limitations. As reported elsewhere,¹⁹ the survey was only conducted with adults in New South Wales, using a sample derived from a market research panel who had self-selected to be approached for such purposes. However, use of quotas ensured that the sample remained

representative of the broader population on key demographic variables. Importantly, it has been noted that while response bias may lead to an underestimation of risk behaviours, it is less likely to bias opinion-based survey results.²⁴

We were unable to identify the parental status of participants and were limited to an assessment of those who cohabitated with children. Opinions about the acceptability of parents introducing children to alcohol may vary by parental status and by number of children; this potential variation was not captured in the surrogate variable used.

Conclusions

This study has identified as potential targets for intervention the age of alcohol initiation and social norms relating to the acceptability of introducing children to alcohol.

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Fig. 1. Association between respondents' age at first standard-sized drink of alcohol and age at which they think it is acceptable for parents to introduce their children to small serves of alcohol (more than a sip) at home, $n = 2351$.

Table 1. Logistic regressions and predicted probabilities for all other survey categories when the question 'At what age (if at all) do you think it is acceptable for parents to introduce their children to small serves of alcohol (more than a sip) at home?' has a response of '≥17 years'

'≥18 years', 'Not acceptable at any age' and 'Don't know' cases are excluded; $n = 2351$; *significant at the 5% level; **significant at the 1% level; ***significant at the 0.1% level

		Models 1–9:		Model 10: Multivariate 1		Model 11: Multivariate 2		Model 11: Predicted probabilities ^A (%)		<i>n</i>
Characteristic		Odds ratio	95% CI	Odds ratio	95% CI	Odds ratio	95% CI			
Sex	Male	1.00		1.00						1165
	Female	0.97	(0.82–	1.10	(0.91–1.34)					1186
Age		0.98***	(0.98–	1.00	(0.99–1.00)					2351
Location	Metro	1.00		1.00						1483
	Other	1.03	(0.87–	1.06	(0.87–1.29)					868
Co-resident children	None	1.00		1.00						1550
	Oldest co-resident child 0–12 years	1.20	(0.98–	0.92	(0.72–1.17)					475
	Oldest co-resident child 13–17 years	1.29*	(1.01–	1.11	(0.84–1.45)					326
Highest level of education	Year 10 or below	1.00		1.00		1.00			29.1	340
	Year 11 or 12	2.10***	(1.59–	1.99***	(1.46–2.71)	2.03***	(1.50–2.75)		45.4	386
	Diploma/certificate	1.59***	(1.25–	1.59***	(1.22–2.07)	1.59***	(1.22–2.06)		39.5	858
	University degree	1.42*	(1.08–	1.59**	(1.16–2.18)	1.60**	(1.18–2.17)		39.6	767
Household income	<\$30 000	1.00		1.00		1.00			29.1	341
	\$30 000–\$55 000	1.23	(0.93–	1.16	(0.86–1.56)	1.17	(0.87–1.58)		32.5	455
	\$55 000–\$85 000	1.96***	(1.49–	1.57**	(1.15–2.13)	1.59**	(1.18–2.15)		39.5	463
	\$85 000+	1.78***	(1.38–	1.26	(0.94–1.71)	1.27	(0.95–1.69)		34.2	705
	Don't know	1.46	(0.93–	1.43	(0.84–2.43)	1.56	(0.94–2.62)		39.1	81
	Prefer not to say	1.61**	(1.18–	1.69**	(1.20–2.39)	1.76***	(1.26–2.47)		42.0	306
AUDIT-C score	Each unit of increase	1.16***	(1.13–1.19)	1.08***	(1.05–1.12)	1.08***	(1.04–1.11)	Min.: 0	34.3	2351
								Max.: 12	55.7	
Age at first standard-sized drink of alcohol	14 years and under	1.00		1.00		1.00			71.4	219
	15–16 years	0.84	(0.60–	0.86	(0.61–1.22)	0.84	(0.60–1.19)		67.8	575
	17 years	0.70	(0.49–	0.76	(0.52–1.11)	0.75	(0.51–1.10)		65.2	316
	18 years and over	0.22***	(0.16–	0.27***	(0.19–0.38)	0.26***	(0.19–0.36)		39.5	1087
	Never	0.12***	(0.08–	0.20***	(0.12–0.33)	0.19***	(0.12–0.33)		32.6	154
'It is acceptable for adults to get drunk, as long as they are not putting other people in danger.'	Strongly disagree	1.00		1.00		1.00			27.6	553
	Disagree	2.03***	(1.61–	1.71***	(1.33–2.21)	1.71***	(1.33–2.20)		39.5	687
	Neither agree nor disagree	3.01***	(2.33–	2.04***	(1.54–2.70)	2.09***	(1.59–2.75)		44.3	512
	Agree	3.97***	(3.06–	2.18***	(1.61–2.94)	2.29***	(1.72–3.05)		46.6	485
	Strongly agree	4.22***	(2.70–	2.44***	(1.49–4.01)	2.49***	(1.53–4.07)		48.7	98
	Don't know	1.87	(0.70–	1.65	(0.58–4.72)	1.66	(0.58–4.70)		38.7	16

^ABased on median characteristics of the sample: Highest level of education – diploma/certificate; Household income – \$55 000–\$84 999; AUDIT-C score – 3; Age at first standard-sized drink of alcohol – 18+ years; It is acceptable for adults to get drunk, as long as they are not putting other people in danger – Disagree.