

Designer drinks and drunkenness amongst a sample of Scottish schoolchildren

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There has been growing concern within the media and elsewhere over the recent development of alcoholic drinks which in aspects of their marketing, and in some cases their sweet taste, may particularly appeal to young people. These drinks include such white ciders as Ice Dragon, TNT, White Lightening, and Spectra White (many of which contain about 8% alcohol by volume), as well as such fruit wines as Maddog 20/20, Flavours for Ravers, and Fruits Unlimited (many of which contain about 13% alcohol by volume). We provide information on the consumption of these drinks in a representative sample of schoolchildren in Dundee, Scotland. These data were collected as part of an ongoing survey of young people's routes into illicit drug use.¹

Subjects, methods, and results

In November 1994, a 1 in 10 sample of all comprehensive school children in compulsory school years S1 to S4 (age 12 to 15) in Dundee was surveyed (n = 758). The five schools participating in this research were selected in consultation with the local education authority as being broadly representative of Dundee's demography. Two mixed ability classes were randomly chosen from each school year, and the researchers administered the questionnaire under examination conditions, with the teacher absent. All of the schoolchildren present on the day of the researchers' visit completed the questionnaire, although no information is available on absentees. Informed consent was obtained from the young people, parents, and teachers. Using the Carstairs and Morris DEPCAT system for 1991 census statistics,² we categorised 51.4% of the young people as living within a deprived area.

Overall, 66.1% of the schoolchildren reported having consumed a whole alcoholic drink. By first year of secondary school almost one in five (18.9%) of the schoolchildren reported having been drunk on at least one occasion. By age 14 more than half of the schoolchildren (52.6%) reported having been drunk.

Table 1 shows the range and frequency of alcoholic drinks consumed as well as the levels of self reported

drunkenness. In all school years, consumers of white ciders or fruit wines were significantly more likely to have been drunk (S1, $\chi^2 = 8.06$, $df = 1$, $P < 0.005$; S2, $\chi^2 = 10.67$, $df = 1$, $P < 0.001$; S3, $\chi^2 = 25.81$, $df = 1$, $P < 0.001$; and S4, $\chi^2 = 11.78$, $df = 1$, $P < 0.001$).

The peak age for consumers of the white ciders was 14, whereas the proportions of young people consuming fruit wines increased steadily across all of the age ranges. Mann-Whitney U tests were conducted in each school year to compare the frequency of alcohol use between those who most recently consumed a white cider or fruit wine with those who most recently had any of the other drinks listed. In all years, consumers of the new drinks were found to be drinking alcohol more often, but the difference reached statistical significance only at age 14 (Mann-Whitney U test, $z = 2.97$, $P < 0.05$). With increasing age, the mean number of units consumed for the new drinks converged with the mean units of old drinks (S1, 8.0 units for new drinks v 4.9 units for other drinks; S2, 9.1 v 4.6; S3, 10.6 v 7.0; S4, 13.0 v 11.5). When units of alcohol consumed most recently were compared, it was expected that, given the high alcoholic content of the new drinks, those who most recently drank any of the new drinks would have consumed more alcohol than those reporting consuming any of the other drinks listed. This was found in S1, S2, and S3 (S1, $z = 4.00$, $P < 0.001$; S2, $z = 5.04$, $P < 0.001$; S3, $z = 3.85$, $P < 0.001$); in S4 the result was not significant ($z = 1.00$, $P = 0.32$).

Comment

The level of self reported drunkenness among young people identified in this study must give cause for concern. Clearly, such drunkenness is not solely related to the new drinks, but the fact that relatively strong alcoholic drinks are now being marketed and being widely consumed by young people is a worrying development, given what we already know about the health consequences of such alcohol consumption.^{3,4} As sections of the alcohol industry are now marketing alcoholic lemonades, this development is likely to continue.

We acknowledge the cooperation provided by all of the schools participating in this research. For reasons of confidentiality we are unable to identify those schools by name.

Funding: The Centre For Drug Misuse Research is funded by the Scottish Office Department of Health; the views expressed in this report do not necessarily reflect those of the funding body.

Conflict of interest: None.

1 Barnard M, Forsyth A, McKeganey N. Levels of drug use among a sample of Scottish schoolchildren. *Drugs: Education, Prevention and Policy* 1996; 3:81-9.

2 Carstairs V, Morris R. *Deprivation and health in Scotland*. Aberdeen: Aberdeen University Press, 1991.

3 Health Education Authority. *Young adults' health and lifestyles: alcohol*. London: Health Education Authority, 1995.

4 Joint Working Group, Royal College of Physicians and British Paediatric Association. *Alcohol and the young*. London: Royal College of Physicians, 1995.

(Accepted 24 May 1996)

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BMJ 1996;313:401

Table 1—Alcohol consumption in 12-15 year olds at comprehensive schools in Dundee. Of the 758 schoolchildren surveyed, 257 did not drink alcohol

Type of alcohol most recently consumed	No	No (%) ever been drunk	Mean days drinking in past year	Mean units consumed on most recent occasion
White cider	132	115 (87)	27.9	10.2
Ordinary cider	29	16 (55)	28.9	5.2
Premium lager	80	46 (57)	31.3	12.4
Ordinary beer	82	35 (42)	14.3	6.8
Fruit wine	43	37 (86)	26.8	12.7
Ordinary wine	60	7 (11)	8.9	1.8
Vodka	52	42 (80)	31.5	9.9
Other spirits	14	9 (64)	25.6	11.9
Other	19	10 (52)	13.1	3.6
Don't know	70	24 (34)	15.9	—
All new drinks (white cider plus fruit wine)	170	147 (86)	28.2	10.6
Total drinkers	501	328 (65)	22.3	8.4