Insights from women about drinking alcohol during pregnancy

A qualitative research report

A report commissioned by the Health Promotion Agency

November 2014

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The HPA commission was managed by Rosie Pears, Principal Policy Advisor, HPA.

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1.0 Executive Summary

Background

The Health Promotion Agency (HPA) commissioned this in-depth qualitative research to inform its work programme to address drinking alcohol and pregnancy.

The overriding objective of this research was to provide an in-depth understanding of the factors influencing alcohol drinking practices during pregnancy amongst different groups of women. More specifically, the research objectives were to identify and understand the influences and influencers that encourage and inhibit alcohol consumption during pregnancy.

Research respondents were recruited by the professional recruitment company, People for Information (PFI), in accordance with sample specifications provided by Research New Zealand.

The sampling criteria were decided in consultation with the HPA and were based on the findings of a literature review¹ completed as part of the initial stages of the research project. The primary recruitment criterion was attitude towards drinking during pregnancy². Secondary recruitment criteria included age, ethnicity, socio-economic status, and number of full term pregnancies. Risky drinkers³ were specifically excluded from the sample.

The final sample included 24 pregnant women or recent mothers⁴, who either held the attitude that it's not OK to drink at all, or it's OK to drink a little, occasionally.

Given potential sensitivities around discussing this topic with others, women were interviewed individually (rather than in groups). In order to provide a depth of understanding, interviews were conducted on a face-to-face basis and were approximately 90 minutes in duration.

Interviews were facilitated by the experienced qualitative researchers responsible for the project and were conducted during July 2014, with respondents from the greater Wellington region.

¹ Research New Zealand (2014). *Drinking alcohol during pregnancy: A literature review.* Wellington: Health Promotion Agency.

² Behaviour relating to alcohol consumption during pregnancy was not a recruitment factor.

³ Risky drinkers were defined as those who drank at binge levels (i.e. 7+-12 standard drinks on a single occasion) or high-risk levels (13 plus standard drinks on a single occasion) during their pregnancy.

⁴ The youngest child of recent mothers was no older than three years of age.



Key findings

The key findings of this research are based on the thematic analysis of interviews and are discussed in relation to any differences found within the sample. It is of note that, with the exception of the age of the mother⁵, no differences were found on the basis of the other demographics on which the sample was selected (i.e. ethnicity and socio-economic status).

The key findings are discussed in relation to: women's attitudes and behaviours towards drinking alcohol during pregnancy; factors influencing drinking during pregnancy; and the roles of influencers – information, advice and social pressure.

Attitudes about alcohol consumption during pregnancy and drinking behaviours

The key findings in relation to women's attitudes about consuming alcohol during pregnancy and their (self-reported) drinking behaviours are discussed under the following headings: the range of attitudes and behaviours; when, during their pregnancy, women believe it's OK to drink; and the type of alcohol women consume during pregnancy.

The range of attitudes and behaviours

Women's attitudes towards drinking during pregnancy ranged from it's not OK to drink at all, to it is OK to drink a little, occasionally. Attitudes appeared to generally reflect self-reported drinking behaviours. When these differed, this was generally because attitudes were not held with conviction.

Women who expressed the attitude that it's OK to drink a little alcohol, occasionally, defined 'a little' as a few sips, or half a glass and 'occasionally', as ranging from 2-3 times week to 2-3 times during their pregnancy.

When women believe it's OK to drink alcohol

Women who believed it was OK to drink a little alcohol, occasionally, during their pregnancy had different opinions about when it was OK to do so:

- Generally, women believe it is not OK to drink in the first trimester of their pregnancies, because this period is so important in terms of their baby's development (e.g. brain and organ development). However, some women whose pregnancies were unplanned stated that they had drunk alcohol (sometimes at binge levels) in the early stages prior to learning they were pregnant.
- The second trimester is generally regarded as the safest time to drink, as women are generally feeling well and the baby is settled.

⁵ As is discussed later in the report, pregnant women at either end of the maternal age spectrum were found to be more anxious about their baby's health and wellbeing (see Section 4.3).



 Most thought drinking during the third trimester was OK, but some thought this might result in labour complications. Others refrained from drinking, because their baby had become very real to them.

