IJADR International Journal of Alcohol and Drug Research

The Official Journal of the Kettil Bruun Society for Social and Epidemiological Research on Alcohol

https://doi.org/10.7895/ijadr.497 IJADR, 2024, 12(1), 21–32 ISSN: 1925-7066

Estimates and predictors of alcohol-related harm to intimate partners in Australia: An analysis of a nationally representative survey

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Abstract

Aims: This study explores the prevalence and predictors reported by men and women of alcohol-related intimate partner violence (ARIPV), that is, verbal abuse, physical abuse, and being put in fear by intimate partners when partners were under the influence of alcohol.

Methods: Cross-sectional analysis of the 2019 Australian National Drug Strategy Household Survey included 22,015 respondents (9,804 men, and 12,211 women) aged 14 years or older. The prevalence of ARIPV in the past year is described, and the ARIPV predictors were analysed using chi-square tests and logistic regressions, overall and separately for men and women.

Results: An estimated 3.4% of the Australian adult population (4.7% women, 2.1% men) reported any ARIPV in 2019. The prevalence of ARIPV was higher among participants who were women, middle-aged (35–44 years), had a certificate or diploma, were less advantaged, were divorced, separated, or widowed, single with dependents, living in more regional and remote areas, and undertook heavy episodic drinking (HED) weekly or less often. Age, marital status, household composition, and any HED predicted any ARIPV for women, while higher education levels and weekly or monthly HED were significant for men.

Discussion and conclusions: Women were twice as likely to report intimate partner violence (IPV) from their male partner when they were under the influence of alcohol, as were men. The findings underline that interventions are needed to address IPV from intoxicated partners.

Introduction

Intimate partner violence (IPV) remains a critical public health concern globally. Internationally, about 30% of females across their lifetime are exposed to physical and/or sexual violence from an intimate partner (IP), or sexual violence from a non-partner (World Health Organization [WHO], 2021a). In Europe, a study revealed that 7.8% of women reported experiencing at least one occurrence of physical or sexual violence from their current partner using data covering the 28 member states of the European Union, with prevalence rates ranging from 2.9% in Austria to 14.1% in Romania (Reichel, 2017). In a metanalysis across seven countries in the Asia Pacific region, 13% of men reported perpetration of physical and/or sexual IPV in the past year, with notable variability in prevalence rates observed among the different countries and country sites (Laslett et al., 2021). In Australia, from the age of 15, the lifetime rates of experiencing physical and/or sexual violence by a previous or cohabiting partner were 17.3% for women and 6.1% for men (Australian Bureau of Statistics [ABS], 2017; Cox, 2015).

The WHO defines IPV as *"any behaviour by a current or former male intimate partner within the context of marriage, cohabitation or any other formal or informal union, that causes physical, sexual or psychological harm"* (WHO, 2021b, p. 4). While the WHO definition of IPV primarily

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Financial support: This study was funded by ARC Linkage Project Grant (LP190100698).
Declaration of interest: None to declare.
Keywords: alcohol, intimate partner violence, physical abuse, verbal abuse, prevalence

focuses on violence by men against women (the most common scenario), the authors acknowledge that IPV can also occur by women against men or within same-sex relationships. McCue (2008) describes the perpetrator's physical abuse as an escalating pattern starting from minor harm "pinches or squeezes in a painful way," to "pushes or shoves", or "causes permanently disabling and/or disfiguring injuries", to the most severe form "murders the victim". Intimate partner violence includes not only physical, sexual, or psychological harms, but also coercive and controlling behaviours such as social restrictions, stalking (online or in person) and financial abuse (Boxall & Morgan, 2021; Stark, 2007).

Alcohol misuse negatively impacts familial, marital, and intimate partner relationships in the previously mentioned ways as well as more broadly. For example, the alcohol's harm to others survey (AHTO) by Laslett et al. (2017) identified a range of alcohol-related harms to IPs of varying severity such as those commonly reported by participants, being "verbally abused", "emotionally hurt or neglected", and those less often reported, being "put at risk in the car", "physically hurt", or "forced or pressured into sex". Furthermore, a qualitative study by Wilson et al. (2020) found that the participants experienced a range of abusive behaviours such as physical, emotional, or sexual assault from their alcohol-affected partners. The authors highlighted how the participants experience fear when their partners start drinking, because they fear that this means the partner will then become angry and behave abusively. Similarly, another study by Olickal et al. (2022) stated that fear of physical violence, arguments, and conflicts due to the intoxicated partner increased stress and worry and burdened families, including wives and children. In this paper, we analyse secondary data including three types of abusive behaviours in relationships; physical abuse, verbal abuse and being put in fear from a partner under the influence of alcohol, and use the term alcohol-related intimate partner violence (ARIPV).

The ways in which gender inequality, alcohol and other intersections are involved in ARIPV are postulated in a number of theories. Alcohol myopia theory (Steele & Josephs, 1990) suggests that alcohol consumption narrows cognitive processing and exacerbates impulsive behaviour. Intersectional feminist (Crenshaw, 2013) and gendered approaches (Taft et al., 2019) are crucial in understanding the complicated nature of ARIPV as these approaches acknowledge that individuals may experience violence differently based on the intersections of their structural identities, e.g., gender, ethnicity, and socioeconomic status (SES). Numerous studies have acknowledged the significance of adjusting for structural and individual-level sociodemographic factors when exploring ARIPV (Yaya & Ghose, 2019; Yu et al., 2019). Sociodemographic variables, such as age, gender, SES, and cultural background, are indicators of the social determinants of health, and also essential for understanding the contexts in which alcohol-related IPV occur (Bryant & Lightowlers, 2021; Shortt et al., 2015; WHO, 2008). In addition, alcohol consumption patterns differ across various socioeconomic backgrounds (Kilian et al., 2023; Wood & Bellis, 2017). Drawing elements from these theories and the social determinants of health, we identified key sociodemographic variables that we posited would be important in our analysis.

A significant body of research has identified a positive association between alcohol use and the likelihood of engaging in IPV (Abramsky et al., 2011; Cafferky et al., 2018). This association may be manifested in instances of men perpetrating violence against women as well as women perpetrating violence against men (Afifi et al., 2012; Connor et al., 2011; Foran & O'Leary, 2008); however, women experience disproportionately higher rates of ARIPV than men (Laslett et al., 2017). Internationally, Graham et al. (2011) examined the association between alcohol consumption and the severity of intimate partner (IP) physical aggression using data from thirteen countries as a part of the multinational Gender, Alcohol, and Culture: An International Study (GENACIS) project. The study found that in almost all countries, alcohol consumption before the incident occurred was significantly associated with the severity of physical aggression. Alcohol use increased the risk as well as the severity of IPV. The percentage of women reporting having harmful heavy drinker partners varied between countries in another international study with the highest prevalence in Vietnam at 29.0% and the lowest in the US at 2.5% while in Australia it was 7.4% (Callinan et al., 2019). Willoughby et al. (2021) conducted a study that analysed the 2016 National Drug Strategy Household Survey (NDSHS), focused mainly on family violence, and found that 5.9% of respondents reported experiencing alcohol-related family violence in Australia in 2016, and 3.6% of respondents experienced ARIPV (2.1% for men and 5.1% for women). The present study seeks to build upon the 2016 study by Willoughby et al., (2021) by analysing the 2019 wave of the NDSHS survey, and to analyse specifically ARIPV as the outcome variable. IPV is a crucial issue in Australia, with national surveys (mentioned above) indicating a significant association between alcohol and these incidents. Additionally, high rates of alcohol consumption and heavy episodic drinking patterns are prevalent with a well-documented "drinking culture" in Australia (ABS, 2015). By addressing these factors, research on ARIPV and knowledge of updated prevalence rates in Australia can contribute to the understanding of the phenomenon and inform effective prevention and intervention.

