

# A Multi-Country Study of Harms to Children Because of Others' Drinking

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**ABSTRACT. Objective:** This study aims to ascertain and compare the prevalence and correlates of alcohol-related harms to children cross-nationally. **Method:** National and regional sample surveys of randomly selected households included 7,848 carers (4,223 women) from eight countries (Australia, Chile, Ireland, Lao People's Democratic Republic [PDR], Nigeria, Sri Lanka, Thailand, and Vietnam). Country response rates ranged from 35% to 99%. Face-to-face or telephone surveys asking about harm from others' drinking to children ages 0–17 years were conducted, including four specific harms: that because of others' drinking in the past year children had been (a) physically hurt, (b) verbally abused, (c) exposed to domestic violence, or (d) left unsupervised. **Results:** The

prevalence of alcohol-related harms to children varied from a low of 4% in Lao PDR to 14% in Vietnam. Alcohol-related harms to children were reported by a substantial minority of families in most countries, with only Lao PDR and Nigeria reporting significantly lower levels of harm. Alcohol-related harms to children were dispersed sociodemographically and were concentrated in families with heavy drinkers. **Conclusions:** Family-level drinking patterns were consistently identified as correlates of harm to children because of others' drinking, whereas sociodemographic factors showed few obvious correlations. (*J. Stud. Alcohol Drugs*, 78, 195–202, 2017)

**D**ESPITE WIDESPREAD ACKNOWLEDGMENT of the protection of children as a key concern (UNICEF, 1989), across the world an estimated 275 million children are victims of violence in their homes (Larraín & Bascuñán,

2009). A substantial literature in high-income countries has found that adult drinking is often implicated in child maltreatment, with proportions attributable to alcohol ranging upward from 16% (Laslett et al., 2013, 2015; Single et al., 2000). Parental and carer alcohol misuse has been linked to a range of negative child outcomes, including poor role modelling and subsequent next-generation problematic drinking (Wilks et al., 1989; Yu, 2003), inability to maintain family routines (Gruenert et al., 2004; Velleman & Templeton, 2007), increased incidence of injuries and childhood diseases (Holmila et al., 2013), and child abuse and neglect (Laslett et al., 2012b, 2013). This article reports on and compares indicators of harm to children from adults' drinking in eight countries: Australia, Ireland, Chile, Sri Lanka, Thailand, Vietnam, Lao People's Democratic Republic (PDR), and Nigeria. These harms include harms to children from the drinking of family members, other relatives, family friends,

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TABLE 1. Overview of country demographic and drinking pattern indicators

Country	Pop. in 2012 (millions) <sup>a</sup>	Percentage age 0–14 years <sup>a</sup>	GNI per capita, 2013 <sup>b</sup>	Education Index (0–1) <sup>c</sup>	Adult PCC 2010 <sup>d</sup>	Percentage of current drinkers <sup>e</sup>			Percentage of HED (monthly or more frequently) <sup>f</sup>		
						Male	Female	Total	Male	Female	Total
Australia	22.0	19	\$65,500	0.927	12	88	84	86	41	16	28
Ireland	4.7	21	\$44,450	0.887	12	80	77	78	58	37	47
Chile	17.4	23	\$15,270	0.746	10	81	66	73	47	25	36
Thailand	69.9	21	\$5,830	0.608	7	66	28	47	27	3	15
Sri Lanka	21.2	25	\$3,490	0.738	4	67	3	34	29	1	15
Nigeria	170.1	44	\$2,680	0.425	10	61	24	43	20	3	12
Vietnam	89.0	24	\$1,750	0.513	7	85	29	57	29	2	15
Lao PDR	6.5	38	\$1,490	0.436	7	86	64	75	24	9	17

