Enacting alcohol realities: gendering practices in Australian studies on 'alcohol-related presentations' to emergency departments

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Abstract

'Alcohol-fuelled violence' and its prevention has been the subject of recent intense policy debate in Australia, with the content of this debate informed by a surprisingly narrow range of research resources. In particular, given the well-established relationship between masculinities and violence, the meagre attention paid to the role of gender in alcohol research and policy recommendations stands out as a critical issue. In this article, which draws on recent work in feminist science studies and science and technology studies, we focus on the treatment of gender, alcohol and violence in Australian research on 'alcohol-related

presentations' to emergency departments (EDs), analysing this type of research because of its prominence in policy debates. We focus on four types of 'gendering practice' through which research genders 'alcohol-related presentations' to EDs: omitting gender from consideration, overlooking clearly gendered data when making gender-neutral policy recommendations, rendering gender invisible via methodological considerations, and addressing gender in terms of risk and vulnerability. We argue that ED research practices and their policy recommendations reproduce normative understandings of alcohol's effects and of the operations of gender in social arrangements, thereby contributing to the 'evidence base' supporting unfair policy responses.

Keywords: alcohol, violence, gender, masculinities, emergency department studies, Australia

Introduction

'Alcohol-fuelled violence' and its prevention has been the subject of intense policy debate in Australia in recent years, as well as the focus of government inquiries and legislative reviews. As we argued in a previous article (Moore *et al.* 2017), the content of this debate has been informed by a surprisingly narrow range of research resources. In particular, given the well-established relationship between masculinities and violence, the meagre attention paid to the role of gender in alcohol research and policy recommendations stands out as a critical issue. As Jo Lindsay (2012) has argued, gender-neutral accounts of alcohol and violence deflect attention from problematic performances of masculinity and overlook the potential of interventions addressing masculinity to reduce harm.

In contrast to the minimal role attributed to gender, the term 'alcohol-fuelled violence', so routinely used in media coverage as well as in research and policy, constitutes a direct causal

relationship between alcohol and violence (Flynn *et al.* 2016). The category of 'alcohol-fuelled violence' obscures the impact of social and cultural context on 'drunken comportment' (MacAndrew and Edgerton 1969) as it foregrounds the universal action of alcohol on the brain as the source of anti-social behaviour.

In preliminary research undertaken in 2017, we examined data from four case studies drawn from the Australian literature on: 1) assaults in inner-urban licensed premises; 2) alcohol-related mortality; 3) alcohol-related emergency department (ED) presentations and hospitalisations; and 4) patterns of alcohol use among young people. In all four cases we identified a consistent erasure of the contribution of men and masculinities to violence involving alcohol, even when the data analysed in these studies provided strong support for the inclusion of gender as a significant element (Moore *et al.* 2017). We argued that the large-scale quantitative studies that receive most attention in policy contexts were not well suited to identifying and analysing the complexities of gender as a regulatory social structure and locus of power. As a result these studies tend to promote simplistic causal models, privileging the pharmacological effects of alcohol and normative assumptions about gendered relations.

Our preliminary study of data on assaults, mortality, ED presentations and drinking patterns made it clear that a more comprehensive mapping of gender issues in research on alcohol and violence was urgently needed to inform more equitable and productive policy responses. This article is a first step in presenting the findings of this mapping. Whereas our focus here is Australian research, a larger comparative project will go on to examine the treatment of gender in research and policy on alcohol-related violence among young people in Canada and Sweden. In what follows we focus on Australian research on 'alcohol-related presentations' to EDs. We chose to analyse this type of research first because of its prominence in policy

debates, such as those relating to the impact of liquor licensing reforms (Australian Associated Press 2016, Davey 2016, Health Outcomes International 2015). It also draws on specific kinds of data and method, and is a recognised subtype of alcohol research (see, for example, the ED studies and reviews regularly published in international alcohol journals).

We want to make clear at the outset that we are not claiming that injuries associated with alcohol use and violence do not produce ED visits. Rather, we ask the following questions: How is the category of 'alcohol-related presentations' defined, measured and analysed? How do ED research practices attribute causality? And how do they treat the agency of the other forces and elements assembled in drinking events, in particular gender and power? Like the term 'alcohol-fuelled violence', the category 'alcohol-related presentations' constructs the issue as a substance use problem, while at the same time removing any trace of the embodied subjects who are doing the 'presenting'. This construction of the problem warrants critical scrutiny because it reproduces normative understandings of alcohol's effects and of the operations of gender in social arrangements, and contributes to the 'evidence base' invoked to support unfair policy responses. Although we pursue our argument with reference to Australian material, the trends we identify may also be relevant to alcohol research and policy in other locations.

More broadly, our analysis contributes to the feminist and sociological literature on gender and substance use, which has demonstrated that generic discourses of alcohol and other drug use assume the standard 'drug user' to be male (Ettorre 2004). Female bodies and subjects are constituted as deviating from this unmarked male norm and often appear as the most vivid examples of substance-related disorder and social threat (Campbell 2000). At the same time,

the specific contribution of masculinities to drug use practices and effects is under-acknowledged, especially in dominant medical discourses (Keane 2017).