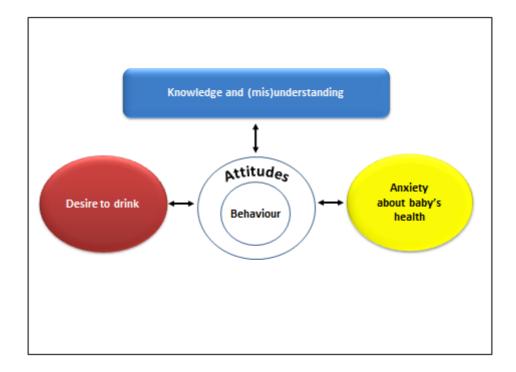
Type of alcohol consumed

Women who consumed alcohol during pregnancy, restricted their consumption to drinks with relatively low alcohol content (e.g. wine, beer and cider) and avoided spirits.

Factors influencing drinking alcohol during pregnancy

Figure 1 illustrates the factors found to be the key influences of women's attitudes towards drinking alcohol during pregnancy and their drinking behaviour. These were: desire to drink alcohol; level of anxiety about baby's health and wellbeing; and knowledge and (mis)understanding of the risks and effects of drinking alcohol during pregnancy.

Figure 1: Factors influencing drinking alcohol during pregnancy



The desire to drink alcohol

A woman's desire to drink alcohol during pregnancy is largely determined by her pre-pregnancy drinking behaviour. As such, women who hardly drank alcohol before they were pregnant, found it easy to give up drinking, but those who enjoyed alcohol pre-pregnancy had less of a desire to stop.



In addition to a woman's pre-pregnancy drinking behaviour, factors that might reduce her desire to drink during pregnancy include the physiological changes some women experience, in which the smell and taste of alcohol becomes unpleasant. Nausea and vomiting also curtailed some women's desire to drink, especially in the first trimester.

Level of anxiety about baby's health and wellbeing

While all women involved in this research were adamant that they wanted to give their babies the best possible start to life, they varied in terms of how careful they were about what they ate and drank during their pregnancy and how fastidious they were about looking after their own health and wellbeing. Such behaviours were influenced (at least in part) by their relative anxiety about their baby's health and wellbeing.

Women who were anxious about their baby's health and wellbeing generally tended to be more risk averse, and as such, abstaining from alcohol was seen as an obvious and relatively easy choice. Women were more likely to be anxious about the health and wellbeing of their baby if:

- they had experienced fertility problems, health issues and pregnancy-related complications
- their pregnancy was planned
- it was their first pregnancy
- they were at either end of the maternal age spectrum.

Knowledge and (mis)understanding of the risks and effects of drinking alcohol during pregnancy

The final key factor influencing a woman's propensity to consume alcohol during pregnancy is her knowledge and understanding, or misunderstanding, of the risks and the immediate/short-term effects of alcohol on the foetus and potential longer-term/permanent effects.

While the women were all aware of and believed that sustained heavy drinking and binge drinking could have serious, lifelong effects on their baby, the women were generally a lot less knowledgeable and were unsure about what the effects of moderate-occasional drinking might be, including whether these might be long-term.

While some of the women were very well informed and knowledgeable about the effects of drinking during pregnancy, more often, women's (mis)understanding of the risks were based on assumptions, personal experiences, observations and advice and information from others.

Those (few) women who had researched the topic thoroughly found the evidence about the risks of moderate-occasional drinking inconclusive. They found that, while some websites clearly state that women should not drink alcohol during pregnancy, others give the impression that it's OK, by providing guidance in relation to how much a woman can drink safely.



Women who believed there could be long-term effects, generally imagined these to be relatively minor (e.g. allergies, or relatively minor learning disabilities and behavioural problems).

In the absence of factual information, some women assumed it was OK to drink alcohol, because their baby was protected by the placental barrier. In contrast, the few women who knew, or assumed, the immediate effects of alcohol on their baby would be amplified and longer lasting (compared with the effects on adults), had decided to abstain from drinking pregnancy.

The role of influencers – Information, advice and social pressure

Key and other influencers exert their influence over women's decisions to drink, or not, during pregnancy, through the provision of advice, information and social pressure.

Key influencers (lead maternity carers and other mothers) and the role of advice and information

Through their provision of quality advice and information, key influencers (i.e. especially lead maternity carers and other mothers) have the potential to shape women's attitudes towards drinking alcohol during pregnancy.