Aims

This study aims to investigate the prevalence of men and women in Australia who reported experiencing harms (verbal, physical, put in fear, and any ARIPV) from an IP who was under the influence of alcohol. Moreover, it examines predictors of alcohol-related violence between intimate partners to determine high-risk groups. It explores the following questions:

1. How common is ARIPV, including verbal abuse, physical abuse and being put in fear by an IP, in Australia in 2019?
2. What are the predictors of ARIPV? For example, SES disadvantage, rurality, and education.
3. How do men and women differ regarding predictors of overall ARIPV and each type of ARIPV?

Methods

Study Sample

The study used the NDSHS survey which is a nationally representative survey that has been conducted every three years since 1995 among Australia's general population (Australian Institute of Health and Welfare [AIHW], 2020b). The 2019 sample includes 22,015 respondents (9,804 men, and 12,211 women). A stratified, multistage random sample with 15 groups (state capitals and "rest of state") was employed, with boosted sample sizes in smaller regions for reliable estimates (AIHW, 2020a). It collects data on alcohol, tobacco, and illicit drug use in the previous 12 months with additional information about respondents' social and demographic status. The 2019 NDSHS used a multi-mode completion methodology where respondents chose to complete it via paper forms, online or by computer-assisted telephone interview (CATI). The response rate was 49% of the contacted eligible sample (AIHW, 2020a). Further information about the methodology, response rates, and definitions is presented in the technical information report (AIHW, 2020a). No individuals were contacted by the authors because the study used secondary data.

Assessment of the Outcome Variable Alcohol-Related IPV and Harm

Self-reported harm in the previous 12 months from a partner under the influence of alcohol was the outcome variable. The respondents were asked, "In the last 12 months, did any person under the influence of or affected by alcohol verbally abuse you/physically abuse you/put you in fear?". A follow-up question was administered to determine the relationship of the person responsible for this incident with the participant. All persons who reported that they had been harmed by a spouse or partner, current boy/girlfriend, or former spouse/partner (boy/girlfriend) were included in the analysis. Each type of harm to an intimate partner (verbal abuse, physical abuse, and being put in fear) was assessed individually as an outcome variable. Then "any ARIPV" was assessed by creating a new dichotomous variable which included all types of ARIPV. Thus, the outcome of our study is the participant's report of ARIPV. As mentioned, they were asked to identify situations where they had been negatively affected by someone who was under the influence of alcohol. We included the HED of the victim in the model, but this was not related to our outcome definition.

Sociodemographic and Alcohol Consumption Measures

The survey dataset comprised the following sociodemographic variables, including gender, sexual identity, age, education, marital status, household composition, remoteness, and employment status. Data were available on the gender (man, woman), and sexual identity – heterosexual, homosexual or bisexual (combined in the data provided), not sure, other, and missing – of the respondent but not of the perpetrator. Age was divided into six categories: 14–24, 25–34, 35–44, 45–54, 55–64, and 65+ years. Respondents aged 14–16 years were included in the analyses, as there is evidence that young people drink alcohol and experience IPV as well (Mulford & Blachman-Demner, 2013). Education included three categories: completion of secondary school (12–13 years of education depending on the state); post-secondary education (certificate or diploma about two to three years), and/or bachelor's or higher degree); and the baseline category of less than secondary school completion.

Socioeconomic status was derived from the postcode of residence by applying the Socio-Economic Index for Areas (SEIFA; ABS, 2011); SEIFA uses an Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) to rank areas across Australia. Lower IRSAD scores indicate greater disadvantage. So, people residing in areas with lower SEIFA scores which are quintiles one and two are considered to be in a less advantageous socio-economic position (ABS, 2021). It has five categories ranging from the first (most disadvantaged) to the fifth (most advantaged).

The graduated frequency method was used to collect data on alcohol consumption. Respondents were asked, "how often in the last 12 months you have had each of the following numbers of standard drinks in a day?". Respondents reported their frequency (eight levels, from 'never' to 'every day') of drinking at various levels (eight levels, from 'none' to '20 or more' standard drinks). A standard drink in Australia includes 10 grams of alcohol. Using this quantity-frequency method, the frequency of drinking five or more standard drinks per occasion (which was defined as heavy episodic drinking [HED]) in the last 12 months was estimated (weekly or more, 1–3 days a month, less often or less than monthly, never).

Statistical Analyses

Weighted percentages and 95% confidence intervals (CI) were estimated for each type of ARIPV individually and then for overall ARIPV. The weights provided were based on the latest Australian Bureau of Statistics population profile for large geographical areas, age groups, and genders. These adjusted weights were applied in all our analyses using STATA software to account for unequal selection probabilities, strata, and clustering design effects (Heeringa et al., 2017; Korn & Graubard, 2011). In the analyses, missing data were included and coded as a separate "missing" category, so the statistical power and their effects in the analysis were not lost. All persons of all genders and sexual identities were included in prevalence estimates. Cross-tabulations with chi-square tests (Munro, 2005) were used to determine the demographic characteristics of those who reported experiencing verbal or physical abuse and being put in fear by intimate partners who were affected by alcohol and the overall ARIPV harm.

Multivariable logistic regressions were used to examine sociodemographic and drinking variables (gender, age, education, marital status, household composition, remoteness, employment status, and HED) associated with each type of ARIPV and any ARIPV. While variables regarding drinking frequency and volume are available for the participants (though not for the perpetrators), we specifically focus on testing the association between the harm they experienced and their HED behaviour in this model. We believe that acute events are more closely associated with HED. Additionally, including both consumption frequency and HED in the model would likely introduce multicollinearity issues.

Separate logistic models were used to investigate differences in the variables associated with the likelihood of occurrence of any ARIPV for men and women, including the same variables as were included in the fully adjusted models. However, the same HED threshold was applied for both sexes because following the new guidelines in Australia, our current definition of HED is that the same number of drinks are recommended for men and women. There is evidence that suggests that men are more likely to harm others than women at the same level of drinking (National Health and Medical Research Council [NHMRC], 2020). We were unable to use the sexual orientation variable in the multiple regression analyses due to the large number of missing responses (n = 1515) and its categorisation of homosexual and bisexual into a single category. So, we recommend future studies combine multiple years of survey data to undertake a more robust analysis that includes sexual orientation.