Approach

Our analysis is informed by two theoretical frameworks. First, sociological research has highlighted the relationship between specific masculinities, alcohol and violence. Studies have focused on violence as a central element of 'masculine' drinking (e.g. Ayres and Treadwell 2012, Burns 1980, Carrington *et al.* 2010, Graham and Wells 2003, Lindsay 2012, Marsh and Kibby 1992, Marshall 1979, Moore 1990, Wells *et al.* 2007, Tomsen 1997), as well as on the relationship between masculinity, drinking and sexual aggression (e.g. Graham *et al.* 2014). In these mainly social constructionist accounts, masculinities, alcohol and violence are shaped by interactions between pharmacology and the social contexts of drinking.

More recent research has drawn on feminist science studies and science and technology studies to argue that the properties and effects of alcohol (and other drugs) emerge from, rather than precede, the assembling of the various forces and elements that come together in consumption events (e.g. Gomart 2002, Fraser *et al.* 2014). These elements include gender and alcohol but also bodies, affects, social classes, age, sexualities, ethnicities, knowledges, technologies, and broader cultural meanings and practices regarding intoxication. As Race (2011: 410) argues, drug effects are the:

> contingent outcome of the collective activity of a diverse range of actors, both human and non-human, including techniques, devices, objects, meanings, affects, environments, practices, prehensions, narratives, and desires. […] Crucially, the

> emphasis is on the performance of things in the world, as they come into encounter with various other elements in interaction so as to produce certain ontological effects.

A focus on assemblage, emergence and contingency challenges the singular explanatory claim of a notion such as 'alcohol-fuelled violence'.

The second theoretical consideration informing our analysis is recent scholarly work on the performativity of scientific and policy knowledges and practices (Bacchi 2009, 2016, Barad 2007, Latour 2004, Law 2004, Mol 2002). In this work, knowledge practices (such as research and policy on alcohol and violence) do not merely describe realities but 'enact' or 'perform' them. This approach has informed recent critical attention to addiction science (Dwyer and Fraser 2015, 2016, 2017, Fraser *et al.* 2014, Keane 2002, Keane 2017, Keane *et al.* 2011), alcohol epidemiology (Hart and Moore 2014) and methamphetamine research (Dwyer and Moore 2013, Thomson and Moore 2014, Moore and Fraser 2015).

In this article we are interested in the enactment of alcohol in research on ED presentations, but we are also concerned with the constitution of gender as a naturalised system of differential power. Carol Bacchi uses the term 'gendering practices' to refer to the 'active, ongoing, and always incomplete processes' that produce 'women' and 'men' as naturalised categories in policy discourses and practices (2017: 20). Her point is that policies create gendered subject positions, as well as problems and objects that are also gendered. Gendering practices are highly variable: 'women' and 'men' are at times constituted in terms of differences, while at other times gender differences are obscured via the production of a generic norm. For Bacchi, gender is performatively constituted in power rather than naturally based in sex, and research and policy, generally understood to address problems, is implicated in their constitution. Together these ideas allow us to ask how research on

'alcohol-related presentations' directly works to constitute specific problems, and how these specific problems iterate particular realities of gender, alcohol and violence.

Here we identify and analyse the gendering practices of research on alcohol-related presentations to EDs. These practices do not primarily operate through the explicit identification of gender categories such as men and women, masculinity and femininity. Rather, as Bacchi's work suggests, a process that appears on the surface to be degendering (namely, the omitting, overlooking and excluding of gender) paradoxically reproduces gendered norms and assumptions about alcohol use.

In taking this approach we acknowledge that two separate but related issues emerge for our analysis. While our focus is the erasure of the role of masculinities in alcohol-related presentations, we are also concerned not to authorise inattention to the conduct and culpability of men. The problem of violent masculinities is not the same as the problem of violent men, but they are of course related. A focus on gendered performance and masculinities may inadvertently exacerbate the invisibility of men's culpability, but this is not our intention. Acknowledging the gap between the two is one way to avoid collapsing them. To conflate men and masculinities would be to evacuate the politically crucial space in which men (and others) can actively renegotiate the masculinities with which they are associated (Waling 2019).

Method

Several search strategies were used to identify a set of Australian studies on 'alcohol-related presentations' to EDs for analysis. First, four journals from the Thompson Reuters Social Science Citation Index category 'Substance Abuse' were selected: *Addiction*, *International*

Journal of Drug Policy, *Drug and Alcohol Dependence* and *Drug and Alcohol Review*. The first three journals were selected as the top three journals in the category based on impact factor (excluding *Nicotine and Tobacco Research*). *Drug and Alcohol Review* (ranked seventh on the journal list) was purposively selected because of its high proportion of Australian research content. In March 2017, databases and publisher websites (e.g. ProQuest, Wiley, Elsevier) were searched using combinations of the terms 'alcohol-related', 'injur*'and 'emergency', for articles published in the four journals between 2012 and 2017. Because of difficulties in restricting the searches to the specific journals, and the large number of irrelevant hits, a second stage employed manual searching of the tables of content for Australian articles published in the four journals for the years 2010-2017. In the third stage content alerts for the four journals were set up and further studies were added to the sample as they were published online throughout late 2017 and 2018. In the fourth stage the reference lists of identified texts were searched to locate relevant articles published in related Australian journals (*Medical Journal of Australia*, *Emergency Medicine Australasia*).