Lead maternity carers and other mothers

Midwives and other maternity experts (including GPs and obstetricians) have the greatest (potential) influence on women's drinking during pregnancy. Regardless of whether, or not, they have other health professionals involved, pregnant women tend to have the strongest relationships with their midwives.

Most women recalled receiving advice not to drink alcohol from their midwife and/or doctor, but few recalled this being backed up with any information, or discussion about the topic. It is of note that some women recalled that the advice that they received from their doctor or midwife was that it was OK to drink a little alcohol, especially in the last trimester.

If women recalled receiving any information about drinking during pregnancy (which they may or may not have read) it was thought to be in the pack of pamphlets they received from their GP or midwife.

Women anxious about their baby's health and wellbeing, especially if they had little desire to drink alcohol, were the easiest to convince to abstain. That is, advice alone, without supporting information was often enough to convince them to abstain from drinking alcohol.

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⁶ Pregnant women are required to choose a Lead Maternity Carer (LMC) who coordinates their maternity care. Lead Maternity Carers can be midwives, GPs with a diploma in obstetrics or obstetricians. LMCs are contracted through the Ministry of Health to provide a complete maternity service to pregnant women (NZ College of Midwives).



In contrast, women at ease with their pregnancy, who wished to continue drinking alcohol, were more likely to ignore the advice they received from their GP and/or midwife, if this was not supported with a convincing rationale. These women were more likely to seek information from other trusted sources, especially other mothers and the internet, in order to justify their desire to continue to drink.

Depending on their own stance, other mothers either condoned and encouraged pregnant women to drink, or actively discouraged their drinking.

Other influencers and the role of social pressure

Key influencers (i.e. lead maternity carers and other mothers) have the potential to shape women's attitudes towards drinking alcohol during pregnancy; thereby ensuring women regulate their own drinking behaviour. However, the extent of the impact (if any) of other influencers is to modify women's drinking behaviour in certain circumstances.

Other influencers include pregnant women's partners/husbands, families, other social networks (e.g. work colleagues) and the general public.

If the influencer and the pregnant woman are likeminded, they have the potential to reinforce the woman's decision to drink alcohol, or not, during pregnancy. However, if their views are divergent, the influencer may pressure them to modify their drinking behaviour in certain circumstances.

Other influencers likely to have the greatest influence on women's drinking behaviour during pregnancy are people women have the closest relationships with and spend the most time with (and as such, those who are in the position to apply persistent pressure).

Implications of the research findings

The importance of the HPA's work programme to address drinking and pregnancy

The findings of this research confirm the importance of the HPA's work programme to address drinking and pregnancy. In the current environment, GPs and lead maternity carers do not appear to be providing consistent, convincing advice and information about drinking during pregnancy. As such, women who wish to continue to drink throughout their pregnancy look for, and readily find, advice and information from other influencers and information sources (especially the internet) to justify their behaviour.

Engaging GPs and lead maternity carers, especially midwives

This research highlights the importance of working with GPs and lead maternity carers, in particular midwives, in order to ensure that their potential as powerful influencers is harnessed and optimised through their provision of consistent advice, convincing information and initiation of discussions about drinking behaviour during pregnancy.



A health promotion programme – Key messages and the target audience

These findings also have implications in relation to the development of a health promotion programme to address drinking and pregnancy. However, given GPs' and lead maternity carers' roles as key influencers, it is important to note that the success of such a programme is likely to be limited without effectively engaging their support.

This research suggests that, in order to convince women who wish to continue drinking during their pregnancy to abstain, information needs to do more than simply outline the facts about the risks and effects of drinking alcohol during pregnancy.

In order to effectively convince women who wish to continue drinking during their pregnancy to abstain, communication materials need to tap into a powerful, positive motivator, such as, women's desire to give their babies the best start in life, at the same time as increasing their concern about the effects of alcohol on their baby. This could be achieved by dispelling some of the commonly held misunderstandings about the risks (e.g. that it's safe to drink in the second and/or third trimester).

However, this research suggests that the information likely to have the most profound impact on a woman's drinking behaviour is learning that her baby is not protected (by the placental barrier) from the immediate effects of alcohol (i.e. the effects will be amplified and longer lasting than the effect on them).

