Original Article

Alcohol and breastfeeding: what do Australian mothers know?

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Background: Drinking alcohol during pregnancy can cause many birth defects and developmental disabilities. There is considerable information available for pregnant women regarding the dangers of drinking alcohol during this time. Postpartum many women enter the period of lactation, which can last for several months to years. However information regarding safe levels of alcohol consumption during lactation is limited despite potential harmful effects on infant development and maternal lactational performance.
Methods: A descriptive study using qualitative methods. Data was collected in focus groups interviews conducted from February 2004 to December 2005. Women eligible to participate in the focus groups were currently breastfeeding or had been breastfeeding within the previous 12 months.
Results: Seventeen women aged 28 to 41 years participated in postpartum focus groups. The mothers were largely unaware of the effects of alcohol on breastfeeding performance and the development of the infant. The majority of the women in the focus groups expressed concern at the lack of information available regarding 'safe' alcohol consumption practices during lactation and reported being more diligent during pregnancy with regard to abstaining from alcohol.
Conclusion: There is a variable level of knowledge regarding consuming alcohol and breastfeeding among Australian mothers. The majority of participants were aware of the recommendations regarding alcohol during pregnancy and felt that a similar level of information was required to provide direction and support during lactation.

Key Words: breastfeeding, lactation, alcohol, knowledge, attitudes

Introduction

Alcohol consumed by a lactating mother enters the breastmilk within 30 to 60 minutes after ingestion and depending on the amount consumed, may have detrimental effects on the infant.[1] In a review of the literature a deficit in motor development, reduced lactational performance and disrupted sleep-wake behavioural patterning of the infant are reported at intakes of two standard drinks per day (one Australian standard drink is equivalent to 10g [12.5ml] alcohol).[2] Despite these adverse health effects, available information on the postpartum effect of alcohol in the breastmilk on the developing human infant is limited.

In contrast the potential adverse effects of alcohol consumption on the developing foetus have been well documented.[3] Many studies report a reduced maternal alcohol intake during pregnancy and a return to prepregnancy levels, or at least higher intakes than during pregnancy, shortly following birth.[4-6] Research shows that in some instances physicians, nurses and lactation consultants advocate an increase in alcohol intake by breastfeeding mothers.[7]

Current Australian research shows that the majority of women limit or completely restrict alcohol intake during lactation. In the 2001 National Health Survey approximately 47% of lactating mothers reported any alcohol consumption in the previous week and most often this was two standard drinks.[8] Determining the factors that influence the alcohol consumption behaviours of lactating women is important in developing initiatives aimed at supporting safe drinking practices and continued breastfeeding.[9] The objective of this research was to investigate the level of understanding that Australian women have regarding the relationship between alcohol and lactation.

Methods

A descriptive study using qualitative methods was conducted in the Perth metropolitan area of Western Australia between February 2004 and December 2005.[10] Data was gathered through focus group discussions. Women eligible to participate were currently breastfeeding or had been breastfeeding within the previous 12 months.

Data collection

Participants were recruited from women attending a private antenatal clinic and private hospital postnatal physiotherapy program. Child Health Nurses (CHN) located in the northeastern corridor of the Perth metropolitan area; and lactation consultants, and midwives attending Perth's major maternity hospital, distributed information about the study to eligible clients. All participants self-selected to attend a focus group and informed consent was obtained from participants prior to their involvement.

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The chief investigator moderated three focus groups using open-ended questions, derived from previous research findings, to help structure the discussion.[2] The questions related to general breastfeeding, 'being a new mother' experiences, and alcohol and breastfeeding (see example questions in Box 1). Whilst the focus group schedule of questions guided the discussion, the moderator allowed for the development of emergent themes from the current focus group to be discussed and investigated during subsequent focus groups.

Data analysis

All focus group and interview data were transcribed verbatim immediately following the discussions. Qualitative content analysis[11] was applied to systematically summarise recurring themes.

Results

Of the 17 participating women, all of them were married, Caucasian and ranged in age from 28 to 40 years. The majority of the women had completed a university degree and were currently working part-time. None of the women had returned to full-time employment. Fifteen of the women were primiparous and all of the women had breastfed their most recent child.

Focus groups results are presented thematically with direct quotations recorded in *italics*.

HAVE YOU HEARD OF ANY FOODS THAT PROMOTE BREASTMILK PRODUCTION?