Notes: Pop. = population; GNI = gross national income; PCC = per capita consumption; HED = heavy episodic drinkers; PDR = People's Democratic Republic. <sup>a</sup>Population figures taken from the 2012 World Population Data Sheet (Population Reference Bureau, 2012). <sup>b</sup>GNI per capita: converted to U.S. dollars using the World Bank Atlas method, divided by the midyear population in 2013 (World Bank, 2013). <sup>c</sup>United Nations Development Program (2013). The index, based on mean years and expected years of schooling, ranges from 0 to 1—in real terms for 2013, from 0.198 for Niger to 0.927 for Australia. <sup>d</sup>Adult PCC includes estimated unrecorded alcohol consumption, as well as the recorded alcohol consumption (Global Status Report on Alcohol and Health [WHO, 2014]). <sup>e</sup>Percentage of current drinkers from the harm-to-others cross-national survey for each country; percentages are weighted for all countries except Ireland. <sup>f</sup>Percentage of HED: five or more drinks on the one occasion monthly or more frequently—as recorded from the harm-to-others cross-national survey for each country; percentages are weighted for all countries except Ireland.

neighbors, coaches, and others; the majority of these harms in Australia were from parents and other family members (Laslett et al., 2012a). We investigated whether demographic factors and the presence of a heavy drinker in the family unit are correlated with the harms children experience because of others' drinking, and how these correlates vary between societies. Finally we discuss whether country-level factors may play a role in alcohol-related harms to children (ARHC).

Varying characteristics of different countries may be linked with greater alcohol-related and other harm to children. Table 1 orders countries by decreasing gross national income; Australia and Ireland are classified as high income; Chile and Thailand as upper-middle income; and Sri Lanka, Nigeria, Vietnam, and Lao PDR as lower-middle income countries. Higher family incomes may insulate children from alcohol-related problems of their parents, particularly in cases of neglect.

The drinking patterns of these countries also differ starkly. Australia and Ireland have relatively high per capita consumption (PCC) levels of alcohol (World Health Organization [WHO], 2014), with Nigeria and Chile having intermediate PCC. Using the survey data reported here, much larger percentages of current drinkers are evident in Australia, Ireland, Lao PDR, and Chile, and rates of female drinkers are particularly low in Sri Lanka and Nigeria. Men are more likely than women to be drinkers in all countries included, but the gender difference is less in the three highest income countries and in Lao PDR (WHO, 2014).

Previous research has found that problems from drinking may be greater in countries in which intoxication is tolerated, in which heavy occasional drinking is expected, rather than it being a part of everyday life as in countries with Mediterranean-style drinking patterns (Graham et al., 2008). Harm is likely to be affected by varying drinking comportment in a range of situations (and we suggest also probably for parents

around their children) in different cultures (MacAndrew & Edgerton, 1969). In addition, the context of drinking often matters: For instance, in some countries drinking may occur largely away from home. Where fewer women drink problematically, mothers and other carers may be better able to shield their children from the impact of their partner's drinking or that of other family members. Where problematic responses to children (e.g., physical discipline) are common in families and where few other strategies and supports exist to minimize stressful situations, heavy drinking is likely to precipitate and worsen child abuse and neglect.

Additional country-level factors, aside from population-level drinking patterns, are likely to play a role in determining both what defines child harm in different cultures and the association of this harm with the drinking of others. Definitions of what constitutes harm to children are, to some degree, subjective. Although comparable data on child abuse and neglect are scarce, experience of violent discipline is collected in surveys undertaken by the United Nations Children's Fund. These report that 30% of Thai and 79% of Nigerian respondents reported using corporal punishment in the home (UNICEF, 2014). In Chile, 75% of children between ages 12 and 17 years surveyed reported that they had experienced some kind of violence in their lifetime from parents (Larraín & Bascuñán, 2009).

Respondents in this study were asked to evaluate whether alcohol was involved in the harm their children experienced. In some instances, the link or line will be clear. For instance, in a scoping study undertaken in the initial phase of this project in India, an intoxicated father stabbed his 8-year-old son with a broken bottle when the son refused to give him money for alcohol on the son's way home from working (Laslett et al., 2016). Yet in other situations, for instance in relation to drinking heavily and ignoring a child's requests or emotional needs, lines are not clearly drawn. To minimize

cultural differences in thresholds of harm and attribution, concrete survey items (e.g., was a child physically hurt because of someone's drinking) have been analyzed here.