We conducted a sensitivity analysis to determine whether men or women reported more harm in heterosexual IP relationships, where respondents reported their own gender, reported being heterosexual, and reported harm from an IP. We assumed the gender of the partner was opposite to their own gender in these instances. Stata software version 17.0 SE was used to conduct the analyses. Statistical significance was set at the 0.05 level, and 95% CIs were estimated. The project received ethics approval from the La Trobe University Human Research Ethics Committee (HEC20518) and permission from the data custodians: Australian Institute of Health and Welfare (AIHW).

Results

Prevalence of Verbal, Physical, Put in Fear, and Any ARIPV

Table 1 includes the weighted percentages of the characteristics of those who reported experiencing ARIPV (verbal abuse, physical abuse, being put in fear, and any ARIPV from a partner under the influence of alcohol) in the last 12 months. Of the 22,015 respondents to the 2019 NDSHS, a total of 777 (3.4%) reported any ARIPV, including 584 (4.7%) women and 193 (2.1%) men. Overall, 682 (2.9%) of the respondents reported alcohol-related intimate partner verbal abuse, 130 (0.6%), physical abuse, and 325 (1.5%) reported being put in fear.

Women were significantly more likely to report experiencing alcohol-related intimate partner verbal and physical abuse and being put in fear (4.1%, 0.9%, 2.4%, respectively) than men (1.8%, 0.4%, 0.5%, respectively). In addition, people aged 35–44 years old had the highest rate of reporting any ARIPV by a partner at 4.8%, followed by the 45–54-year age group, while older participants aged over 65 years reported the lowest rates of any ARIPV. Regarding education, people who had a certificate or diploma had significantly higher rates (3.5% for verbal abuse, 1.9% for being put in fear, and 4.1% for any ARIPV) of reporting all types of harm and any ARIPV, compared to respondents with secondary school or lower education, apart from physical abuse which was not associated with education. Unlike education, SES was not significantly associated with harm, except for physical abuse, with the rate in the most disadvantaged group (0.8%) double that for the third SEIFA quintile group (0.4%).

Furthermore, divorced, separated, or widowed participants had significantly higher rates of any ARIPV (5.5%) and each individual type of ARIPV (5.0% for verbal, 1.5% for physical and 2.9% for put in fear) than never married or married/de facto participants. Single participants with dependant(s) had the highest rates of reporting all types of alcohol-related violence examined, as well as any ARIPV compared to other household compositions. Those who were solely engaged in home duties, volunteer/charity work, and other forms of employment were significantly more likely to report experiencing ARIPV in all or any of its forms (5.4%) followed by currently employed participants (4.0%) and then those who were retired or on a pension (1.5% reported any ARIPV). The proportion reporting verbal or physical abuse, or being put in fear, and any ARIPV increased with increasing frequency of drinking five or more drinks on one occasion; for example, participants who had engaged in at least weekly or more HED drinking reported experiencing higher rates of any ARIPV (5.9%) compared to those who never reported HED drinking during the last year (2.6%). Individuals who had engaged in HED drinking on a weekly basis or more, 1–3 days per month, or less frequently (less than monthly) reported significantly higher rates of any ARIPV and each type of individual harm compared to those respondents who never engaged in HED drinking.

Factors Associated with Alcohol-Related Intimate Partner Violence in Australia

Table 2 presents the results of the logistic regression models for the association between demographic characteristics and reports of any ARIPV, verbal abuse, physical abuse and being put in fear harm by intimate partners who were under the influence of alcohol during the past year (i.e., ARIPV). Females had significantly higher odds of reporting any ARIPV harm (adjusted odds ratio [aOR] = 2.63, 95% CI [2.10, 3.28]) and the three types of abuse: verbal (aOR = 2.69, 95% CI [2.13, 3.41]), physical (aOR = 2.44, 95% CI [1.42, 4.21]), and being put in fear (aOR = 4.75, 95% CI [3.12, 7.23]) than men after adjusting for other demographic characteristics and the frequency of the respondent's HED. Compared to respondents aged over 65 years, all other age groups had significantly higher odds of reporting any ARIPV harm, verbal abuse, physical abuse and being put in fear after adjusting for the possible confounders included in our model. Those who held a certificate, or a diploma had significantly higher odds of experiencing any ARIPV (aOR = 1.39, 95% CI [1.10, 1.74]), verbal abuse (aOR = 1.29, 95% CI [1.02, 1.63]) and being put in fear (aOR = 1.58, 95% CI [1.10, 2.26]) from a partner compared with participants who had secondary education or less.

Table 1

Weighted Percentages of Respondents Who Reported Experiencing Alcohol-Related Intimate Partner Violence