Initially the majority of participants responded that they had not heard of anything specific with the exception of consuming water. However, in all groups at least one woman had heard that alcoholic beverages, in particular stout, could increase breastmilk production. Some of the mothers then concurred but were unable to explain how the potential increase in breastmilk would occur. For some women, family and friends had been the source of this information.

Two women had tried to increase their breastmilk production by drinking stout. These women were unable to confirm how successful consuming stout had been in increasing their breastmilk supply.

'It certainly made me feel better and I felt it did help my breastmilk. It definitely made me feel better.'

'My aunty turned up with a 6 pack for me!'

WHAT IS YOUR OPINION OF ALCOHOL AND BREASTFEEDING?

Some women consumed wine and did this at the evening meal or after the last breastfeed for the evening. Several women expressed that initially when they first commenced breastfeeding they would rarely drink, but as the child matured and they breastfed less they tended to consume more alcohol and on a more regular basis. Some women indicated they did not consume spirits due to the higher alcohol content.

There was a general consensus from the women that they had been more diligent in abstaining from alcohol throughout their pregnancy due to the perception that there was more chance of the alcohol 'getting into the baby's system' than when breastfeeding. In addition, mothers expressed that due to their abstinence during pregnancy they felt entitled to recommence drinking alcohol once the baby had been born.

'More conscientious when I was pregnant because of the developing foetus. You have to give it a chance. Once they're out you can breastfeed them.'

'You spend all that time when you are pregnant trying not to drink and then when you get to breastfeeding – it can be a year and it's like a YES (now I can drink).'

A few mothers consumed alcohol after a breastfeed to minimise the effect on the baby, however babies are often unpredictable in their sleeping patterns when they are young and in two cases the mothers were then required to feed again.

'I did that very similar thing after a wedding where I'd had a couple of drinks and he woke up and I fed him. He slept for 12 hours and I felt terrible like I'd poisoned him…after that I felt like a terrible person because the alcohol had made him go to sleep. But I can see how it happens.'

'I remember going out to a function when she was 6 weeks old and I fed her before we went. When we got there I had one of the pre-dinner drinks, a half a half a glass – like I picked the smallest one on the tray…20 minutes later she's screaming and I had to feed her. I was feeling dreadful and really berating myself being at a big function not knowing what to do… me being in the audience with a screaming baby and I didn't want to feed her but I didn't know what else to do. So you know things like that did happen.'

HAS ANYONE SOUGHT ADVICE ON CONSUMING ALCOHOL DURING LACTATION?

The majority of women in the focus groups had read that consuming alcohol throughout pregnancy could cause Foetal Alcohol Syndrome (FAS). However they indicated they had been unable to find any information about consuming alcohol whilst breastfeeding and that often the information they did find was conflicting. Some had read books in an effort to research the risks to the infant from consuming alcohol during breastfeeding, and a smaller number had asked their obstetrician, GP, child health nurse, Breastfeeding Australia (a breastfeeding support organisation) or searched the internet.

'I don't think I was actively discouraged even from my obstetrician. I wasn't encouraged but I wasn't discouraged put it that way. He never said I shouldn't have any.'

'I find that there seems to be a degree of acceptance of alcohol during breastfeeding from the GPs. My GP was very lackadaisical about it and I have friends who are GPs who like me have the occasional drink with a meal. I wouldn't say they drink a lot but it does seem to be quite accepted by the medical profession.'

'Technically I don't think you should do it but I did. After the paediatrician had said I should have a couple

of beers I thought right…'

The majority of the participants reported a need to have more information about breastfeeding during lactation readily available in the community, particularly information that was correct.

'I didn't quite realise the direct effect it had on the breastmilk. So I guess lack of education did effect my behaviour with it (alcohol).'

'I guess I wish there was more really good literature and good guidelines. One of my friends says ' a stout a day' is good for the baby and she is a 40 year old midwife!! There is so much misinformation. And I know someone who drinks a full glass of wine and then breastfeeds. We are all doing different things. And I think the guilt is hard to deal with.'

WHAT WOULD BE THE EFFECT OF ALCOHOL ON THE BABY?

Mothers were asked about the perceived effect of alcohol on the infant. Those mothers who had personal experience responded that they thought the baby had been more unsettled, however they were unable to tell if this was just a coincidence or if there were other events (e.g. 'teething') that were causing the baby to be unsettled. The participants also discussed the effect on the mother.