This study explored country differences in the prevalence of ARHC and examined a range of factors associated with these harms. More specifically, the research objectives of this study were to (a) measure how commonly different countries reported that their children had been affected by others' drinking, and (b) examine whether correlates of ARHC (gender, age, within-country income, and family composition) were similar in each country.

### Method

Ethical approval was obtained from WHO and each individual country site, and for the international archiving from the Eastern Health and La Trobe University Human Research Ethics Committees.

This research draws on harm-to-others surveys undertaken in 2008 in Australia (Laslett et al., 2010, 2011), in 2010 in Ireland (Hope, 2014), and in six countries implemented under joint WHO and ThaiHealth auspices between 2012 and 2014. The main features of the individual surveys have been reported for the WHO and Australian suite of studies (Callinan et al., 2016), and for Ireland (Hope, 2014) but are summarized here. In Australia, computer-assisted telephone interviewing was used, with random-digit dialing of landlines. In all other countries, face-to-face interviews were undertaken in area-probability household surveys (except for quota sampling in Ireland). Two countries undertook regional samples: Chile included seven cities and surrounds, and Nigeria sampled one northern and two southern states. Although fieldwork staff at all sites was trained rigorously, response rates are those reported by fieldwork directors and staff may not have consistently applied rules on randomization in the household.

In Nigeria, houses in which no one was home were not included in the denominator, which made the calculation of response rate impossible; in Ireland this was also the case as quota sampling was used. The Vietnam survey used a purposive regional sample. Furthermore, the Irish study included only a small number of questions on harm to others that were added to a drinking survey, and a number of explanatory variables were not provided in the same format. Its results are included as indicative only and need to be compared with those from other countries with caution. The samples from other countries were national and generally representative, although in Australia, Lao PDR, and Thailand males were underrepresented, whereas in Nigeria females were underrepresented in the raw data (adjusted for by weighting).

The response rates for the surveys are presented in Table 2 and range from 35% to 99%. The average age of the sample was younger in Chile (36.3 years) and older in Australia (47.7 years) and Thailand (46.1 years). The Irish sampling

quotas met age-, sex-, and location-based parameters, although the sample may be biased in other ways as repeated attempts to interview respondents were not made.

Only respondents living with children or who indicated that they had parental-like responsibility for children under age 18 (e.g., step-parents) were included in the subsamples drawn on here (designated respondent family units [RFUs]; Table 2). In Australia and Thailand the surveys assumed that the respondent had parental responsibility if children less than 18 years old were living in the household, and respondents were asked about additional children under 18 years outside the household they were responsible for as well. In Sri Lanka, Nigeria, Chile, Vietnam, and Lao PDR, responsibility was not presumed by living arrangements and respondents were asked if they had responsibility for children under 18 years in or outside the household just before the questions on child harms. None of the surveys included institutionalized children (living in either orphanages or juvenile justice institutions) or homeless families or children.

All of the surveys were translated from English into the main languages of each sampled population and back-translated and checked by the principal investigators in each country. An exception here was the Nigerian study, which used multilingual research assistants in each region to administer the survey in the multiple languages. Respondents from all countries were asked about specific harms their children had experienced because of others' drinking, including being physically hurt, verbally abused, exposed to domestic violence, and left unsupervised. A summary measure of ARHC comprised a positive response to one or more of these four items. As an indicator of severity, a second summary harm indicator (ARHC-2) comprised those with positive responses to two or more of these items.

The questions asked, and thus the rates being measured in this study, were of harm to children in a family, rather than of harm to a child. Because of this, independent variables that reflected the environment of the child's family were used as correlates. These included area of residence (rural or nonrural) and household income. Income in local currency was divided for each country into low, middle, and high income groups. "High" and "low" incomes thus were measured in relative rather than absolute terms, in reference to a given society. Family structure was categorized into two groups: respondents living with children only (in single parent/carer families) and all other compositions.