Given the immediate and high personal relevance of the topic, this research suggests that the primary target audience for a health promotion programme should be pregnant women and women planning to get pregnant; in particular, those women predisposed to continue drinking through their pregnancies. Given their roles as influencers, secondary target audiences could include other mothers, partner/husbands and the general public.

Targeting adolescents and women of childbearing age

The research finding that women with unplanned pregnancies may continue to drink alcohol at binge levels early on in their pregnancies (i.e. before recognising that they are pregnant), highlights the importance of mainstream programmes aiming to reduce the binge drinking culture, and programmes specifically aiming to reduce the alcohol consumption of adolescents and women of childbearing age.



2.0 Introduction

The Health Promotion Agency (HPA) commissioned this in-depth qualitative research to inform its work programme to address drinking alcohol and pregnancy.

2.1 Research objectives

The overriding objective of this research was to provide an in-depth understanding of the factors influencing alcohol drinking practices during pregnancy amongst different groups of women.

More specifically, the research was intended to identify and understand the influencers and influences encouraging or inhibiting alcohol consumption during pregnancy.

2.2 Methodology

Recruitment criteria and approach

Recruitment criteria were decided in consultation with the HPA, and were based on the findings of a literature review⁷, which was also completed as part of the initial stages research project. The recruitment criteria were based on consideration of a number of decisions. These were to:

- solely focus the research on women decision makers that is, women who were
 pregnant, or had recently been pregnant (i.e. their youngest child was under three). As
 such, the sample did not include any potential influencers (e.g. partners)
- focus this research on women likely to respond to health promotion programmes, and as such, to exclude women who continued to drink alcohol at risky levels (i.e. at binge and high-risk levels⁸) since learning they were pregnant
- recruit women on the basis of their attitudes towards drinking alcohol during pregnancy, rather than their self-reported alcohol consumption during pregnancy (i.e. behaviour)
- recruit all respondents from the demographically diverse greater Wellington region (i.e. including Kapiti Coast, Hutt City, Porirua).

⁷ Research New Zealand. (2014). *Drinking alcohol during pregnancy: A literature review.* Wellington: Health Promotion Agency

⁸ Binge drinking is defined as drinking 7-12 standard drinks on a single occasion and high risk drinking is defined as drinking 13 plus standard drinks on a single occasion.



The primary recruitment criterion for this research was women's attitudes⁹ towards drinking alcohol during pregnancy.

Secondary recruitment criteria included: age, ethnicity¹⁰, socio-economic status (based on household income) and the number of full-term pregnancies a woman had had.

Research respondents were recruited with the assistance of the specialist recruitment company People for Information (PFI), in accordance with the sample specifications outlined in the recruitment guide (see Appendix A). Research respondents were sourced directly from PFI's panel of respondents, as well as using a snowballing approach (i.e. inviting respondents to identify other potential research participants).

Recruitment was conducted by telephone. On making contact, recruiters described the purpose of the research and identified the research sponsor. Those who met the recruitment criteria were invited to participate in the research.

When interviews were confirmed, respondents were sent (by email/post) an information sheet including (FAQs) outlining the purpose of the research (see Appendix A).

Sample characteristics

The final sample of 24 respondents included nine pregnant women and 15 women who had recently been pregnant¹¹, who held the following attitudes¹² towards drinking alcohol during pregnancy. The sample included the following:

- n=16 It's not OK to drink at all.
- n=8 It's OK to drink a little, occasionally.

The final sample was also differentiated in terms of the following characteristics:

- ◆ Age: n=5 women aged 18-20 years, n=8 aged 21-30 years, and n=11 aged 31-43 years.
- ◆ Socio-economic status (based on household income)¹³: n=11 high, n=7 medium and n=6 low
- ◆ Ethnicity: n=6 Māori, n=6 Pacific people¹⁴, and n=12 European and other New Zealanders.

⁹ Women were asked to select one of the following three attitudinal statements: *It's not OK to drink at all; It's OK to drink a little, occasionally; It's OK to drink more than a little, frequently.*

¹⁰ Prioritised ethnicity was established during recruitment, through the question "what best describes your ethnicity?" Respondents were not provided with the option of selecting multiple ethnicities.

¹¹ The youngest child of women who had recently been pregnant was less than three years old.