	Alcohol-related verbal abuse *n* (%, 95% CI)	**Alcohol-related physical abuse *n* (%, 95% CI)**	**Alcohol-related fear *n* (%, 95% CI)**	**Any ARIPV by partner *n* (%, 95% CI)**
Total harmed by partners	682 (2.9%, 2.7-3.2%)	130 (0.6%, 0.5-0.8%)	325 (1.5%, 1.3-1.7%)	777 (3.4%, 3.1-3.7%)
Gender				
Men (*n* =9,804)	172 (1.8%, 1.5-2.1%)	31 (0.4%, 0.2-0.6)	44 (0.5%, 0.4-0.8)	193 (2.1%, 1.7-2.5%)
Women (*n* = 12,211)	**510 (4.1%, 3.7-4.5%)**	**99 (0.9%, 0.7-1.2%)**	**281 (2.4%, 2.0-2.7%)**	**584 (4.7%, 4.3-5.2%)**
Age 6 categories:				
14-24 (*n* = 2,144)	48 (1.5%, 1.1-2.1%)	15 (0.6%, 0.3-1.0%)	39 (1.5%, 1.0-2.2%)	65 (2.4%, 1.8-3.3%)
25-34 (*n* = 3,378)	**129 (3.5%, 2.8-4.4%)**	**29 (1.0%, 0.6-1.7%)**	**76 (2.2%, 1.6-3.0%)**	**153 (4.3%, 3.5-5.3%)**
35-44 (*n* = 3,536)	**176 (4.5%, 3.7-5.3%)**	**40 (1.0%, 0.7-1.5%)**	**95 (2.2%, 1.7-2.8%)**	**196 (4.8%, 4.1-5.7%)**
45-54 (*n* = 3,325)	**145 (4.2%, 3.5-5.2%)**	**25 (0.8%, 0.5-1.4%)**	59 (1.7%, 1.2-2.3%)	**160 (4.7%, 3.8-5.7%)**
55-64 (*n* = 3,725)	**112 (3.1%, 2.5-3.8%)**	11 (0.3%, 0.1-0.4%)	37 (1.0%, 0.7-1.4%)	124 (3.4%, 2.8-4.2%)
65+ (*n* = 5,907)	72 (1.3%, 1.0-1.6%)	10 (0.6%, 0.0-0.4%)	19 (0.3%, 0.2-0.5%)	79 (1.4%, 1.1-1.7%)
Education (Missing *n* = 936)				
Secondary or lower (*n* = 7,051)	171 (2.2%, 1.8-2.6%)	36 (0.5%, 0.4-0.8%)	78 (1.0%, 0.8-1.4%)	194 (2.5%, 2.1-3.0%)
Certificate/ diploma (*n* = 7,584)	**283 (3.5%, 3.0-4.0%)**	58 (0.7%, 0.5-1.0%)	**143 (1.9%, 1.5-2.3%)**	**323 (4.1%, 3.6-4.7%)**
Bachelor or higher (*n* = 6,444)	**209 (3.2%, 2.7-3.8%)**	31 (0.6%, 0.4-1.0%)	92 (1.4%, 1.1-1.9%)	**234 (3.6%, 3.1-4.2%)**
SEIFA quintile:				
Lowest (*n* = 4,360)	144 (3.2%, 2.6-3.9%)	**39 (0.8%, 0.6-1.2%)**	72 (1.4%, 1.1-1.8%)	165 (3.5%, 2.9-4.3%)
2nd (*n* = 4,143)	131 (3.3%, 2.7-4.0%)	**24 (0.8%, 0.5-1.3%)**	60 (1.4%, 1.0-1.9%)	149 (3.8%, 3.1-4.5%)
3rd (*n* = 4277)	153 (3.2%, 2.6-3.8%)	20 (0.4%, 0.2-0.7%)	78 (1.8%, 1.3-2.3%)	168 (3.7%, 3.1-4.4%)
4th (*n* = 4,649)	125 (2.3%, 1.8-2.9%)	25 (0.6%, 0.4-1.2%)	53 (1.4%, 0.9-2.0%)	144 (3.0%, 2.4-3.7%)
Highest (*n* = 4,586)	129 (2.8%, 2.3-3.5%)	22 (0.6%, 0.3-1.0%)	62 (1.4%, 0.98-1.9%)	151 (3.2%, 2.7-3.9%)
Marital status: (Missing *n* = 99)				
Never Married (*n* = 4,834)	151 (2.4%, 1.97-2.9%)	43 (0.8%, 0.6-1.1%)	**97 (1.8%, 1.4-2.3%)**	187 (3.3%, 2.8-4.0%)
Divorced/ separated/widowed (*n* = 4,194)	**169 (5.0%, 4.1-6.1%)**	**50 (1.5%, 1.0-2.3%)**	**96 (2.9%, 2.2-3.8%)**	**191 (5.5%, 4.6-6.6%)**
Married or defacto (*n* = 12,888)	361 (2.8%, 2.4-3.1%)	36 (0.4%, 0.3-0.6%)	131 (1.0%, 0.8-1.2%)	398 (3.1%, 2.7-3.5%)
Household composition: (Missing *n* = 274)				
Single + dep[1] (*n* = 1,004)	**110 (11.0%, 8.8-13.7%)**	**38 (3.6%, 2.5-5.3%)**	**68 (6.3%, 4.7-8.4%)**	**122 (11.9%, 9.6-14.6%)**
Couple + dep[1] (*n* = 5,426)	192 (3.2%, 2.7-3.7%)	25 (0.6%, 0.4-1.0%)	78 (1.4%, 1.1-1.8%)	210 (3.6%, 3.0-4.2%)
Parents + non-dep[2] (*n* = 2,225)	60 (2.8%, 2.1-3.9%)	12 (0.7%, 3.3-1.5%)	24 (0.9%, 0.6-1.4)	66 (3.1%, 2.3-4.1%)
Singles, no children (*n* = 4,684)	100 (2.5%, 1.9-3.2%)	27 (0.7%, 0.4-1.1%)	53 (1.3%, 0.9-2.0%)	123 (3.2%, 2.5-4.1%)
Couples no children (*n* = 5,742)	152 (2.5%, 2.1- 2.9%)	10 (0.1%, 0.0-0.2%)	55 (1.0%, 0.7-1.3%)	171 (2.8%, 2.4-3.3%)
Other (*n* = 2,660)	61 (2.1%, 1.6-2.9%)	17 (0.7%, 0.4-1.2%)	44 (1.7%, 1.2-2.4)	77 (2.9%, 2.2-3.7%)
Remoteness:				
Major cities (*n* = 14,892)	450 (2.9%, 2.6-3.3%)	84 (0.6%, 0.5-0.8%) [a]	211 (1.4%, 1.21.7%)	512 (3.4%, 3.0-3.7%)
Inner regional (*n* = 4,174)	120 (2.9%, 2.3-3.6%)	22 **(0.7%, 0.4-1.2%)**	58 (1.5%, 1.1-2.1%)	137 (3.5%, 2.8-4.2%)
Outer regional[3](*n* = 2,949)	112 (3.2%, 2.5-4.2%)	24 **(0.9%, 0.5-1.6%)**	56 (1.8%, 1.2-2.6%)	128 (3.9%, 3.0-5.0%)
Employment status: (Missing *n* = 903)				
Currently empl. (*n* = 11,645)	**446 (3.5%, 3.2-3.9%)**	75 (0.6%, 0.5-0.9%)	196 (1.6%, 1.3-1.9%)	**498 (4.0%, 3.6-4.4%)**
Unemployed[4] (*n* = 2,107)	65 (2.0%, 1.5-2.7%)	17 (0.5%, 0.3-1.0%)	45 (1.6%, 1.0-2.3%)	81 (2.7%, 2.1-3.6%)
Retired or on pension (*n* = 5,468)	63 (1.4%, 1.0-1.9%)	10 (0.4%,0.1-0.7%)	22 (0.4%, 0.2-0.7%)	70 (1.5%, 1.1-2.01%)
Other[5] (*n* = 1892)	**90 (4.2%, 3.3-5.5%)**	**22 (0.8%, 0.8-2.7%)**	**52 (3.1%, 2.1-4.5%)**	**105 (5.4%, 4.2-6.9%)**
Frequency of HED: 5+ drinks on one occasion in the last 12 months (missing *n* = 573)				
Weekly or more (*n* = 1,700)	**101 (5.4%, 4.3-6.8%)**	**24 (1.5%, 0.9-2.5%)**	**34 (2.1%, 1.3-3.3%)**	**105 (5.9%, 4.6-7.4%)**
1-3 days a month (*n* = 2,601)	**139 (5.0%, 4.1-6.1%)**	**24 (0.8%,0.5-1.2%)**	**57 (2.0%, 1.5-2.8%)**	**156 (5.8%, 4.8-7.0%)**
Less often[6] (*n* = 2,931)	**111 (3.6%, 2.9-4.4%)**	**18 (0.7%,0.4-1.2%)**	53 (1.9%, 1.4-2.6%)	**124 (4.2%, 3.4-5.1%)**
Never (*n* = 14,210)	320 (2.1%, 1.9-2.5%)	61 (0.5%, 0.4-0.7%)	174 (1.2%, 1.0-1.5%)	379 (2.6%, 2.2-2.9%)