Two of the identified studies (Lloyd *et al.* 2012, Egerton-Warburton *et al.* 2017) focused on 'alcohol-related presentations' to EDs in the context of major public holidays and sporting and social events. Because the former dealt only with admissions for 'acute intoxication' and did not discuss violence-related injuries, and the latter (a short report) presented only overall percentages of ED presentations relating to alcohol without further discussion, both were excluded from analysis. It is worth noting, however, that neither study included gender in its results or analyses.

These search strategies yielded a set of 18 texts for the analysis, which was completed in October 2018. Most of the selected studies include at least some empirical data and analysis

relating to violence, use quantitative methods and follow an introduction-methods-results-discussion format, in which recommendations for policy and future research appear in the discussion section. In the analysis that follows, we highlight the ways in which 'alcohol-related presentations' are defined, measured and analysed in these texts. We identify four types of gendering practices performed by research on 'alcohol-related presentations' to EDs: omitting gender from consideration, overlooking clearly gendered data when making gender-neutral policy recommendations, rendering gender invisible via methodological considerations, and addressing gender.

Omitting gender

The first gendering practice we identified is the omission of gender from consideration while foregrounding alcohol's causal role in violence.[1] In these studies, gender is either absent, appears briefly in introductions or is glimpsed in results sections. For example, Egerton-Warburton *et al.* aim to determine the proportion of 'alcohol-related presentations', including 'intentional or unintentional injuries caused by a third party affected by alcohol' (2014: 585), in Australian and New Zealand EDs at 2am on 14 December 2013. Alcohol-related presentations are defined broadly as those 'directly or indirectly related to alcohol consumption', with this crucial assessment being made by 'the senior doctor in the ED at the time of the survey' (2014: 585). No information is provided on the criteria used in this assessment. In order to 'maintain confidentiality and statistical meaning', only aggregate data is reported (2014: 585) – that is, without disaggregation by age or gender (or other variables). On the basis of this imprecise methodology the article concludes that one in seven patients in Australia EDs and one in six in New Zealand EDs 'present for reasons related to alcohol consumption' (2014: 585). Furthermore the article stresses the sole significance of alcohol in these events: 'when hospitals in multiple jurisdictions report more than a third of their ED

workload is due to this *single cause*, we contend that this represents a strong case for preventive public health campaigns as a key component of a broad policy response' (2014: 586, emphasis added). In this study, the methods adopted and the policy measures recommended reproduce normative assumptions about the causal role and inexorable effects of alcohol by disentangling the substance from other elements – such as gender – that shape intoxicated conduct and interactions. As we noted earlier, sociological research has produced a substantial body of knowledge that highlights the relationship between specific masculinities, alcohol and violence, as well as the gendering of intoxication (e.g. Brown and Gregg 2012, de Visser and Smith 2007a, 2007b, Gefou-Madianou 1992, Griffin *et al.* 2009, Hernandez *et al.* 2013, Lyons and Willott 2008, Measham 2002).

A second article that omits gender while emphasizing alcohol compares the impact of different intervention approaches on injury-related ED presentations during 'high-alcohol hours' (12am-5.59am on Saturdays and Sundays) in two sites (Miller, Curtis *et al.* 2014). This article concludes that restrictions on trading hours (i.e. measures that affect all patrons) are more effective than voluntary interventions in reducing ED presentations during these times. It begins by citing a single Australian study that identifies alcohol 'as a factor in almost three-quarters of assaults and offensive behaviour on the streets' (2014: 314-5) but makes no mention of the sociological literature on alcohol, masculinity and violence, nor the lead authors' own work on the topic (e.g. Miller, Wells *et al.* 2014, Zinkiewicz *et al.* 2015). The article claims that 'ED datasets have been demonstrated to substantially improve detection of assault and violence over police recorded data' (2014: 315) but does not acknowledge that ED data (as we will see below) provide few clues about the (usually male) perpetrators of assault and violence. The single brief reference to gender in the text is found in the reporting of ED presentations, 67.2% of which are males in both research sites.

A particularly striking example of the omission of gender and foregrounding of alcohol is provided by an article that draws on ED and police data in four locales to argue that community-based interventions (e.g. education campaigns, patron banning, safe taxi ranks) for reducing alcohol-related harm, including violence, are ineffective (Curtis *et al.* 2017). In establishing the significance and contribution of the study, the article does not identify the disproportionate involvement of men and masculinities in the perpetration of physical and sexual violence. This is puzzling as previous research (e.g. Australian Bureau of Statistics 2013) suggests that approximately 95% of all victims of physical violence in Australia, whether male or female, *report a male perpetrator*. Instead, the article singles out the alcohol (and other drug) consumption of perpetrators as well as that of victims, implying that this, too, is of concern:

> In 2007, almost two-thirds of Australian men who were physically assaulted said that the perpetrator had been drinking or taking [other] drugs, and 28% of victims had been consuming alcohol or [other] drugs themselves. Almost half of women physically assaulted and 84% of women who were sexually assaulted said that the perpetrator had been drinking or taking [other] drugs. Of those reporting involvement in aggressive encounters in night-time entertainment precincts, 88% had consumed alcohol prior to the incident. (Curtis *et al.* 2017: 359)

The article's results and discussion sections do not mention gender and the article concludes by arguing for blanket 'evidence-based regulatory strategies, such as restricted trading hours'.

