House of Representatives Standing Committee on Social Policy and Legal Affairs

Inquiry into Fetal Alcohol Spectrum Disorders

Dr Colleen O'Leary
Centre for Population Health Research, Curtin Health Innovation Research Institute, Curtin University and Division of Population Sciences, Telethon Institute for Child Health Research

This submission to the House of Representatives Standing Committee on Social Policy and Legal Affairs into Fetal Alcohol Spectrum Disorders (FASD) specifically addresses the first terms of reference for the inquiry, 'prevention strategies'.

Prevalence of alcohol consumption and risky drinking by Australian Women

The societal tolerance of alcohol use in Australia has led to the perception that there is a relatively low rate of harm from prenatal alcohol exposure and a false sense of security about the risks from consuming alcohol during pregnancy. The majority of Australians consume alcohol and over recent years, there has been a steady increase in the percentage of Australian women drinking alcohol at levels that place themselves and their unborn babies at significant risk. In the 2010 National Drug Strategy Household Survey[1], 16.6% of Australians reported periodically drinking at levels that place them at risk of short- and long-term harm, which increased from 13% in 2004-05 and 8.2% in 1995. The highest rate of risky drinking and binge drinking for women is during the childbearing years; 17% to 20% of 18-29 year olds and 12% of 30-49 year olds.[1] Between 19% to 28% of 18-29 year olds engage in binge drinking sessions (defined as 5+ standard drinks/occasion for women) on a weekly basis. For 30-39 year old women, 13% binge drink on a monthly basis and 8% participate in weekly binge drinking. Although a higher percentage of Aboriginals abstain from alcohol (27%) than in the non-Aboriginal community (19%), Aboriginals are 1.5 times as likely to binge drink weekly and to drink at risky levels of doing long-term harm, than non-Aboriginals.

The societal tolerance of drinking in Australia has carried through to acceptance of drinking during pregnancy with around 50%-60% of Australian women consuming alcohol during pregnancy.[2-5] Of particular concern is the high percentage of women reporting that they were binge drinking during pregnancy, with figures ranging from 4%-20%[2, 3, 5] for non-Aboriginal pregnant women, and 22% of Aboriginal women[6].

However, around 50% of pregnancies are unplanned so with the high prevalence of drinking and binge drinking by women of childbearing age, alcohol consumption will endanger babies prior to pregnancy awareness and many will be exposed to heavy levels of alcohol.

Fetal Alcohol Spectrum Disorders

Prenatal alcohol exposure can result in a range of fetal alcohol effects that are classified within the umbrella term Fetal Alcohol Spectrum Disorders (FASD) and include Fetal Alcohol Syndrome (FAS), birth defects, and a range of alcohol-related neurodevelopmental disorders such as intellectual disability, mental health problems, social and behaviour problems.[7] Estimates of the prevalence of FASD vary depending upon the method of ascertainment, the population, and country.[8]

A major gap in our knowledge is the lack of population-based estimates of the prevalence of the broader Fetal Alcohol Spectrum Disorders (FASD), in particular Alcohol-Related Neurodevelopmental Disorder, where the characteristic FAS Facial Features are absent.

There are a number of issues in Australia that contribute to this lack of prevalence data for FAS and the broader FASD.

(i) Diagnosis of FAS is difficult.

(ii) There is a lack of recognition of FAS by health professionals; A Western Australian survey of health professionals only 16% know all the diagnostic features of FAS and only 7% had diagnosed a child with FAS[9];

(iii) There is limited diagnostic capacity for FAS and no centralized diagnostic clinic in Western Australia;

(iv) There is a lack of recognition in the health care setting of:

- the prevalence of risky drinking by women of childbearing age;
- the high rate of unplanned pregnancies;
- maternal alcohol consumption during pregnancy;

and there is a lack of routinely implemented strategies to deal with these issues in the health care setting.

The primary focus of this submission relates to the items contained within point (iv) and prevention of prenatal alcohol exposure.

Prevention of prenatal alcohol exposure

An important strategy to reduce prenatal alcohol exposure is to address risky drinking in women of childbearing age. Women of childbearing age and pregnant women are not routinely asked by health professionals about their alcohol consumption.[10] Importantly, if they are asked about their drinking, the data are not routinely collected and stored for analysis to enable health professionals to identify the level of alcohol exposure to the baby during pregnancy. This has a number of implications for health professionals and raises the important the issue of FASD. Preconception or early pregnancy health checks provide opportunities for (i) prevention of prenatal alcohol exposure through reducing risky drinking in women of childbearing age; (ii) prevention of unplanned pregnancy in non-pregnant women who choose to continue drinking heavily;[11] (iii) providing information to the mother on the risks to the fetus and moderating alcohol consumption during pregnancy; (iv) identifying women drinking at risky levels during pregnancy; and (v) early identification of children prenatally exposed to heavy levels of alcohol who should be monitored for symptoms of FASD over time. Identification of women drinking at risky levels before and during pregnancy provides unique opportunities to implement interventions that will assist the woman to stop or reduce her drinking, when ceasing is not an immediate option, and protect her unborn child.