Notes: All statistically significant variables are bolded. The significance level was a p-value < 0.001 except for education and any ARIPV where the p-value was < 0.01; and for the SEIFA quintile and remoteness variables and physical abuse where the p-value was < 0.05. CI: confidence interval; ARIPV: Alcohol-related Intimate Partner Violence; SEIFA: Socio-Economic Index for Areas; HED: heavy episodic drinking. [a] Chi-square tests showed a significant difference, but comparison of confidence intervals (more conservative analysis) showed no evidence of difference between any groups. [1]dep = dependents; [2]non-dep = non-dependent children; [3]Outer regional = Outer regional, remote, or very remote; [4] Student/Unemployed/Looking for work; [5] Solely engaged in home duties/volunteer/charity work/ other; [6] Less often or less than monthly

Table 2

Association Between Demographic Characteristics and Forms of Alcohol-Related Harm by Intimate Partners

	Any alcohol-related harm by partner		Alcohol-related verbal abuse by partner		Alcohol-related physical abuse by partner		Being put in fear by alcohol affected partner	
	OR [95% CI]	**aOR [95% CI]**	**OR [95% CI]**	**aOR [95% CI]**	**OR [95% CI]**	**aOR [95% CI]**	**OR [95% CI]**	**aOR [95% CI]**
Gender: Men (ref)								
Women	2.33 [1.89, 2.87]*	2.63 [2.10, 3.28]***	2.38 [1.91, 2.96]***	2.69 [2.13, 3.41]***	2.46 [1.44, 4.19]***	2.44 [1.42, 4.21]**	4.53 [2.96, 6.91]***	4.75 [3.12, 7.23]***
Age: 65+ (ref)								
14–24 yrs.	1.83 [1.24, 2.71]**	1.83 [1.09, 3.06]*	1.20 [0.78, 1.83]	1.19 [0.67, 2.11]	3.36 [1.28, 8.82]*	3.70 [0.93, 14.72]	5.48 [2.86, 10.50]***	6.40 [2.78, 14.73]***
25–34 yrs.	3.30 [2.36, 4.62]***	2.89 [1.92, 4.35]***	2.82 [1.99, 4.01]***	2.41 [1.57, 3.70]***	6.24 [2.46, 15.81]***	7.41 [2.15, 25.47]**	8.15 [4.47, 14.86]***	9.81 [4.79, 20.09]***
35–44 yrs.	3.72 [2.74, 5.06]***	3.28 [2.24, 4.80]***	3.62 [2.63, 4.98]***	3.02 [2.03, 4.49]***	6.39 [2.71, 15.06]***	6.33 [2.04, 19.64]**	7.93 [4.50, 13.97]***	9.27 [4.69, 18.31]***
45–54 yrs.	3.58 [2.58, 4.95]***	3.08 [2.10, 4.50]***	3.44 [2.45, 4.83]***	2.80 [1.89, 4.16]***	5.08 [2.01, 12.88]***	4.31 [1.35, 13.69]*	6.08 [3.35, 11.06]***	6.63 [3.36, 13.07]***
55–64 yrs.	2.59 [1.86, 3.60]***	2.38 [1.68, 3.37]***	2.46 [1.74, 3.46]***	2.16 [1.51, 3.10]***	1.74 [0.59, 5.11]	1.55 [0.52, 4.65]	3.51 [1.84, 6.70]***	3.83 [1.99, 7.35]***
Education: Secondary or lower (ref)								
Certificate or diploma	1.67 [1.33, 2.08]***	1.39 [1.10, 1.74]**	1.62 [1.28, 2.04]***	1.29 [1.02, 1.63]*	1.34 [0.80, 2.26]	1.09 [0.63, 1.90]	1.79 [1.26, 2.55]**	1.58 [1.10, 2.26]*
Bachelor or higher	1.45 [1.14, 1.84]**	1.17 [0.91, 1.52]	1.49 [1.16, 1.92]**	1.17 [0.90, 1.54]	1.17 [0.64, 2.17]	1.06 [0.55, 2.07]	1.39 [0.93, 2.07]	1.13 [.74, 1.72]
SEIFA quintile: Lowest: most disadvantaged (ref)								
2nd	1.07 [0.81, 1.41]	1.07 [0.81, 1.43]	1.04 [0.77, 1.40]	1.03 [0.76, 1.40]	0.94 [0.50, 1.77]	0.99 [0.51, 1.90]	0.99 [0.66, 1.50]	1.04 [0.68, 1.58]
3rd	1.05 [0.80, 1.38]	1.07 [0.81, 1.42]	1.00 [0.75, 1.34]	1.00 [0.75, 1.34]	0.50 [0.26, 0.94]*	0.55 [0.28, 1.07]	1.26 [0.85, 1.86]	1.41 [0.95, 2.10]
4th	0.84 [0.62, 1.13]	0.85 [0.62, 1.17]	0.73 [0.53, 0.99]*	0.71 [0.52, 0.99]*	0.77 [0.38, 1.56]	0.90 [0.44, 1.83]	0.97 [0.60, 1.57]	1.11 [0.67, 1.82]
Highest: most advantaged	0.91 [0.69, 1.21]	0.95 [0.70, 1.28]	0.88 [0.65, 1.20]	0.87 [0.63, 1.21]	0.70 [0.35, 1.39]	0.88 [0.45, 1.74]	0.98 [0.63, 1.51]	1.21 [0.76, 1.93]
Marital status: Never Married (ref)								
Divorced/separated/widowed	1.71 [1.30, 2.23]***	1.62 [1.13, 2.34]**	2.15 [1.62, 2.86]***	1.75 [1.17 ,2.61]**	1.95 [1.13, 3.36]*	2.39 [0.86, 6.64]	1.66 [1.12, 2.4]*	2.47 [1.36, 4.47]**
Married/*de facto*	0.93 [0.74, 1.16]	0.90 [0.6, 1.36]	1.16 [0.92, 1.47]	1.03 [0.65, 1.63]	0.49 [0.28, 0.85]*	0.58 [0.21, 1.57]	0.56 [0.40, 0.79]***	0.63 [0.37, 1.08]
Household composition: Single + dependents (ref)								
Couple + dependents	0.27 [0.21, 0.37]***	0.52 [0.32, 0.82]**	0.26 [0.20, 0.35]***	0.47 [0.28 ,0.77]**	0.17 [0.09, 0.31]***	0.56 [0.20, 1.62]	0.21 [0.14, 0.32]***	0.73 [0.39, 1.38]
Parents + non-dep. children	0.23 [0.16, 0.35]***	0.57 [0.36, 0.89]*	0.23 [0.16, 0.35]***	0.53 [0.33, 0.87]*	0.19 [0.08, 0.43]***	0.96 [0.41, 2.26]	0.14 [0.08, 0.24]***	0.67 [0.35, 1.27]
Singles, no children	0.24 [0.17, 0.34]***	0.51 [0.35, 0.75]***	0.20 [0.14, 0.29]***	0.44 [0.29, 0.65]***	0.18 [0.09, 0.34]***	0.45 [0.19, 1.03]	0.20 [0.12, 0.33]***	0.61 [0.34, 1.11]
Couple, no children	0.22 [0.16, 0.29]***	0.63 [0.40, 0.98]*	0.20 [0.15, 0.28]***	0.56 [0.34, 0.92]*	0.03 [0.01, 0.07]***	0.19 [0.06, 0.56]**	0.14 [0.09, 0.22]***	0.91 [0.49, 1.68]
Other	0.22 [0.15, 0.31]***	0.56 [0.35, 0.89]*	0.18 [0.12, 0.26]***	0.54 [0.32, 0.90]*	0.18 [0.09, 0.36]***	0.53 [0.15, 1.82]	0.26 [0.16, 0.41]***	0.80 [0.40, 1.61]
Remoteness: Major cities (ref)								
Inner regional	1.03 [0.81, 1.30]	0.97 [0.76, 1.24]	0.99 [0.77, 1.27]	0.91 [0.70, 1.17]	1.09 [0.58, 2.05]	1.06 [0.55, 2.02]	1.07 [0.74, 1.54]	1.08 [0.74, 1.56]
Outer regional-very remote	1.16 [0.87, 1.53]	1.05 [0.78, 1.42]	1.11 [0.84, 1.48]	0.98 [0.72, 1.32]	1.51 [0.80, 2.86]	1.51 [0.78, 2.93]	1.28 [0.84, 1.97]	1.28 [0.82, 2.01]
Employment status: Currently employed (ref)								
Unemployed[1]	0.67 [0.49, 0.92]*		0.55 [0.40, 0.76]***		0.86 [0.44, 1.65]		0.99 [0.63, 1.55]	
Retired or on pension	0.36 [0.26, 0.50]***	–[a]	0.39 [0.27, 0.55]***	–	0.56 [0.22, 1.43]	–	0.25 [0.14, 0.43]***	–
Others[2]	1.36 [1.03, 1.81]*		1.21 [0.90, 1.64]		2.42 [1.23, 4.73]*		2.02 [1.31, 3.10]**	
HED frequency: 5+ drinks on one occasion in the last 12 months: Never (reference)								
Weekly or more	2.39 [1.79, 3.17]***	2.75 [2.04, 3.72]***	2.61 [1.96, 3.47]***	3.09 [2.28, 4.19]***	3.01 [1.61, 5.62]***	3.35 [1.74, 6.46]***	1.75 [1.05, 2.90]*	2.13 [1.26, 3.58]**
1–3 days a month	2.37 [1.86, 3.01]***	2.47 [1.91, 3.20]***	2.41 [1.88, 3.11]***	2.69 [2.05, 3.52]***	1.53 [0.84, 2.80]	1.39 [0.73, 2.63]	1.68 [1.15, 2.47]**	1.55 [1.02, 2.35]*
Less often[3]	1.67 [1.29, 2.15]***	1.58 [1.21, 2.05]***	1.69 [1.29, 2.21]***	1.64 [1.24, 2.17]***	1.42 [0.72, 2.77]	1.28 [0.64, 2.55]	1.57 [1.07, 2.29]*	1.34 [0.91, 1.98]