Our final example of the gendering practice of omission is a recent editorial (Egerton-Warburton 2018) that refers to the policy implications of several of the ED studies we analyse here. The editorial is wide-ranging and considers the proportion of alcohol-related

presentations to EDs; reductions in non-domestic alcohol-related violence following the introduction of restrictions on alcohol availability in central Sydney and Newcastle; whether these restrictions led to the displacement of violence to surrounding areas; the similar findings of a Norwegian study on the relationship between trading hours and assaults; and the need for improved data collection on alcohol-related presentations (including where patients last consumed alcohol before being injured). It concludes by calling for restricted access to alcohol in order to reduce the number of assaults and the exposure of ED staff to alcohol-related violence and aggression. A notable absence from the discussion, however, is the disproportionate involvement of men, and the role of specific masculinities. Instead, the editorial calls for policy measures that would result in the costs of violent men and masculinities being borne by all.

Overlooking gendered data

A second type of gendering practice found in Australian ED studies occurs when gendered data is reported in the results sections of articles but are overlooked in policy recommendations. For example, Egerton-Warburton *et al.* (2018) report on a prospective, multi-centre study of alcohol-related harm in eight Australasian EDs during a seven-day period in 2014. Presentations were classified as 'alcohol-positive' if patients had been drinking immediately prior to ED attendance (or whose presentation related to longer-term drinking) or if they had 'intentional or unintentional injuries suspected to be caused by a third party affected by alcohol (as determined by the clinician in consultation with the patient)' (2018: 625). This means that an intoxicated person injured in a fall, and a sober woman or man being treated for assaultive injuries caused by a drunken man, are both classified as 'alcohol-positive' presentations. The article reports that 'alcohol-positive patients were 1.9 times more likely to be male' (2018: 623) and that one in seven (14.1%) 'sustained their

injury from a third party affected by alcohol' (2018: 630). However, the discussion of policy and practice responses is limited to 'screening, brief intervention and referral for treatment' in EDs (i.e. including those patients injured by a drunken third party) and restrictions on alcohol availability (e.g. restricted trading hours). As we saw in previous examples, gender disappears when regulatory actions are considered, as if violent masculinities cannot or should not be addressed.

A second example of this form of gendering practice is provided by an article reporting the findings of a state component of the national study discussed above (Egerton-Warburton *et al.* 2018). The article analyses 213 alcohol-related presentations to a Perth ED. Interviews with consenting adult patients were performed 'if alcohol was determined to be causal' (McClay *et al.* 2017: 532). However, no detail is provided on how causality was determined apart from a single screening question asked at triage: 'Has the patient consumed alcohol in the last 6 hours?' (2017: 532). Research assistants then conducted face-to-face interviews with screened patients and '[s]urveys also assessed whether alcohol was considered causal in a patient's presentation' (2017: 532), although, again, the criteria used to make this assessment are not provided. Screened patients were 'categorised as either alcohol-positive or alcohol-negative' (2017: 532), using the criteria outlined in the previous example – if patients had been drinking immediately prior to ED attendance (or whose presentation related to longer-term drinking) or if they had 'intentional or unintentional injuries suspected to be caused by a third party affected by alcohol (as determined by the clinician in consultation with the patient)'.

One hundred and forty eight (69.5%) of the 213 'alcohol-positive' patients were male and 42 (19.7%) had injuries 'suspected to be caused by an alcohol-affected third party' (2017: 531).

The article notes that 15% of ED presentations in the study period were 'alcohol-related' and that these were 'more likely to be male' (2017: 536). On the basis of these findings, the article supports the introduction of 'public health measures to reduce [alcohol-related harms] (such as 1:30 am lockouts)' (2017: 537). The introduction of such measures would also reduce the 'load of alcohol harm' at the ED, 'create a safer environment for staff and patients', and reduce the 'resources required by other services such as Police' (2017: 537). Again, we see advocacy for generic restrictions on availability and no acknowledgement of the disproportionate involvement of men in alcohol-related presentations or their likely over-representation in the category of 'alcohol-affected' third parties.

Our next example of the inattention to gendered data is provided by a recent research letter that compares the incidence of orbital fractures (assault being the 'main mechanism of injury') before and after the 2014 introduction of Sydney's lockout laws (i.e. laws preventing patrons from entering, or re-entering, licensed premises after a specific time) (Holmes *et al.* 2018). The number of these injuries fell from 196 prior to the introduction of these laws to 155 following their introduction. However, in both cases, men make up the majority of cases: 75% and 73%, respectively. As a research letter, the scope and claims made in this text are modest and specific. However, despite the clear over-representation of men in the data, and the ABS statistics on the gender of assault perpetrators cited earlier, gender is overlooked in favour of an implicit argument in support of lockout laws that reduce overall availability of alcohol.