Heavy drinkers were self-identified by respondents as people who in the last 12 months "drank fairly heavily or a lot sometimes." Presence of a heavy drinker in the respondent's household (or not) was determined by combining questions asking about heavy drinkers in the respondent's life and whether these people lived in the household, along with whether the respondent identified him/herself as drinking in a risky manner (ranging from 50 g to 60 g absolute alcohol) on a single occasion monthly or more often.

### *Analysis*

Data analyses were undertaken using Stata Version 13 (StataCorp LP, College Station, TX). The unweighted number of cases ( $n$ ) is presented, with percentages and other analyses based on data weighted for household composition and gender (excepting Ireland). Household weighting was undertaken simply to adjust for household size, and for example to avoid single-person or multi-person households being over- or under-represented. Gender weighting was used to correct for disproportionate representation by gender in each sample. Checking for non-overlapping confidence intervals (as compared with ensuring that figure A does not fall in the confidence interval range of figure B) was used to identify significant differences between two figures. This is a conservative method of testing for significant differences (du Prel et al., 2009) that can be a better option than hypothesis testing (Gardner & Altman, 1986). An additional reason for selection of this method was simplicity, given the possible number of reference categories for comparison. Bivariate and multivariate logistic regression analyses were used to study the unadjusted and adjusted correlations between the independent variables and the dependent variable (i.e., presence of one or more ARHC).

As with other studies, there were large amounts of missing data for household income. Hence, analysis was undertaken additionally with imputed income data, whereby a new data set is created that has imputed values for income based on the responses to the other variables in the data set. This new income variable was used to provide estimates for income alongside the other unadjusted variables.

### **Results**

The sample included 7,848 carers (4,223 women) from eight countries (Australia, Chile, Ireland, Lao PDR, Nigeria, Sri Lanka, Thailand, and Vietnam). Table 2 describes for each site how many respondents in the study sample live with or are responsible for children (RFUs) in Column 4 and provides detailed information on the socio-demographic characteristics and drinking patterns of carers (Columns 5–10). Although not shown in the table, countries ranged between 43% and 73% in the proportion of participants who lived with children or were responsible for children, except in Chile, where only 409 respondents (27%) were asked questions concerning harm to children from adults' drinking (the Chilean sample was slightly under-representative of rural, less-educated areas). Eighty percent of respondents in the RFUs reported that they lived with children and 20% that they had responsibility for children but did not live with them. As can be seen in Column 5, much higher percentages of respondents were from nonrural (urban) areas in Australia, Chile, Ireland, and Thailand, whereas in Sri Lanka, Nigeria, and Vietnam, a greater percentage of respondents were from

rural areas. The percentages of the survey samples that were urban were relatively close to the percentage of the population described as urban in the Global Status Report on Alcohol and Health (WHO, 2014), except in Nigeria and Sri Lanka, where urban respondents were under-represented, and in Thailand and Lao PDR, where they were over-represented. The presence of at least one heavy drinker in the family (potentially including the respondent) was reported by 18%–43% of respondents.

### *Prevalence of alcohol-related harms to children*

The prevalence of ARHC in each country is presented in Table 3. Respondents in Vietnam, Ireland, and Chile were most likely to report that their child was left in an unsupervised or unsafe situation because of others' drinking. Statistically significant differences were apparent between these three countries and the much lower rate reported in Lao PDR. The reported rates of children being left unsupervised or unsafe in Sri Lanka, Nigeria, and Australia were also significantly lower than those in Vietnam.

Verbal abuse because of others' drinking was the most common form of harm in all countries. In Lao PDR and Nigeria, smaller proportions of respondents reported verbal abuse because of others' drinking, significantly smaller than all other countries except for Chile. Physical harms to children because of others' drinking were lower than other forms of harm in all countries, but again more likely to be reported in Vietnam, Ireland, and Sri Lanka than in Lao PDR. There was little difference in the prevalence of physical harm between the other countries. Children witnessing serious drinking-related violence in the home were significantly more common in Vietnam and Thailand than in Sri Lanka, Lao PDR, Nigeria, and Australia.