Notes: * p<0.05; ** p<0.01; *** p<0.001. OR: odds ratio; aOR: adjusted odds ratio; CI: a 95% Confidence interval SEIFA: Socio-Economic Index for Areas; HED; heavy episodic drinking, a employment status variable was not included in the adjusted model.[1] Student/Unemployed/Looking for work; [2] Solely engaged in home duties /volunteer/ charity work/other; [3] Less often or less than monthly.

Being divorced, separated, or widowed increased the likelihood of any ARIPV (aOR = 1.62, 95% CI [1.13, 2.34]) compared to never being married. Furthermore, being a single parent with dependants significantly increased the likelihood of any ARIPV and verbal abuse more than other types of family composition. Remoteness and SEIFA were not significant predictors of any ARIPV, however, respondents in the fourth SEIFA quintile group were significantly less likely to report IP verbal abuse compared to the least disadvantaged group after adjusting for other variables (aOR = 0.71, 95% CI [0.52, 0.99]). The likelihood of reporting any ARIPV and verbal harm was strongly associated with any HED. In addition, weekly or more HED drinking was a significant predictor for physical harm and put in fear as well.

The sensitivity analysis of heterosexual individuals who reported harm from a partner demonstrated consistent results with the overall sample analyses (Supplementary Table 1). Within this group, women were more likely to report experiencing any ARIPV from a male partner than men from a female partner (aOR= 3.10, 95% CI [2.46, 3.93]).

Table 3

Comparison Between Men and Women Regarding Predictors of any ARIPV by Intimate Partners Affected by Alcohol