When a child entering the school system at 4-6 years of age is identified with developmental problems (such as cognitive impairment or behaviour problems) it is difficult for the health professionals and the teachers to attribute these problems to prenatal alcohol exposure in the absence of confirmed maternal alcohol use during pregnancy and in the absence of the characteristic FAS facial features. It is important to recognize that not all children exposed prenatally to alcohol, even at heavy levels, will show obvious symptoms of harm or be harmed to the same degree.[12] However, even if the child is not harmed prenatally by their mother's alcohol-use they may be at-risk of physical or emotional injury during childhood if the mother is drinking heavily. Children of mothers with an alcohol-use disorder are exposed to several interacting risk factors that stem from the family environment and increase the risk of adverse health outcomes including cognitive, behavioural, and psychosocial problems, poor educational achievements.

Prevention strategies

- Early identification of risky drinking by women of childbearing age should be a health priority.
- Women of childbearing age should be asked about their alcohol consumption by health professionals at the time of hospital admissions (data would be available for future admissions and for research) and GP visits.
- Information should be recorded on all pregnant women concerning their alcohol consumption during pregnancy.
    - This information should be routinely collected using a standardized questionnaire at the first antenatal visit ; the Audit-C has been recommended in the Western Australian FASD Model of Care.[13] Collection of this information by the Midwives Notification System, a statutory notification system, would ensure the data were available for future reference by clinicians and for researchers to monitor the proportion of pregnant women being asked about their alcohol consumption, to evaluate the impact of prevention strategies on the prevalence of women drinking alcohol during pregnancy, and to assess the prevalence of some of the fetal effects.
- Women identified as drinking heavily should be provided with a brief intervention strategy that addresses their heavy alcohol use; women who are not pregnant and who are drinking at risky levels should also be provided with advice on prevention of unplanned pregnancy.
    - Women who have trouble reducing or ceasing their alcohol consumption should be offered appropriate treatment and support.
    - Ideally, midwives would provide extra follow-up and support for pregnant women with an alcohol-use disorder and child and community health nurses would follow-up the mothers and their child after the birth. Where indicated, the children should be followed-up by a paediatrician.

Alcohol labelling

Dissemination of the NHMRC policy recommending that abstaining from alcohol is the safest choice for pregnant women is an essential first step in helping women to make informed choices about drinking during pregnancy. Placing warning labels on alcoholic beverages advising women not to drink would greatly assist in dissemination of this message,

provided the size and placement of the label makes it easily visible. The logo depicting a pregnant woman with a glass in her hand a line through the image is used on bottles of Australian wine served on international flights. However, the logo was placed at the back of the bottle, surrounded by logos for the airline and standard drinks advice that were 2-3 times as large as the 0.5 cm alcohol and pregnancy warning. While this logo is on Australian wines served on international flights from Europe to Australia, it does not appear to be used on Australian wines served on domestic flights or in wines sold on the domestic market.

Alcohol and pregnancy warning labels should be clearly visible and should be of the same magnitude and positioning as cigarette warning labels, so that they are visible when opening the beverage.

Comments on Alcohol Industry Submissions

There are a number of comments from submissions to the Committee by alcohol industry organisations about Australian research that I would like to address.

- Distilled Spirits Industry Council of Australia; Submission No 32; page 3 points F, G, H.

These points discuss the lack of evidence about the risk to the fetus from exposure to low levels of alcohol and reference the Drug and Alcohol review by myself and Professor Bower.[14] However, they neglect to acknowledge the evidence we presented in the review that 3-4 standard drinks, equivalent to around 2 to 2.5 serves of wine, once or twice per week increases the risk of neurodevelopmental problems. Although defined in the study as moderate drinking during pregnancy,[15] this level of drinking is relatively low by community standards today.

The submission suggests that it is somehow alarmist and simplistic to provide advice to women that abstinence from alcohol during pregnancy is the safest choice. Although there is some evidence about stress and anxiety stemming from the abstinence message, to date this has been limited to anecdotal reports. We highlight in the Drug and Alcohol Review that health professionals need to handle the abstinence message in a rational and balanced manner in order to avoid undue stress and anxiety in women who have consumed alcohol prior to pregnancy awareness. However, we conclude that since the current evidence indicates a relatively low threshold for risk to the fetus, it would be morally and ethically unacceptable for policies not to recommend to abstinence during pregnancy. Alcohol is a risk factor for

fetal development and the public health message should recommend abstinence, as is the case for other fetal risk factors such as tobacco and listeria.

