

Children and young people's exposure to alcohol advertising in Australia's major televised sports

Sherilene Carr ¹, Kerry S. O'Brien ^{1*}, Jason Ferris ², Robin Room ³, Michael Livingston ⁴, Brian Vandenberg ⁵, Dermot Lynott ⁶.

Monash University, Australia¹; Institute for Social Science Research, University of Queensland, Australia²; Melbourne School of Population and Global Health, University of Melbourne; Centre for Alcohol Policy Research, Turning Point, Fitzroy, Victoria, Australia³; Centre, UNSW, Australia⁴; Cancer Council Australia⁵; Lancaster University ⁶, UK.

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* Author to whom correspondence should be addressed at: Monash University, VIC, Australia.

E-mail: kerrykez@gmail.com

Introduction

Children's exposure to alcohol advertising is associated with earlier initiation of drinking, and greater consumption in existing drinkers [1, 2]. Restriction of alcohol advertising and sponsorship via effective independent regulation has been recommended as a population-level strategy for reducing youth drinking [3]. Television advertising regulations in Australia stipulate that alcohol advertising should not occur at times when large numbers of children are viewing, with daytime considered peak viewing times [4-6]. However, one section of the regulation still allows, for unknown reasons, alcohol advertising to be present during children's peak viewing times if it is in sport TV [5].

A recent analysis of the extent of alcohol advertising in Australian sport and non-sport TV for 2012 found there were a greater mean number of alcohol advertisements in sport TV compared to non-sport TV [7]. The majority of alcohol advertising occurred in the three leading televised sport codes, Australian Football League (AFL), Cricket and National Rugby League (NRL). It was also found that large numbers of children (0-17 years) and young people (18-29 years) were watching TV during the daytime (6am-8.29pm) and night time TV (8.30pm-11.59pm), and therefore may have been exposed to large amounts of alcohol advertising. However, the study could only estimate potential for exposure, and could not establish whether children and young people were watching a specific program that was known to contain alcohol advertising. More accurate estimates of exposure to alcohol advertising in sport TV are needed to inform alcohol policy debates, and there is no research examining children's exposure to alcohol advertising while watching major televised sports in Australia. An examination of AFL, Cricket and NRL is pertinent because most other sporting codes (e.g., Netball Australia, Football Federation of Australia) refused alcohol advertising and sponsorship [ANPHA REF BRIAN] from 2012.

We examine the extent of alcohol advertising in the three major Australian televised sports (AFL, Cricket and NRL), known to contain alcohol advertising. We also estimate exposure of children and young people to alcohol advertising while viewing these sports during the daytime and

night time. The research addresses a gap in the literature and provides evidence for debates on the effectiveness of current alcohol advertising regulations aimed at protecting children.

Method

Information on all alcohol advertising in sport and non-sport TV in 2012 on the 11 commercial free-to-air TV channels for the five major metropolitan centres of Australia (Sydney, Melbourne, Brisbane, Adelaide, and Perth; 61% of the total Australian population) was purchased from Ebiquity, an international media monitoring company. The data included the time/date, sport program in which the advertisement was placed and full content (i.e., video/sound/image). We did not examine subscription (pay-per-view) TV because it contains little commercial advertising and has low audience numbers relative to free-to-air TV.

We also purchased TV audience viewing data (rounded to nearest 1000) for young people (ages 0-4, 5-13, 14-17, 18-29 years) for all AFL, Cricket and NRL games/matches televised in the five major metropolitan centres from Australian Television Audience Measurement (OzTAM), the official source of television audience measurement in Australia. The audience viewing data identified whether individuals were watching a specific AFL, Cricket or NRL TV program at a particular time of day. By cross matching the two data sources we were able to identify audience numbers for AFL, Cricket, and NRL programs known to contain one or more alcohol advertisement and thus calculate exposure to alcohol advertising, for the respective age groups during the day and night. We did not purchase target audience rating points as the cost was prohibitive.