The highest prevalence of at least one of the four ARHC was found in Vietnam, Thailand, and Australia. Lao PDR and Nigeria had the lowest reported prevalence figures—statistically significantly lower than in all other countries. There were no significant differences between any of the countries with reported higher levels of ARHC. The prevalence also did not differ significantly between Nigeria and Lao PDR.

Examining the prevalence of ARHC where at least two of the harms were present (ARHC-2) indicated that all other countries reported significantly more harm than Lao PDR. Vietnam reported more harm in terms of this measure than Sri Lanka, Nigeria, Australia, and Lao PDR. In Ireland, ARCH-2 was statistically significantly higher than in Australia. However, in general there was little difference in prevalence across the other countries in the study.

### *Correlates of harm to children in each country*

Examining the within-country data using multiple logistic regression, Table 4 portrays the correlates of harm to

TABLE 2. Descriptive characteristics of respondents from respondent family units (RFUs)

Country (survey year)	Participant <i>n</i>	Response rate, %	RFUs <i>n</i>	Wtd. % of RFUs that are nonrural living	Wtd. % of RFUs in income category			Wtd. % of RFUs reporting HD in household or that the respondent is an HED monthly or more frequently	Wtd. % of single parent/sole carer RFUs
					Low	Middle	High		
Australia (2008)	2,649	35	1,142	85.4	16.4	36.8	25.2	41.4	7.0
Ireland <sup>a</sup> (2010)	1,008	<sup>b</sup>	694	63.3	—	—	—	—	—
Chile (2012–2013)	1,500	72	409	81.8	35.2	25.1	19.2	42.7	3.8
Thailand (2012–2013)	1,695	94	937	62.1	23.2	26.8	29.2	34.9	1.0
Sri Lanka (2013–2014)	2,475	93	1,251	26.7	26.4	31.6	32.2	32.7	2.4
Nigeria (2012–2013)	2,270	<sup>b</sup>	1,659	30.6	34.4	24.2	33.7	17.7	9.1
Vietnam (2012–2013)	1,501	99	961	29.9	33.4	31.8	28.7	38.6	3.2
Lao PDR (2013)	1,257	99	795	51.5	41.9	24.4	31.3	33.0	9.1

Notes: Wtd. = weighted; HD = heavy drinker; HED = heavy episodic drinker. <sup>a</sup>Weighted percentages are reported for all countries except Ireland. <sup>b</sup>Response rates were not calculable for Ireland because it was a panel sample nor for Nigeria, where information on nonrespondents was not collected.

children in each country. The first column for each country indicates the percentage of respondents from RFUs of the sociodemographic variable subgroup that reported harm to their children. For instance, 18% of Thai respondents from the low household income group reported harm to children, compared with 11% of respondents in the high income group; and this difference was significant at the  $p < .05$  level as indicated by the asterisk. In the second column for each country, multivariate models present odds ratios (ORs) and show which factors predicted ARHC, after adjusting for other factors in the model. For all countries except Sri Lanka, where more harms were reported in nonrural than rural areas, rural/urban residence was not associated with ARHC. Income was a factor in Thailand and Nigeria, although in Thailand a higher income seemed to be protective concerning child harm, whereas in Nigeria those with a moderate

income seemed more likely to report harm. Using the Thai example above again, the adjusted OR for alcohol-related child harm of 0.5 was significantly lower after adjusting for the other factors in the model (rurality, household structure, and presence of a risky drinker in the family). Analyses run imputing missing income data (not shown) revealed very similar results. Household family structure was a significant correlate only in Nigeria and Australia, with ARHC more commonly reported in single-parent than in other households. The presence of a heavy drinker was correlated strongly with harm to children (although the harm was not necessarily from this drinker) in all countries.