- Submissions from the Australian Alcoholic Beverage Industries and Australian Wine Research Institute.

These two submissions have drawn conclusions from Western Australian research that misconstrue the published data. One submission was from the Australian Alcoholic Beverage Industries: Page 24: *"Despite medical advice to abstain from alcohol, in a recent study of alcohol consumption during pregnancy.."*; and the other was the submission from the Australian Wine Research Institute which also referenced the percentage of Western Australian women in the study drinking during first trimester and then stated: *"This was despite receiving advice to abstain"* (page 8).

These conclusions cannot be drawn from that study because the women in the Western Australian study were not asked whether or not they had been advised to abstain from alcohol during pregnancy. It should be recognized that although the manuscript was published in 2007, the study recruited women who had delivered a baby between 1995 and mid-1997 when there was little awareness of alcohol and pregnancy and FASD in the community.[2] A Western Australian survey in 2002/03 found health professional lacked knowledge about FAS and the majority did not routinely advise pregnant women about alcohol and pregnancy.[10] Therefore, it cannot be assumed that the women in the Western Australian study had been advised about alcohol and pregnancy.

Alcohol Advertising

Australian attitudes to alcohol use are influenced by media advertising and representation of sporting heroes consuming alcoholic beverages, including to excess. Restriction of alcohol advertising to 9:30pm or later is supported by over 70% of Australians surveyed for the 2010 National Drug strategy Household Survey.[1] This measure would reduce the amount of exposure young children have to alcohol advertisements and should be implemented.

The recent attempts by the Australian government to discourage alcohol advertising in sport are to be commended but considerably more effort needs to be undertaken. I am aware of two examples of alcohol consumption by Australian athletes that received media attention at the London Olympics. The most prominent media story described the young Australian

rower who drank to intoxication while in his Australian uniform and then proceeded to damage private property. The second event occurred after the medal ceremony when three young Australian women won Olympic silver medals in sailing. The women were shown on television each drinking directly from a large bottle of champagne while still in their Australian uniforms. Irrespective of how much alcohol they consumed, this gives a subtle message that consuming alcohol is 'the' way to celebrate success. These athletes act as role models for young Australians and athletes televised drinking alcohol or drunk while in their Australian uniform clearly links success in sport with alcohol consumption. One strategy which should be considered is banning alcohol use by athletes representing Australia when wearing their Australian uniform.

Western Australian data linkage research on mothers with an alcohol-related diagnosis

One of the gaps in the Standing Committee's terms of reference for the inquiry relates to developing the research evidence about the risk to the fetus from alcohol and pregnancy and more generally the impact on children through their early years, from the environmental risk factors stemming from maternal alcohol misuse.

One of my current research projects is a study examining the health and social outcomes for children of mothers with an alcohol-use disorder. All mothers in Western Australia who have a birth recorded on the Midwives Notification System (1983-2007) and who have an alcohol-related diagnosis, a proxy for heavy alcohol consumption, recorded on health, mental health, and Perth-based drug and alcohol service datasets have been identified.

The aim of this study is to examine the effect of maternal alcohol-use disorder on their children. We are currently examining the health outcomes for the children but we have also linked the children's data with education, justice, and child protection data.

These studies are giving an estimate of the impact maternal alcohol-use disorders on their children. We have published papers on the risk of cerebral palsy[16] and stillbirth[3] and currently have several more papers under review that demonstrate the risk of infant mortality and sudden infant death syndrome, intellectual disability, and birth defects and examine alcohol-use disorders during pregnancy.

The study on cerebral palsy provides an example of the post-natal risk to children of mothers with an alcohol diagnosis.[17] A key finding of this work was the finding that maternal alcohol diagnosis recorded during pregnancy was associated with increased the risk of pre/perinatally acquired cerebral palsy and there was increased risk of post-neonatally acquired cerebral palsy in non-Aboriginal children whose mothers had an alcohol diagnosis recorded in the year after pregnancy. These results indicate that the increased risk from maternal alcohol-use disorder is not confined to prenatal alcohol exposure but also occurs from environmental risk factors associated with maternal alcohol-use disorder during childhood.

In general, our studies indicate that although there has been an increase in the proportion of women with an alcohol diagnosis during pregnancy since 1983, there is significant under-recognition of alcohol-use disorders during pregnancy in Western Australia. Implementing strategies to identify alcohol consumption by pregnant women needs to be a primary focus of FASD prevention strategies.

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