In our fourth example of slippage between gendered data and generic recommendations, Miller *et al.* (2011) compare the impact of four community interventions (such as media/education campaigns and ID scanners) targeting licensed premises on rates of alcohol-

related emergency presentations in Geelong, Victoria. The analysed ED data (triage records and ICD-10 data) include 'detailed descriptions' such as 'whether alcohol was a factor in the reason for admission' (2011: 548), although no further information is provided to support this crucial, if casual, attribution of causality (e.g. who determines 'whether alcohol was a factor' and on what basis?). The article reports that 49% of ED presentations for alcohol-related injury concerned those aged 15-34 years and 68.9% involved males, but does not revisit gender (or age) in the analysis. It concludes that there 'appears to be little effect from community-based intervention on alcohol-related injury presentations at the ED' (2011: 552). Towards the end of the discussion section, the article acknowledges that further research is needed to examine potential confounding effects and cites Watt *et al.* (2004) on this point. If we refer back to the Watt *et al.* text, however, we find the following statement:

> the relationship between alcohol and injury appears confounded by usual drinking patterns, risk-taking behaviour and substance use. Therefore, these variables should be *considered in any analysis of the alcohol-injury relationship*, and also *considered when developing public health strategies* to reduce alcohol-related injury. (2004: 1262, emphasis added)

Previous research suggests that all three of the listed confounders – usual drinking patterns, risk-taking behaviour and use of drugs other than alcohol – are heavily gendered (e.g. Australian men drink more heavily and more often than Australian women, and have higher rates of illicit drug use (Australian Institute of Health and Welfare 2017)). Having been mentioned, however, such confounders receive no further attention in the article's discussion.

Another example of the inattention to gendered data when making policy recommendations is provided by Descallar *et al.*, who investigated the 'short-term temporal relationship between [ED] attendances for acute alcohol problems and assaults reported to police' (2011: 549).

This article begins with a brief survey of experimental and quantitative research on alcohol availability, which 'suggests a strong relationship between alcohol consumption and violence' (2011: 549). It does not cite qualitative research on the gendered dynamics of drinking and violence. The article then analyses ED and police assault data for NSW for the years 2003-2008. For those aged 15+ years, 35,912 males and 20,492 females presented at an ED for an acute alcohol problem (most commonly, 'alcohol intoxication'), a male to female ratio of 1.7:1. Among 15-24 year-olds, the figures are almost even: 8,645 males and 8,475 females. However, in the 'persons of interest' figures (i.e. those arrested for assault) for those aged 15-24 years, the male to female ratio rises sharply to 4.3:1 (45,755 males vs 10,749 females).[2]

The article then models the relationship between ED attendances and number of reported assaults. It argues that an extra 100 weekly ED attendances for acute alcohol problems among those aged 15+ years was associated with an 11% increase (approximately 140 incidents) in reported assaults in the same week. This association was similar for both domestic and non-domestic assaults, with a 14% increase or an average of 70 additional persons of interest arrested for assault. When limited to those aged 15-24 years, the increase was 27% (an average of 49 additional persons of interest). Among males aged 15-24 years, the increase was 39% (an average of 57 additional males) and among females 66% (an average of 23 additional females). The larger percentage increase among females seems anomalous, and a rather different picture of male involvement in assault emerges if we investigate further. If the increase in persons of interest for all those aged 15-24 years is 27% or 49 persons, the base number prior to the increase is 181 persons of interest. Among males in the same age group, the base number is 146 persons (because the increase is 39% or 57 additional males) and among females, it is 35 persons (because the increase is 66% or 23 additional females).

Even though the female percentage increase is higher than that for males (66% vs 39%), the ratio of males to females is 2.5:1 (57/23) and the base male:female ratio for those arrested for assaults is 4.2:1 (146/35) or 81% male versus 19% female.

In the discussion, the article acknowledges that using a 'single provisional primary diagnosis field' to 'determine whether a patient visit to an ED was for an acute alcohol problem' means that 'the full impact of alcohol as a factor driving ED attendances will be underestimated particularly for injuries in which alcohol was a risk factor' (2011: 554). As the male:female ratios noted above suggest, the 'full impact' of male gender as a factor driving assaults is also severely underestimated. The article concludes by noting that the results are 'consistent with the findings of other studies that show a link between alcohol and violence over time' and 'provide further evidence of the impact of alcohol consumption on violence' (2011: 555). It also notes the impact of 'excessive alcohol consumption, particularly among young men *and* women', on limited health and police resources, and argues that restrictions on late-night trading, if properly enforced, 'provide an effective policy instrument for reducing alcohol-related violence' (2011: 555, emphasis added). In doing so, it reinforces the causal role of alcohol in violence and ignores the vastly disproportionate involvement of men and masculinities evident in the arrest data.

A study on the effects of alcohol outlets, sales and trading hours on alcohol-related injury presentations at Perth EDs performs a similar action, despite acknowledging that young men are significantly over-represented in the data (Hobday *et al.* 2015). In presenting the kinds of scenarios that may promote alcohol-related violence (analysed as 'proximity' and 'amenity' effects), the gender-neutral categories of 'intoxicated people' and 'on-premise drinkers' are used:

> clusters of outlets […] act as 'attractors of trouble' and facilitate large crowds of intoxicated people walking on the streets and moving between outlets. […] on-premise drinkers remain at venues for extended periods, becoming more intoxicated over the course of the evening and thereby increasing the likelihood of violence.
>
> (Hobday *et al.* 2015: 1906)

The article recommends limitations on the granting of liquor licences and extended trading hours, reducing the size and capacity of off-premises outlets, and reducing the density and geographical proximity of on-premises outlets. Men and masculinities are erased from the discussion of measures to reduce violence.