Respondents' age and gender were also analyzed but not included in the models as the family (RFUs) rather than the individual was the main unit of analysis. In any case, the vast majority of respondents were middle aged, reflecting their

TABLE 3. Experience of child harm as reported by percentage of respondents from respondent family units

How many times, if any, in the last 12 months, was/did one or more [children] . . .	Australia (n = 1,142)	Ireland <sup>a</sup> (n = 694)	Chile (n = 409)	Thailand (n = 937)	Sri Lanka (n = 1,251)	Nigeria (n = 1,659)	Vietnam (n = 961)	Lao PDR (n = 795)
left in an unsupervised or unsafe situation because of someone's drinking?	3.3 [2.4, 4.7]	5.3 [3.8, 7.3]	5.1 [3.0, 8.6]	3.7 [2.4, 5.7]	3.3 [2.4, 4.6]	3.3 [2.5, 4.5]	6.2 [4.8, 8.1]	1.8 [1.0, 3.0]
yelled at, criticized or otherwise verbally abused because of someone's drinking?	8.6 [6.9, 10.6]	9.2 [7.3, 11.7]	6.5 [4.4, 9.7]	7.3 [5.5, 9.7]	8.1 [6.7, 9.9]	4.0 [2.9, 5.3]	11.4 [9.3, 13.9]	2.6 [1.5, 4.2]
physically hurt because of someone's drinking?	1.2 [0.7, 2.0]	2.8 [1.8, 4.3]	1.3 [0.9, 2.9]	1.7 [1.0, 3.1]	2.5 [1.7, 3.5]	1.6 [1.1, 2.5]	3.2 [2.1, 5.0]	0.4 [0.1, 1.1]
witness serious violence in the home because of someone's drinking?	2.8 [1.9, 4.0]	4.8 [3.5, 6.7]	4.6 [2.9, 7.3]	6.7 [5.2, 8.6]	1.3 [0.8, 2.2]	2.0 [1.3, 3.1]	6.1 [4.5, 8.1]	1.1 [0.6, 2.2]
Reporting any one of the above four questions	11.8 [9.9, 14.1]	11.1 [9.0, 13.7]	10.3 [7.4, 14.3]	12.8 [10.5, 15.5]	10.2 [8.5, 12.1]	5.7 [4.5, 7.1]	13.7 [11.5, 16.4]	4.4 [3.1, 6.4]
Reporting at least two of the above four questions	2.9 [2.0, 4.1]	6.2 [4.6, 8.3]	5.0 [3.2, 7.7]	4.8 [3.3, 6.8]	3.5 [2.5, 4.7]	3.4 [2.5, 4.7]	7.6 [5.9, 9.7]	1.0 [0.5, 2.0]

<sup>a</sup>Weighted percentages [confidence intervals] are reported for all countries except Ireland.

TABLE 4. Logistic regression models predicting reporting of alcohol-related harm to children

Variable	Australia		Chile		Thailand		Sri Lanka		Nigeria		Vietnam		Lao PDR	
	% <sup>a</sup>	OR <sup>b</sup>	% <sup>a</sup>	OR <sup>b</sup>	% <sup>a</sup>	OR <sup>b</sup>	% <sup>a</sup>	OR <sup>b</sup>	% <sup>a</sup>	OR <sup>b</sup>	% <sup>a</sup>	OR <sup>b</sup>	% <sup>a</sup>	OR <sup>b</sup>
RFU lives in nonrural area														
Rural	12.7	(ref.)	11.8	(ref.)	14.2	(ref.)	9.2	(ref.)	5.2	(ref.)	15.1	(ref.)	3.0	(ref.)
Nonrural	11.7	1.0	9.8	1.0	12.0	1.1	13.0	1.6*	6.8	1.4	10.7	0.8	5.8	1.7
Household income <sup>c</sup>														
Low	16.4	(ref.)	14.2	(ref.)	18.0	(ref.)	10.3	(ref.)	4.3	(ref.)	18.5	(ref.)	3.5	(ref.)
Middle	10.6	0.6	9.7	0.6	16.9	0.8	11.2	0.9	8.6*	2.2*	13.3*	0.8	5.2	1.5
High	12.9	0.7	8.8	0.5	10.9	0.5*	8.3	0.7	4.3	1.2	10.8**	0.7	4.6	1.0
Household type														
Other	11.1	(ref.)	10.3	(ref.)	12.9	(ref.)	10.2	(ref.)	5.1	(ref.)	13.6	(ref.)	4.2	(ref.)
Single parent or sole carer	21.7**	2.2**	9.9	1.1	7.5	0.5	8.3	1.1	11.5**	3.0***	19.6	1.9	6.6	1.7
Presence of an HD in household														
No (ref.)	7.6	(ref.)	4.55	(ref.)	8.9	(ref.)	5.0	(ref.)	3.3	(ref.)	7.9	(ref.)	2.4	(ref.)
Yes	17.9***	2.9***	18.1***	4.9***	20.2***	2.5***	20.9***	5.2***	16.8***	6.4***	23.1***	3.3***	8.6***	3.9***