Analysis

We report the number of AFL, Cricket, and NRL programs containing alcohol advertising, mean number of alcohol advertisements per sport program, and audience numbers in the daytime (6am- 8.29pm) and night time (8.30-midnight) for each major metropolitan centre. To allow for comparison of audience between age categories with different theoretical populations, we calculated

audience proportions relative to young adults (18-29years), after adjusting for an estimate of the total population in each age category in metropolitan centres.

Exposure to alcohol advertising was calculated by multiplying the audience in each age category for AFL, Cricket, or NRL programs, by the number of times an alcohol advertisement was shown. For example, if there were 30,000 14-17 year olds watching an AFL game containing four alcohol advertisements, then the exposure score would be 120,000. Because age categories vary in number of years within them (0-4=5 years vs. 5-13=9 years), we adjust for the number of years within each age category when calculating exposures. For example, for 14-17 year olds we divide 120,000 by four (number of years in age category), to yield an exposure score of 30,000 for each year in that age category. This adjustment allows for comparison of age categories irrespective of number of years in them. Thus, we report exposure to alcohol advertising in televised AFL, Cricket, and NRL programs for each year in the respective age categories (0-4, 5-13, 14-17, 18-29 years), for metropolitan centres in the daytime and night time.

Results

There were 3544 alcohol advertisements in televised AFL (1942), Cricket (941), and NRL (661), representing 60% of all alcohol advertising in sport TV, and 15% of all categorized alcohol advertisements (23,936) on Australian TV in 2012. The alcohol advertisements were contained within 751 AFL, Cricket, and NRL games and matches televised in the five major metropolitan centres.

As can be seen in Table 1, AFL programs containing alcohol advertising were predominantly during the daytime, with the majority in Adelaide, Melbourne, and Perth. Overall AFL carried considerably more alcohol advertising than the other sports. There was little difference between AFL and Cricket in mean number of alcohol adverts per program, but the NRL was slightly lower. The majority of alcohol advertising in NRL was during the daytime, and was greatest in Brisbane

and Sydney. The distribution of alcohol advertising in televised Cricket was similar across metropolitan centres, nearly all occurring during the daytime.

Most of the audience (85%) was watching AFL, NRL, and Cricket during the daytime (Table 2). The highest audience numbers were for AFL, combined audience numbers for all AFL approaching 16 million. Over seven million viewers were under 18 years of age, and over five million 13 years or younger. The total audience proportions (population adjusted) for the 0-4, 5-13, 14-17 age categories, approached those of 18-29 years (range .63 to .91). Overall, 0-17 year olds had 75% of the audience relative to 18-29 year olds audience.

Table 3 displays the alcohol advertising exposure occurring during AFL, Cricket, and NRL TV programs per each age year in the respective age categories. Children and adolescents exposure to alcohol advertising was greatest for daytime AFL viewing, particularly for those in Melbourne, Adelaide, and Perth. There were high levels of exposure in Cricket across all five metropolitan centres; however, the greatest exposure occurred in Cricket televised in Melbourne and Sydney.

Discussion

Sixty percent of the alcohol advertising in sport TV for 2012 was in the AFL, Cricket, and NRL. Most of this advertising was during the daytime when there were large numbers of children and young people watching. The analysis suggests that children and adolescents potential exposure to alcohol advertising was considerable, particularly for those viewing AFL during the daytime in Melbourne, Adelaide, and Perth, and for those viewing the NRL in the daytime in Brisbane and Sydney. In most centres, children's (0-17 years) exposure to alcohol advertising approached that of young adults (18-29 years). The results indicate that current alcohol advertising regulations do not achieve their stated intent, which is to protect children from exposure to alcohol advertising [5].

The findings are consistent with the pattern of exposure identified in previous research in Australia [8]; however, the present work is the first to examine children's exposure during sport TV programming. This is an important step because the study shows that the clause in Australian

advertising regulations allowing alcohol advertising during sport TV during the daytime exposes considerable numbers of children and adolescents to alcohol advertising. Considered alongside research showing that greater exposure to alcohol advertising in children is associated with earlier initiation and more harmful drinking, the present results suggest that viewing AFL, Cricket, and NRL may lead to more problematic drinking in young Australians.