Our final example of the disconnection between gendered data and gender-neutral recommendations is provided by Miller *et al.* (2012). The article's aim is to gauge the long-term effects of 3am 'lockouts' on alcohol-related ED presentations in Ballarat. After defining aggression and violence as a 'major public health issue', it (2012: 370) notes that:

> Widespread community acceptance of alcohol-related antisocial behaviour, and even alcohol-related violence, may be accentuated in regional areas, due to significant sections of the community regarding these behaviours as 'fun' or 'masculine'.

The article then reports that 69.4% of ED presentations in Ballarat are male, with the figure being even higher in a control site, Geelong (81.3%). It concludes that the lockout strategy had no 'discernible long-term impact' on alcohol-related ED presentations, with an initial drop in attendances being followed by an increase. The opening insight is not returned to: that masculinity plays a key role in antisocial behaviour and violence.

Rendering gender invisible

A third type of gendering practice in alcohol and violence research concerns method: in these cases, gender is rendered invisible by methodological considerations. For example, Williams *et al.* (2011) adopted a case-crossover approach in their analysis of alcohol consumption and acute injury risk in six Sydney EDs. This decision is justified on the basis of previous research suggesting that a case-crossover design, in which 'each case [i.e. each participant] is its own control', can provide 'perfect matching on person-specific variables that are relatively stable' (Williams *et al.* 2011: 345). This design allows the study to 'control for short-term time invariant potential confounders (e.g. smoking, age, sex, socioeconomic status)' in each case.

Unlike many of the studies reviewed above, which analyse data collected by ED staff, the reported research involved a survey of ED attendees and analysed data drawn from this convenience sample (n = 1,599, response rate = 64.2%, sample = 62.4% male). Participants were asked a series of questions about their drinking six hours, 24 hours, 48 hours and seven days prior to their injury. A series of results are reported by gender:

- Men were nearly twice as likely to be drinking in the six hours before the injury than women (20.2% vs 12.3%)
- Nearly three times as many men drank at (NHMRC-defined) risky levels (men: 61-100g of alcohol, women: 41-60g) on a weekly basis than women (12.5% vs 4.1%)
- Three times as many men drank at both high-risk levels (Level 1: men = 110g, women = 70g; Level 2: men = 280g, women = 140g) than women (Level 1: 7.8% vs 2.7%; Level 2: 8.5% vs 3.3%)
- Almost four times as many men were drinking 91g or more of alcohol than women six hours before the injury (6.5% vs 1.8%)

- There was no difference in injury risk between men and women drinking at high risk levels (men OR: 1.88, 95% CI; women OR: 1.89, 95% CI)

There is no comparison of injury rates for men versus women, and therefore the gendered implications of the data are not drawn out. If men and women have similar rates of injury following heavy drinking, but men drink heavily at four times the rate of women, then men's rate of injury will be four times higher than that of women. The gendering of drinking practices and harm is rendered invisible in the analysis by the case-crossover design.

Even though the article notes that 'higher levels [of alcohol were] consumed when men were present [in a group] and generally much less […] in all female groups', the logic of invisibility is continued in the discussion. Here, the agency of alcohol is again emphasised in the form of a dose-response relationship: 'risk of injury increases monotonically with increasing the amount of alcohol consumption' (Williams *et al.* 2011: 351). Gender does make a brief reappearance in the policy recommendations at the end of the article. Alongside 'increased warnings' that alcohol increases the risk of injury, 'younger people' and 'men especially' should be 'particularly targeted in any community awareness and public health initiatives' (Williams *et al.* 2011: 352; see also Indig *et al.* 2010). Men should also be targeted for brief interventions in EDs. The article then returns to familiar ground by advocating generic strategies such as restrictions on alcohol sales, tighter legislation, and warning labels featuring increased emphasis on the number of standard drinks and additional information on the risks associated with alcohol consumption, including the risk of injury.

Our second example of the ways in which methodological considerations shape the treatment of gender is found in Whitlam *et al.* (2016). The aim of the study was to 'evaluate the precision of readily available administrative emergency department (ED) data in public

health surveillance of acute alcohol harms' (Whitlam *et al.* 2016: 693) – that is, to develop ways of distinguishing 'chronic' forms of alcohol-related harm (e.g. withdrawal) from 'acute' forms (e.g. injuries from alcohol-related assaults) in order to develop more accurate assessments of the extent of harm from 'binge drinking'. The article does this by examining ED surveillance data from NSW for 2014. The article notes that 64% of all ED presentations coded as alcohol-related (i.e. both chronic and acute) are male. But 'sex' is then removed from the analysis of the predictors of acute alcohol-related harm 'as it met the 0.15% significance level for exclusion' (Whitlam *et al.* 2016: 696). In other words, because men are heavily implicated in *both* acute and chronic forms of alcohol-related harm (being 1.5 times more likely to experience acute forms of alcohol-related harm and 1.8 times more likely to experience chronic forms), gender cannot be used to distinguish one from the other (for a similar methodological move, see Liang *et al.* 2016). In this way, the relationship between acute (as well as chronic) alcohol-related harm and men/masculinities is made invisible. This invisibility continues in the conclusion where the article argues that improved and more accurate identification of acute alcohol-related harms at the population level, such as that provided in the analysis, can inform future policy development and program evaluation.