Notes: OR = odds ratio; RFU = respondent family unit; ref. = reference; HD = heavy drinker. <sup>a</sup>Percentage reporting any alcohol-related harm to children (statistical significance in these columns is taken from bivariate odds ratios predicting any harm). <sup>b</sup>ORs are presented in relation to the ref. category; multivariate model with all variables presented in the table included. <sup>c</sup>Missing income data was included in the multivariate analyses but is not presented here; inclusion of imputed income data made no substantial difference.

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

parenthood status, and gender of the respondent was not associated with child harms except in Thailand, where women were more likely to report harms to children than men.

## Discussion

The findings indicate that a substantial minority of children were adversely affected by the drinking of others in the past year in all of the eight countries studied. Between 4% and 14% of respondents from family units reported that children in their household, or children they were responsible for, were affected in one or more ways. The reported levels of ARHC were lower in Nigeria and Lao PDR than in the other countries surveyed. Verbal abuse of children was the most common form of harm respondents reported that their children experienced because of others' drinking. Between 1% and 8% of respondents reported that children experienced two or more specific types of harm.

Looking within countries for common factors associated with at least one ARHC, it is apparent that few factors consistently emerged apart from the presence of a heavy drinker in the household. The magnitude of the odds ratio, after adjusting for the other factors in the models for each country, was consistently substantial across countries (between 2.5 and 6.4), suggesting that the presence of a heavy drinker increased the likelihood that a child would experience harm because of others' drinking. There was evidence of higher prevalence of ARHC among single-parent families in two countries—Australia and Nigeria—but not elsewhere. Children in single-parent families have been shown to be at greater risk for a range of child harms; fewer resources, including financial and protective supports, may be available. This study found no differences in ARHC between rural and nonrural areas in any of the countries, except in Sri Lanka,

where harms were more common in nonrural areas. This contrasts with an Indian study of five states examining harms from others' drinking, which found that harms to adults from others' drinking were reported more commonly in rural than in urban areas (Esser et al., 2015). There was also no clear relation between the family being in a lower income group and harm in the current study (except in Thailand, where lower income groups reported more ARHC). In summary, ARHC were fairly uniformly spread across social groups within these societies.

With only eight countries, our study cannot provide statistical evidence about why there is more ARHC in some countries than others. However, turning to the obvious question that arises about country-level differences, we will describe the patterns in the data that emerge and conjecture. Only a few differences between countries were identified. For instance, ARHC were more common in one group of countries (Australia, Ireland, Chile, Thailand, Vietnam, and Sri Lanka) than in Lao PDR and Nigeria. Lao PDR and Nigeria are the countries that have the lowest educational indices while having similar gross national incomes per person to many of the other countries. Perhaps most saliently, the prevalence of heavy episodic drinking among males (per country) was lowest in Nigeria and Lao PDR (Table 1), the two countries with the lowest levels of ARHC (Table 3). Moreover, the overall prevalence of heavy drinkers in the family was lowest in Nigeria, Sri Lanka, and Lao PDR (Table 2), also the three countries with the lowest levels of ARHC. Alternatively, other data from UNICEF (2014) indicate that physical discipline is more commonly used in Lao PDR and Nigeria. This may mean that there is greater tolerance of all forms of physical discipline, including discipline that is administered by family members who have been drinking, meaning that lower

levels of harm may be reported in comparison with the other five countries in which such practices are less tolerated.