A limitation of the study is that the data was restricted to the five major metropolitan regions of Australia. Although the majority of Australians live within these regions, the results may not generalise. Also, the advertising data reported here do not include advertising material placed on sport uniforms, stadia hoardings, or field signage, or in-game promotional comments regarding alcohol [9-11]. Thus, our results likely underestimate alcohol advertising exposure. Finally, we cannot be sure that viewers were paying attention when the alcohol advertisement was being played.

Sport TV programming attracts the largest viewing audiences, both nationally and internationally. In Australia, 30 of the top 50 TV programs in 2012 were sport, with a cumulative viewing audience of 100 million people [12]. The clause in advertising regulations that permits alcohol advertising in sport TV during the daytime needs to be removed. There is no rationale for why sport programming during the day is allowed to contain alcohol advertising, when it is acknowledged that alcohol advertising is inappropriate in non-sport programming.

References

1. Anderson P., de Bruijn A., Angus K., Gordon R., Hastings G. Impact of Alcohol Advertising and Media Exposure on Adolescent Alcohol Use: A Systematic Review of Longitudinal Studies. *Alcohol and Alcoholism* 2009; 44: 229-43.
2. Smith L., Foxcroft D. The effect of alcohol advertising, marketing and portrayal on drinking behaviour in young people: systematic review of prospective cohort studies. *BMC Public Health* 2009; 9: 9-51.
3. Casswell S., Thamarangsi T. Reducing harm from alcohol: call to action. *The Lancet* 2009; 373: 2247-57.
4. Australian Communications and Media Authority (ACMA). *Children's Viewing Patterns on Commercial, Free-to-air and Subscription Television*. Belconnen, ACT; 2007.
5. Australian Commonwealth Government. *Children's Television Standards*. Canberra, ACT; 2009.
6. Free TV Australia (2010) Commercial Television Industry Code of Practice.
7. O'Brien K., Carr S.M., Ferris J., Room R., Miller P.G., Livingston M., et al. Alcohol advertising in sport and non-sport TV in Australia during children's viewing times. *Under review*.
8. Fielder L., Donovan R.J., Ouschan R. Exposure of children and adolescents to alcohol advertising on Australian metropolitan free-to-air television. *Addiction* 2009; 104: 1157-65.
9. Lindsay S, Thomas S, Lewis S, Westberg K, Moodie R, Jones S. Eat, drink and gamble: marketing messages about 'risky' products in an Australian major sporting series. *BMC Public Health* 2013; 13: 719.
10. Adams J, Coleman J, White M. Alcohol marketing in televised international football: frequency analysis. *BMC Public Health*. 2014; 14: 473.
11. Graham A, Adams J: Alcohol marketing in televised English professional football: a frequency analysis. *Alcohol Alcohol* 2014; 49: 343-348.
12. Free TV Australia. *Television year-in-review*. 2012. Available at: http://www.thinktv.com.au/media/2012_Year_In_Review.pdf (accessed 5 February 2014).

Table 1. Number of televised AFL, Cricket, and NRL Cricket programs containing alcohol advertising during the daytime and night time for the five metropolitan regions. Mean number of alcohol advertisements per program are in parentheses ().

		AFL	Cricket	NRL	Total
Adelaide	Day	109 (4.2)	40 (4.2)	1 (1.0)	150
	Night	40 (2.2)	-	2 (2.0)	42
Brisbane	Day	6 (2.2)	29 (3.1)	38 (2.5)	73
	Night	-	3 (1.6)	18 (3.0)	21
Melbourne	Day	101 (4.7)	40 (4.0)	1 (4.0)	142
	Night	45 (2.3)	-	13 (2.1)	58
Perth	Day	96 (3.5)	34 (3.0)	1 (1.0)	131
	Night	24 (1.6)	-	6 (2.7)	30
Sydney	Day	6 (2.2)	38 (3.9)	40 (2.6)	84
	Night	-	1 (1.0)	19 (2.7)	20

Note. Counts include the same event broadcast in multiple cities (e.g. national broadcasts). Times when events with alcohol advertising were not present are represented by a dash -.