	Any ARIPV reported by women		Any ARIPV reported by men	
	OR (95% CI]	**aOR (95% CI]**	**OR (95% CI]**	**aOR (95% CI]**
Age: 65+ (ref)				
14–24 yrs.	2.12 [1.34, 3.37]**	2.55 [1.40, 4.62]**	1.52 [0.72, 3.20]	0.90 [0.34, 2.33]
25–34 yrs.	3.57 [2.40, 5.30]***	3.41 [2.07, 5.61]***	2.95 [1.57, 5.54]***	1.88 [0.91, 3.89]
35–44 yrs.	4.35 [3.02, 6.26]***	3.93 [2.45, 6.29]***	2.70 [1.50, 4.85]***	2.08 [1.06, 4.08]*
45–54 yrs.	3.86 [2.61, 5.72]***	3.28 [2.08, 5.18]***	3.32 [1.86, 5.95]***	2.48 [1.24, 4.95]**
55–64 yrs.	2.89 [1.94, 4.32]***	2.66 [1.74, 4.06]***	2.14 [1.19, 3.84]*	1.75 [0.95, 3.23]
Education: Secondary school or lower (ref)				
Certificate or diploma	1.77 [1.37, 2.30]***	1.36 [1.05, 1.77]*	1.76 [1.12, 2.75]*	1.53 [0.95, 2.45]
Bachelor or higher	1.30 [0.99, 1.72]	1.00 [0.74, 1.34]	1.90 [1.16, 3.10]*	1.77 [1.04, 3.01]*
SEIFA quintile: Lowest: most disadvantaged (ref)				
2nd	1.01 [0.75, 1.37]	1.04 [0.76, 1.41]	1.25 [.67, 2.31]	1.18 [0.62, 2.21]
3rd	0.95 [0.69, 1.30]	0.97 [0.70, 1.33]	1.39 [0.78, 2.45]	1.29 [0.72, 2.31]
4th	0.82 [0.59, 1.15]	0.86 [0.60, 1.22]	0.91 [0.47, 1.76]	0.85 [0.44, 1.63]
Highest: most advantaged	0.95 [0.69, 1.31]	1.03 [0.73, 1.46]	0.87 [0.47, 1.60]	0.80 [0.43, 1.51]
Marital status: Never married (ref)				
Divorced/separated/widowed	1.51 [1.10, 2.07]*	1.92 [1.22, 3.01]**	1.47 [0.88, 2.44]	1.18 [0.63, 2.22]
Married/*de facto*	0.97 [0.75, 1.26]	1.07 [0.69, 1.66]	0.80 [0.52, 1.21]	0.65 [0.27, 1.55]
Household composition: Single + dependents (ref)				
Couple + dependents	0.33 [0.24, 0.46]***	0.51 [0.31, 0.84]**	0.31 [0.15, 0.64]**	0.50 [0.18, 1.41]
Parents + non-dep. children	0.28 [0.18, 0.44]***	0.56 [0.34, 1.00]*	0.28 [0.12, 0.67]**	0.55 [0.21, 1.43]
Singles, no children	0.28 [0.19, 0.41]***	0.52 [0.33, 0.82]**	0.32 [0.15, 0.70]**	0.46 [0.21, 1.02]
Couple, no children	0.28 [0.20, 0.39]***	0.66 [0.40, 1.12]	0.22 [0.11, 0.45]***	0.52 [0.20, 1.34]
Other	0.23 [0.15, 0.36]***	0.45 [0.26, 0.80]**	0.33 [0.15, 0.71]**	0.73 [0.30, 1.82]
Remoteness: Major cities (ref)				
Inner regional	1.06 [0.82, 1.37]	1.02 [0.78, 1.34]	0.91 [0.54, 1.54]	0.90 [0.53, 1.53]
Outer regional - very remote	1.18 [0.85, 1.62]	1.09 [0.77, 1.53]	1.12 [0.63, 1.98]	1.02 [0.56, 1.86]
Employment status: Currently employed (ref)				
Unemployed[1]	0.63 [0.45, 0.89]**		0.67 [0.34, 1.31]	
Retired or on pension	0.27 [0.18, 0.39]***	–[a]	0.54 [0.29, 1.01]	–
Others[2]	1.03 [0.76, 1.40]		1.21 [0.51, 2.88]	
HED frequency: 5+ drinks on one occasion in the last 12 months: Never (ref)				
Weekly	3.49 [2.42, 5.02]***	2.77 [1.90, 4.04]***	2.86 [1.75, 4.67]***	2.56 [1.56, 4.21]***
1-3 days a month	3.11 [2.33, 4.15]***	2.69 [1.98, 3.65]***	2.31 [1.45, 3.67]***	2.12 [1.32, 3.42]**
Less often or less than monthly	2.00 [1.50, 2.66]***	1.68 [1.25, 2.27]***	1.38 [0.80, 2.39]	1.29 [0.74, 2.25]

Notes: * p<0.05; ** p<0.01; *** p<0.001. OR: odds ratio; aOR: adjusted odds ratio; CI: a 95% Confidence interval; ARIPV: Alcohol-Related Intimate Partner Violence; SEIFA: Socio-Economic Index for Areas; HED; heavy episodic drinking, [a] employment status variable was not included in the adjusted model. [1] Student/unemployed/looking for work; [2] Solely engaged in home duties/volunteer/charity work/other.

Comparison between Men and Women Who Were Harmed by Drinking IP

Separate logistic regression analyses were conducted to compare the predictors of any and each type of ARIPV for men and women. Table 3 shows the predictors for experiencing any ARIPV comparing men and women after controlling for other variables. For women of younger age (all categories) compared with the oldest group, having a certificate or a diploma compared with secondary school or lower education, being divorced, separated, or widowed compared with never married, being a single mother with

dependents and any HED compared with never HED increased the likelihood of reporting any ARIPV. The significant predictors for men were age (35–44 yrs. and 45–54 yrs.), having a bachelor's or higher degree, and any HED vs never HED.

In gender- stratified analyses of verbal, physical, and fear-inducing ARIPV, we reduced the number of categories for age, SEIFA, household composition, remoteness, and employment status into fewer categories due to low cell counts in certain categories, particularly for men reporting physical abuse and put in fear to avoid the sparse data effect as a potential problem. Detailed descriptions of these variables and differences between men and women regarding all predictors of experiencing these alcohol related harms are highlighted in Supplementary Tables 2 and 3. The significant predictors of verbal harms towards women included age (30 –54 vs 55 + year olds), being divorced, separated, or widowed (vs never married), and any HED vs never HED in the adjusted model. However, single with/out dependents/children and currently employed were significant only in the bivariate analyses. In contrast, for men, 30–54 years old, holding a certificate or diploma, and having a bachelor's degree or higher and reporting weekly or more or 1–3 days a month HED, were associated with an increase in the likelihood alcohol related verbal abuse. Being 30–54 years old and HED weekly or more for men and for women aged 14–29 and 30–54 vs 55+ years old increased the likelihood of physical abuse. Regarding being put in fear, age, having a certificate or diploma, marital status (being divorced, separated, or widowed), and monthly HED were significant predictors for women, while for men aged 30–54 years, higher education and weekly or more HED were significant.

Discussion

The present study has identified the prevalence and predictors of overall and various types of ARIPV in Australia in 2019. Overall, significantly higher proportions of respondents reported experiencing any ARIPV in the last 12 months if they were women, 35–44 years old, held a certificate or diploma, were divorced, separated, or widowed, single with dependents, currently employed, and drank more than five drinks on at least one occasion weekly or more. Similarly, regarding predictors of any ARIPV, adjusting for all factors in the model simultaneously, the likelihood of any ARIPV was greater for respondents aged 35–44 years old, holding a certificate or diploma, who were divorced, separated, or widowed, single with dependents and drinking at HED levels weekly or more. Socioeconomic status (SES) and remoteness were not significantly associated with any ARIPV in the adjusted model.

The prevalence of any ARIPV was 3.4%, but this is likely an underestimate of harm because the survey covers a limited number of types of ARIPV in the previous year and not all individuals are willing to disclose being a victim of ARIPV. In the general population from the 2008 HTO survey, there are very similar results as 5% of women and 2% of men reported being harmed in the past year by a current spouse/partner's drinking and 1% and 0.1% by an ex-spouse/partner's drinking respectively (Laslett et al., 2015). In the present analyses, women also reported more of all types of ARIPV and any ARIPV from their IP's drinking than men did in the previous year. This is consistent with the findings of Willoughby et al. and with previous research that showed higher rates of ARIPV perpetration by men against women (Callinan et al., 2019; Laslett et al., 2011; Willoughby et al., 2021) possibly because alcohol consumption by men is more common and heavier. Studies have indicated that women experience higher rates of IPV generally (Caldwell et al., 2012) including those harms related to alcohol use (Aizpurua et al., 2021) and men perpetrate a disproportionate amount of violence against women in all contexts. Alcohol-related intimate partner violence reflects gendered patterns influenced by power imbalances and societal norms (Karriker-Jaffe et al., 2023). This contributes to increased rates of IPV among women, particularly, when combined with alcohol's impact on men's behaviours (Karriker-Jaffe et al., 2023). The interaction between alcohol-related and gender-related social norms plays a role in the frequency and severity of violence against women (Graham et al., 2011). This highlights the importance of addressing both alcohol misuse and gender inequity in prevention and intervention efforts (Fergus & Partridge, 2015).