Addressing gender

Two of the selected Australian ED texts address gender in their research practices, both in their data and in policy recommendations. These texts suggest promising directions for improved quantitative analyses of gender and both are authored by a group of Queensland researchers. The first article (Vallmuur *et al.* 2013) compares three methods for identifying alcohol involvement in injury-related ED presentation data for 12-24 year-olds: (1) using discharge codes, (2) mining triage text and (3) using alcohol attributable fractions. Across all three methods, '18 to 24-year olds, females, and indigenous youth generally had the highest

estimated alcohol involvement compared with their counterparts' (Vallmuur *et al.* 2013: 523). However, other crucial gender differences also emerge, particularly in relation to alcohol-related violence. Using the second method – mining triage text – the article reports that 'males were 3.7 times more likely than females to have alcohol involvement documented in triage text alone' (2013: 523). This method also produces significantly higher proportions of alcohol-involved Indigenous patients as well as those presenting on a weekend or between midnight and 5am. A possible explanation for these findings is offered in their discussion:

> Cases identified [by text only] have presented with injuries other than intoxication alone, and it is likely that this finding reflects more aggressive or risky acts among these groups when intoxicated or other social risk factors not identified in this data set. (Vallmuur *et al.* 2013: 525)

The article also offers an explanation for the higher proportion of females assigned 'alcohol intoxication codes' on discharge from EDs (4.9% of females versus 1.7% of males):

> This suggests that females are more likely than males to present solely for assessment and management of intoxication and may reflect community concerns around personal safety for young women when profoundly intoxicated. (Vallmuur *et al.* 2013: 525)

The article does not draw out fully the gendered implications of these findings. We might conclude that young men are more likely to visit EDs following participation in alcohol-related violence or 'risky acts' and young women are more likely to visit EDs when intoxicated because of concerns (either their own or that of friends) about physical or sexual assault by men. In both cases, we see the stark effects of the relationship between gender, alcohol and violence.

The second article by the Queensland research group analyses a different ED dataset (Hides *et al.* 2015). Unlike many of the other studies analysed here, the article is specifically

interested in adolescents (12-17 years) and young adults (18-24 years). In its literature review, the article notes previous research suggesting that young people, and particularly young males, 'account for the majority of alcohol-related ED injury' (Hides *et al.* 2015: 178). As a consequence, age and gender, along with day, time, location of injury, and injury type and severity, are key variables in the analysis. The article reports that, overall, young men are almost twice as likely as young women to present with an alcohol-related injury (3099 male to 1568 female cases or 66% vs 34%), with the male to female ratio rising to 2.3:1 in the young adult age range (2474 male to 1062 female cases or 70% vs 30%). The article also notes that 'the proportions of alcohol-related ED presentations recorded among males and females appear to diverge at age 16, with a steep rise in the number of male presentations' (Hides *et al.* 2015: 180). Females were more likely to be injured at home (39.2%) whereas the most common location for male injury was public spaces (27.8%). The most common form of alcohol-related injury among young people was 'alcohol-related violence' (44%), which is defined as 'cases of interpersonal (physical assault, sexual assault and drink spiking) and non interpersonal (striking an object and aggressive behaviour) violence' (Hides *et al.* 2015: 179). Here, again, the much higher involvement of males compared to females is noted: 75% vs 25% (for all cases of alcohol-related violence among those aged 12-24 years) rising to 77% vs 23% for 18-24 year olds. With the exception of injuries due to alcohol-related self-harm (1:1.86) and alcohol intoxication (1:1.17), the male:female ratios for other types of alcohol-related injury range from 1.86:1 (alcohol-related falls) through 2.70:1 (road traffic accidents) to 3.35:1 (other alcohol-related injury).

The discussion section of the article continues to highlight the importance of gender when it summarises some of the main findings. Furthermore, although the analysed ED data do not 'consistently distinguish […] between perpetrator and victim in the majority of cases', the

‘Australian [National Drug Strategy Household Survey] reports that males aged 14+ years exhibit a higher rate of perpetrating both verbal and physical abuse while under the influence of alcohol compared to females’ (Hides *et al.* 2015: 182). Female gender is also addressed in that alcohol intoxication and alcohol-related ‘deliberate self-harm’ were ‘more common in adolescents and females’. These results ‘may reflect higher levels of alcohol intoxication, psychological distress and disinhibition among less experienced and adolescent drinkers’ as well as greater physiological susceptibility of females to the ‘effects of excessive drinking’ (Hides *et al.* 2015: 182).

The article’s recommendations suggest further research on the effectiveness of brief interventions tailored to gender: those addressing ‘alcohol-related violence and risk-taking behaviour in young adults, *particularly males*’, and those addressing ‘underage drinking, alcohol intoxication and alcohol-related [deliberate self-harm] in adolescents and *females*’ (Hides *et al.* 2015: 183, emphasis added). Finally, there is a call for a ‘combined strategy’ that includes ‘population controls’ and ‘behavioural and environmental strategies in entertainment areas’ (Hides *et al.* 2015: 183).