'If I didn't know and then I had to feed her I would just feed her. If she slept longer than she was supposed to then I would feel guilty and probably jump on the internet and find out all the crazy stuff about it but I wouldn't be doing it all the time.'

General thoughts regarding the perceived immediate effect of the alcohol on the baby varied between the effect on sleep and the contentedness of the baby. The baby would sleep better and go to sleep quicker were common responses. The baby would be more irritable or suffer from a 'mini' hangover.

'If they [adults] get a headache from it maybe the baby does as well.'

In the long term some mothers thought that there could be long term developmental problems.

Discussion

There was a range of issues emerging from this qualitative study. Perhaps the most pervasive was that among breastfeeding women generally there is a lack of knowledge on the effect of alcohol on the breastfed infant. Coupled with this was the equal desire for more accurate information to be made available in this area through the usual channels of antenatal care.

It is useful to consider the health promotion Theory of Reasoned Action (TRA) and Theory of Planned Behaviour (TPB)[12, 13] when developing recommendations based on this study and to guide future investigations (see Fig 1). Together these theories explore the relationship between

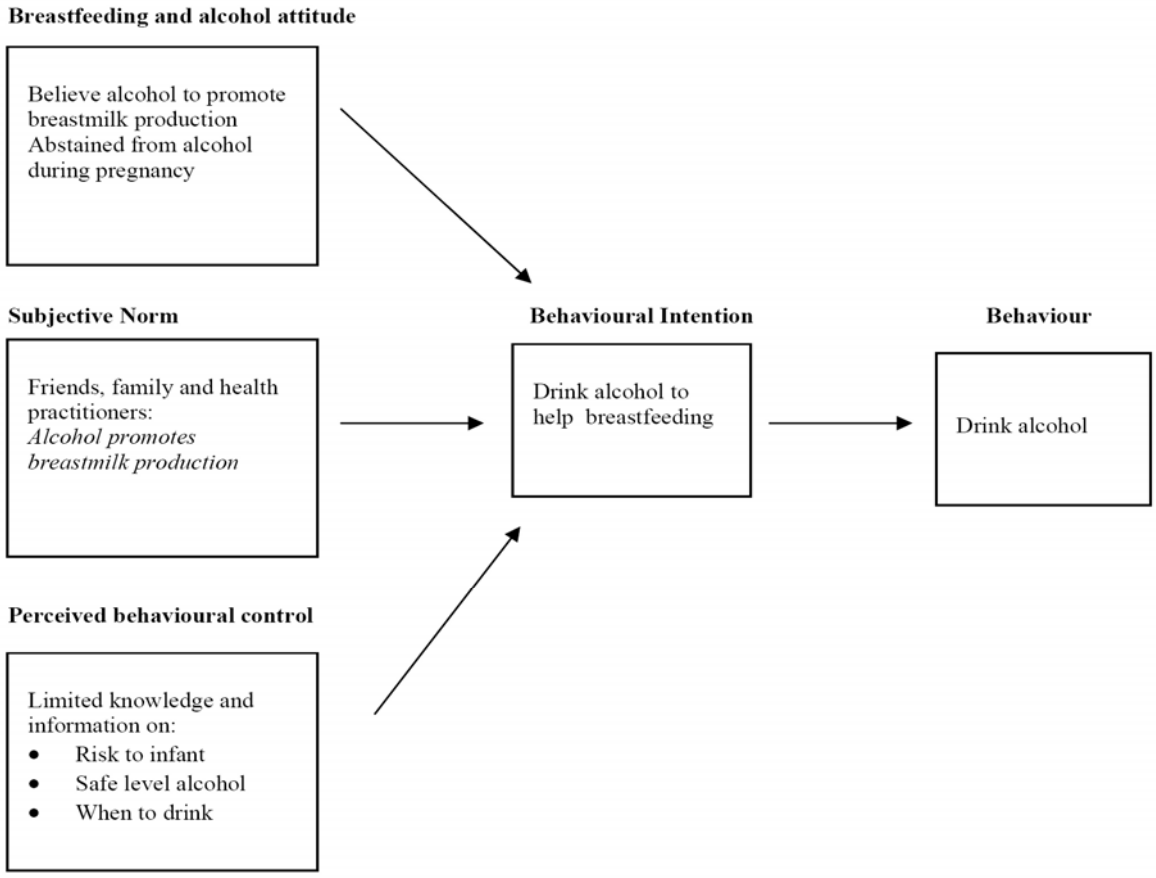

Figure 1. Theory of Planned Alcohol Consumption Behaviour During Lactation

Table 1. An ecological perspective: levels of influence

Concept	Definition/Example
Intrapersonal Level	Individual knowledge, attitudes, beliefs and personality traits.
Interpersonal Level	Interpersonal processes and primary groups. Influence of family, friends and supportive role models.
Community Level	Policies and information that may promote or constrain recommended behaviours. Information from
Institutional Factors	community health nurse, midwife, GP, obstetrician, paediatrician.
Community Factors	Social networks and norms, which exist as formal or informal among individuals, groups, and organizations. E.g. Women or Mother's group.
Public Policy	Local, state and federal policies and laws that regulate or support healthy actions for breastfeeding. A lack of a federal policy and evidence-based guidelines that outlines safe drinking practices for lactating women.

behavior and beliefs, attitudes, and intentions. A person's behavior is determined by her intention to perform the behavior and this intention is, in turn, a function of her attitude toward the behavior and her subjective norms.

In this study the behavioural intention is to drink (or not drink) alcohol during the period of lactation. This decision is influenced by an individual's attitude towards this behavior. If the mother believes that drinking alcohol can promote breastmilk production then she is more likely to drink alcohol during lactation.

In our study the theme that alcohol is a galactagogue can be identified as a behavioural belief of the target group. In this group of women this belief may translate into the attitude that drinking alcohol can increase breastmilk production.

In addition to the individual's attitudes toward the behavior, is the individual's subjective norms, that is their beliefs about how people they care about will view the behavior in question. The concept that alcohol is a galactagogue can also be investigated as a *subjective norm* of friends, family and some health practitioners of the women, and their motivation to comply with those around them.