Moreover, we hypothesised that there would be gendered reporting of different types of violence, for instance, physical violence would be more gendered than verbal abuse. Hence, we analysed the data separately. The current results did not support this hypothesis. The results consistently demonstrated that women were more likely than men to report experiencing all forms of alcohol-related intimate partner violence, including verbal abuse, physical abuse, and being put in fear. This suggests that while both genders are affected by alcohol-related intimate partner violence, women are more disproportionately affected as mentioned before. This does not support the hypothesis that physical violence is more gendered than verbal abuse.

As has been shown, the 25–54-year age groups reported a higher prevalence of the three types of alcohol's IPV and any ARIPV than both younger and older age groups. A possible explanation for this might be that average daily alcohol consumption reaches its peak in middle-aged Australians compared with other age groups (Leggat et al., 2022), suggesting that the participants' middle-aged IPs drink more alcohol than other age groups and cause more harm to participants in these middle-aged groups. This finding could also be due to the fact that this age group is more likely to have an IP than the younger and older age groups. Some groups of Australians in different occupations, e.g., construction, hospitality, and retail workers, who do not commonly have a bachelor's degree (ABS, 2020), drink more alcohol than other groups (Roche et al., 2020). This may explain the higher rates of ARIPV reported among respondents who hold a certificate or diploma.

Single parents with dependents reported a far higher prevalence of any ARIPV than any other family/household type. Furthermore, gender stratified analysis shows that this was only true for women. Indeed, because people, and more

often women, face alcohol-related violence/harm from their intimate partners, they may become single parents/mothers and experience divorce and separation (Parkinson, 2013; Ramisetty-Mikler & Caetano, 2005). On the other hand, single parents with children may face substantial work and financial stress and may drink alcohol to cope (Devries et al., 2014; Kaysen et al., 2007; Kim & Kim, 2020). Smit et al. (2023) found that the alcohol expenditure among men and women who were single parents had been considerably stable in the last 30 years, while a decline in alcohol expenditure was observed in other family compositions.

The findings of this study showed that SES and remoteness variables were not associated with an increased likelihood of any ARIPV. This is unlike other studies that showed SES is an important factor of ARIPV. For example, Abramsky et al. (2011) found that high SES was one of the protective factors against IPV and others have found that education was also protective. Among men, no schooling or primary studies (low educational attainment) was associated with men's IP victimization and perpetration and (the likelihood of IPV decreased with higher education; Gilchrist et al., 2015; Okenwa et al., 2009). One explanation for this may be that the severity of harm measured in the present study, comprising predominantly verbal abuse, may be less severe than in the other studies. The differential association between SEIFA and education (two different measures of SES) with ARIPV in this study suggests future research should include more nuanced measures of SES and ARIPV.

Respondents also were at greater risk of experiencing IPV when they themselves drank in a heavy episodic way. Respondents may be drinking to cope, or it may be a marker that if one partner drinks heavily, the other partner may also drink (Devries et al., 2014). Other researchers have found that bi-directional violence is more common when both partners are drinking, and drinking can be something that couples argue about (Mennicke & Wilke, 2015). Finally, a respondent's drinking may make them more vulnerable to opportunistic harm from a partner, and a partner may even use substance use coercion, where they enable the drinking of the partner to ensure they are less well placed to leave.

A strength of this study is that it is one of only a few studies that have compared women's and men's experiences of each type of IP harm and overall harm. Moreover, using the NDSHS, which is a nationally representative survey with a large sample size, increases the statistical power of the study. A potential limitation of the study is the reporting bias (Gordis, 2014) and that sensitive information about IPV may be underreported by respondents. Also, measures of the perpetrator's drinking were not included in the survey; however, participants were asked directly about the harms that occurred while the perpetrator was under the influence of alcohol. Additionally, there was no measure of gender equality scales or other measures of cultural factors that we might have expected to be related to ARIPV in the survey. Furthermore, while the survey used friend and boy/girlfriend in separate categories, this might be considered a potential limitation as commonly boy/girlfriend is used to imply a romantic friend, and some respondents may have interpreted these terms to mean a general friend. Another potential limitation of this study concerns the categorization of respondents based on marital status. Due to few respondents being widowed, we opted to combine the widowed category with the divorced and separated group, rather than the never-married category. However, as there was a low prevalence of reporting of experiencing IPV within the widowed group this approach could underestimate the true effect of ARIPV among individuals who have experienced divorce or separation. Finally, the data does not have information on whether participants were of Aboriginal or Torres Strait Islander background. According to the technical report from AIHW, the survey included eight remote indigenous communities in the Northern Territory that required adaptations in the methodology due to language and access limitations. While this data improves representativeness, it is not directly comparable and may cause bias. So, it is excluded by the data custodians from analyses due to inconsistent methodology (AIHW, 2020a). Our findings provide insights into the demographic and behavioural factors influencing several types of alcohol-related harms from IPs and underline the gender-specific patterns in ARIPV where women were more likely to experience ARIPV than men. Thus, the impact of ARIPV on women is highlighted in a national survey and provides crucial insight that will inform future policy decisions.

Conclusion

This study found that the prevalence of ARIPV was higher among women, 35–44-year-olds, those with a certificate or diploma, divorced, separated, or widowed individuals, single with dependents, currently employed, and those who engaged in HED weekly or more. In the adjusted model, these socio-demographic variables, except for SES and remoteness were associated with any ARIPV.

The predictors for ARIPV differed between women and men highlighting the need for further research to develop alcohol-related, and gender informed interventions to address partner violence linked to alcohol use across various sociodemographic groups. While support should be offered to those needing treatment for alcohol misuse, the primary focus should be on changing the drinking behaviour of the perpetrator and assisting those affected by ARIPV. Modifying one's own HED behaviour may help to reduce the chance of experiencing ARIPV, but targeted community and social services for those more often affected –women, people who were divorced, separated, or widowed, single with dependents and drink heavily in an episodic way – are crucial, alongside interventions to shift the culture of gendered violence to reduce and prevent the burden of ARIPV on these subpopulations.

Acknowledgments

AML was supported by the Australian Research Council (DE190100329), veski and the National Health and Medical Research Council (GNT 2016706). HJ was supported by the Australian Research Council Discovery Project (DP200101781). RJ is funded by the Australian Human Rights Commission. AT was supported by a La Trobe University Full-Fee Research Scholarship (LTUFFRS).

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