The article highlights gendered patterns of alcohol-related harm throughout and concludes with a call for research on gendered brief interventions, which is consistent with the study’s findings. Although brief interventions invariably address the victims of assault rather than its perpetrators, and the article tends to reinforce the causal role of alcohol and emphasise female physiological susceptibility (Dwyer and Fraser 2017, Keane 2017), the study makes a meaningful attempt to consider gender within the constraints of its method and data.

Conclusion

In this article, we focused on the treatment of gender, alcohol and violence in Australian research on 'alcohol-related presentations' to EDs, analysing the specific research practices of this recognised subtype of research because of its prominence in policy debates. We identified four types of practice through which research genders 'alcohol-related presentations'. In the first set of research practices, gender is omitted from consideration (or mentioned only briefly), alcohol is foregrounded as a substantial 'single cause' of ED presentations or gender is alluded to in the introductory section of an article but considered no further. In the second set of research practices, by far the largest, gendered data of varying types are presented in the results sections of articles but invariably overlooked in policy recommendations that emphasise brief interventions and generic measures to reduce alcohol availability. The category of 'alcohol-related presentations', often defined by the mere presence of alcohol (even among third parties), erases the disparate forces and elements (or 'potential confounders') involved in injury and violence, or data are presented in ways that highlight alcohol's causal role and exclude male gender. The third set of research practices gendering 'alcohol-related presentations' involves methodological considerations that remove gender (cast as 'sex') from cross-over 'cases', treats gender inconsistently or sets aside gender because it cannot distinguish between acute and chronic forms of alcohol-related harm. In the final set of research practices, more promising directions for analysing alcohol, gender and violence are visible. In the first article, gendered data are presented (although their implications could be more fully drawn out) and, in the second, there is a meaningful attempt to consider gender even as it reproduces assumptions about the value of brief interventions addressing assault victims, the causal role of alcohol and female physiological susceptibility.

Normative understandings of alcohol and its effects, and of the operations of gender in social arrangements, can be said to co-construct ED research practices and their conclusions. Drawing on Bacchi's (2017) analysis of 'gendering practices' in policy, we have argued that ED studies on alcohol-related presentations create gendered subject positions, problems and objects. They do this in two distinct ways: by obscuring gender differences via the production of a generic norm or by constituting 'women' and 'men' in terms of differences. The first three types of gendering practice do not simply overlook evidence of gender differences as a variable in ED data: they variously privilege alcohol as a causal agent, and diminish the disproportionate involvement of men and masculinities in ED presentations, violence and assault as an inevitable, acceptable and even banal side-effect of men's risk-taking behaviours. Thus, a process that appears to be degendering paradoxically reproduces gendered norms and assumptions about alcohol use – the alcohol/masculinities/violence nexus is all but naturalised, and men are treated as homogeneous and unchangeable, as not the proper targets of specialised research attention. These gendering practices do not operate primarily through the explicit identification of gender categories such as men and women, masculinity and femininity, but the fourth type of gendering practice constitutes 'women' and 'men' in terms of differences. It addresses evident gender differences in ED presentation data and makes recommendations accordingly. However, in calling forth interventions that address men and women in terms of risk and vulnerability, respectively, such practices also reproduce normative assumptions about men and women, masculinity and femininity (as either biological sex or social role). In these ways, ED research works directly to constitute specific problems, and these specific problems iterate particular realities of gender, alcohol and violence. They single out and reinforce the causal role of alcohol by overlooking the agency of other elements and forces – in the case highlighted here, men and masculinities – in drinking events involving violence and injury. Even if we were to put aside our

sociological reservations and accept the main premise of many of these articles – that alcohol plays a causal role in ED presentations – the data presented on the greater involvement of men would, at the very least, suggest that they be singled out for concerted policy attention.

Sociological research has consistently highlighted the relationships between violence, masculinities, alcohol, social practices, forms of cultural capital and socioeconomic disadvantage. In light of this, ED research needs to re-think its gendering assumptions, research questions, methods and conclusions. As Walby and Towers (2017: 12) have argued in their critique of UK surveys on violence, a better 'methodology to assess the distribution of violence including its multiple gender dimensions' is required. There are valuable starting points for such a methodology in the two articles that do address gender (Hides *et al.* 2015, Vallmuur *et al.* 2013). In turn, the research realities produced by ED research influence, and are reproduced in, policy and legislative realities. The imperative for policy debate would therefore seem to be to 'probe the assumptions that result in gendered inequities' (Hearn and McKie 2008: 83) and to address configurations of masculinity through health promotion, law reform, education and initiatives focused on licensed environments, and in broader efforts to address socioeconomic disadvantage. Research and policy constitute realities, including social realities of gender (Hearn and McKie 2008). At present the realities being constituted in ED studies, and in the policy informed by them, naturalise men and masculinities as a stable and background feature of alcohol-related injury and violence.

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Notes

1. The issues we identify in this and the next section are also evident in Australian studies reporting the experiences of ED staff when dealing with 'alcohol-affected' patients and/or their families and visitors (e.g. Egerton-Warburton *et al.* 2014, Egerton-Warburton *et al.* 2016, Gilchrist *et al.* 2011).
2. This male to female ratio is consistent with other Australian statistics on violence (e.g., Australian Bureau of Statistics 2013, 2017).

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