Finally, perceived behavioral control influences intentions. Perceived behavioral control refers to people's perceptions of their ability to perform a given behavior. The lack of information available to the women regarding the risks of drinking alcohol during lactation will affect the control the mothers have over the behavioural intention. Mothers have the option of abstaining or not abstaining from alcohol, or timing their alcohol intake to minimise the risk to the infant. However, the results from our study suggest that women are not aware of the risks of drinking alcohol to the infant or the options for 'safe' alcohol consumption and this lack of education/information may limit the control (perceived or otherwise) that women have over this behaviour.

However, as not all the women report drinking alcohol to increase breastmilk production, there must be additional factors that prevent this behaviour. It is possible the profuse availability of health information regarding FAS accessed during pregnancy, may still be influencing the abstinent behaviour of these women and influencing their behavioural beliefs. Alternatively, their lack of knowledge about drinking alcohol and the effect on the infant may be inhibiting this behaviour.

Based on this examination, interventions to promote safe alcohol intake during lactation need to dispel the myths about alcohol and breastmilk production, and expose the risks of drinking alcohol during lactation. Educational material that provides direction for safe drinking practices may help promote the initiation of breastfeeding and support continued breastfeeding duration. This information should be widely disseminated to ensure greater public and professional understanding. In this way, an ecological perspective of the consumption of alcohol during lactation needs to be considered when developing education interventions in the future (see Table 1).

This descriptive study employed a variety of methods to recruit a representative sample of women and to elicit their opinions and experiences with respect to drinking alcohol during lactation. Despite this the study was limited in attracting women from the very disadvantaged socioeconomic groups reflecting the 'hard to reach' groups of health promotion. Notwithstanding the overall low number of women and lack of representativeness of the very disadvantaged socioecomic groups in the sample, we did find that many of the ideas were repeatedly expressed in each of the focus group discussions. Given that alcohol intake during and after pregnancy is related to higher social class[14-16] it is possible that the women in this study reflect those women most likely to be consuming alcohol during lactation.

The authors are unaware of any previous qualitative research in this area and further research that examines women's opinions and experiences with alcohol during lactation is needed. Future research that interviews a greater number of breastfeeding mothers, from a greater distribution of socioeconomic backgrounds, several times during the infant's first year will help provide a better understanding of the issues identified in this study. Clear evidence-based guidelines on alcohol consumption during this period need to be developed and disseminated to practitioners so that the advice given to breastfeeding mothers is consistent, realistic and based on research findings.

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Appendix

Example Focus Group Questions

Let's discuss people's initial breastfeeding experiences.
How did most people find their appetite at this time?
Did anyone find that some foods upset the baby?
What about foods to promote breastmilk production?
Let's talk about alcohol and breastfeeding. What's your opinion?

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