Why the group of countries with higher levels of at least one ARHC is such a broad range of countries, with quite varying levels of gross national income per capita and risky drinking patterns, is more difficult to explain. ARHC are likely to be influenced by factors that we have not been able to consider in this analysis. For instance, drinking may be an activity that is more likely to be undertaken out of home, in places separated from children (and potentially from spouses and partners) in some countries more than others. In addition, there may be stronger cultural norms around abstinence and low-risk drinking once adults become parents.

In general, perusing the first three tables, there seem to be few societal differentiations that the prevalence of child harm is linked to: not per capita gross national income, not the proportion of drinkers among adults in the country, and not PCC. Further, the proportion of female drinkers showed little sign of being obviously linked to reporting of greater harm to children. However, if the prevalence of male heavy episodic drinking or the proportion of households with a heavy drinker in a country is greater, it seems that the ARHC prevalence figures also tend to be higher—although Vietnam and Thailand do not fit this pattern well.

### *Limitations*

It is possible that differences in years of survey administration (between 2008 and 2012) could affect differences in rates of ARHC across countries over time because of potential decreases (e.g., associated with changes in disciplinary practices in countries over time or decreases in alcohol consumption among parents) or increases (e.g., associated with increases in reporting associated with greater awareness, decreased stigma, and improved systems for reporting and managing child abuse and neglect). However, it was only in Australia and Ireland where the survey was undertaken earlier in 2008 and 2010, with the remaining countries all undertaking surveys between 2012 and 2013. Of more concern is that response rates may introduce bias, wherein nonrespondents compared with respondents, for example in Australia, may be more likely to be from families in which children experience harms from others' drinking.

There were some variations between sites in field procedures when respondents within households were selected, meaning that women were oversampled in Thailand and Lao PDR and undersampled in Nigeria (to control for this, the data were weighted for gender). An additional way in which the surveys differed is that in Australia the survey was a telephone survey, whereas in all other countries the surveys were undertaken face to face.

In interpreting the country-level data obtained from the United Nations and WHO, the caveats of those organizations that the data may be of somewhat variable quality and

validity should be kept in mind. It should also be kept in mind that the survey data used in this analysis were only from parts of the country in Chile and Nigeria, whereas the United Nations- and WHO-derived data are for the country as a whole; there are often substantial variations between regions of a country.

The respondents in each country were asked to attribute causality—the questions about harm to children included “because of someone else’s drinking.” Therefore, these data were reliant on the subjective interpretation of the respondents regarding whether alcohol was involved. This attribution is likely to be affected by cultural differences in blaming alcohol for the harm. There are also likely to be cross-country differences in classification of what constitutes child harm or abuse. A recent mapping of national child protection systems in the East Asia and Pacific region (including Lao PDR, Thailand, and Vietnam) reported that there were higher levels of tolerance of physical violence, particularly in countries in which community harmony was valued over individual rights. Such tolerance raises the threshold of reporting so that, for example, only incidents that result in bleeding or broken bones may be regarded as cases in the formal system (ECPAT International et al., 2014). Where this applies, it may imply a higher threshold for positive responses to our questions on harm to children.

### *Conclusion*

This study measured the prevalence rates and correlates of harm to children from others' drinking within countries, and these country-level comparisons provide the best estimates and explanations to date of levels of perceived ARHC by country. Future studies should investigate these and other potential explanatory factors, including cultural differences in thresholds for definition of harms to children and in levels of tolerance to heavy drinking, as well as in patterns of drinking behavior around children. To better examine the relationship of child harm cross-nationally with these explanatory factors and with societal heavy drinking rates and family or household-level heavy drinking, multi-level analyses with more national cases should be undertaken.

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