¹² It is of note that despite concerted effort it was not possible to recruit women with the attitude *it's OK to drink more than a little, frequently.*

¹³ SES was based on household income, with high defined as more than \$71,000, medium defined as \$41,000 - \$70,000 and low defined as less than \$40,000.

¹⁴ Pacific respondents included those who identified as Samoan, Tongan, the Cook Islands and Fijian.



Number of pregnancies: n=12 women were pregnant for the first time or had recently had their first child¹5; and n=12 women had more than one child¹6.

Procedure

Prior to commencing the recruitment and fieldwork stages of this research, ethics approval was sought and granted by the New Zealand Ethics Committee (NZEC14 #9).

Given potential sensitivities around discussing this topic with others, in-depth interviews were chosen as the methodological approach and were conducted individually and on a face-to-face basis.

All interviews were conducted during July 2014 at Research New Zealand's central Wellington offices.

At the beginning of each interview, respondents were asked: to sign a consent form (see Appendix B) confirming their participation was on a voluntary, confidential and fully informed basis; and for permission to audio-record and transcribe their interview, for analysis purposes only.

Interviews were each approximately 90 minutes in duration and were facilitated by the experienced qualitative researchers responsible for this project using a discussion guide as an 'aide memoir' to ensure that key themes were consistently explored (see Appendix B).

At the completion of interviews respondents were provided with a cash incentive/koha.

Materials

The recruitment guide (see Appendix A) was developed by Research New Zealand on the basis of the sampling framework agreed with the HPA.

The information sheet (FAQs) outlining the purpose of the research (see Appendix A), interview consent form and interview guide (see Appendix B) were also developed in consultation with the HPA. The interview guide reflected the lines of guestioning developed for the ethics application.

Analysis and reporting

Interview transcripts, along with notes produced by the researchers following each interview, were used to assist with analysis. Analysis was conducted on a thematic basis, in line with the research objectives.

The findings are discussed in relation to any differences found within the sample. It is of note that with the exception of the age of the mother¹⁷, no differences were found on the basis of the other demographics on which the sample was selected (i.e. ethnicity and socio-economic status).

¹⁵ The youngest child of women who had recently been pregnant was less than three years old.

¹⁶ The women in the sub-group had between two-to-five children.

¹⁷ As is discussed later in the report, pregnant women at either end of the maternal age spectrum where found to be more anxious about their baby's health and wellbeing.



3.0 Attitudes and behaviours in relation to drinking alcohol during pregnancy

This chapter discusses: the range of attitudes and behaviours women have in relation to drinking alcohol during pregnancy; when women believe that it's OK to drink alcohol; how women define what they mean by 'drinking a little' and drinking 'occasionally'; and the type of alcohol women consumed during pregnancy.

3.1 The range of attitudes and behaviours

Levels of alcohol consumption

Within the sample of women interviewed, self-reported drinking behaviours during pregnancy ranged from complete abstinence (either from the time they learned of they were pregnant, or from the time they starting trying to get pregnant, if their baby was planned), to what they described as occasional¹⁸ drinking.

I don't drink because I feel that it's in the baby's best interests. So I just avoid it altogether. So, it's like, I don't need this and it's not good for my baby.

You don't want to harm your unborn baby. Like if I did have a wine I was always cautious. It would be half a glass of wine. I think, maybe I had two half glasses of wine throughout my pregnancy and cider on New Year. So I think that was about as far as I went because I didn't want to cause any harm.

I had like two glasses probably throughout the pregnancies. I had one at a dinner and one at New Year's.

The women we spoke to whose pregnancies were planned were more likely to have abstained from drinking alcohol during their pregnancy and to have stopped drinking alcohol when they started trying to get pregnant.

We sort of thought we'd try. It was just we'll see how we go and see what happens. It didn't happen straight away, but after a few months... So, I was being careful before I actually got pregnant.

In contrast, a number of the women whose pregnancies were unplanned had drunk alcohol, sometimes at binge levels prior to learning they were pregnant.

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¹⁸ How when define 'occasional' drinking is discussed in section 3.2.



I had a few big nights before I knew I was pregnant, but as soon as I found out I stopped...

Both babies were surprises. But, I did find out after a night of drinking with both of them. It was the next day after a night out that I found out that I was pregnant. I was like, Oh, I was drinking!

In my first six weeks I probably drank quite a bit because I didn't know.

It is of interest that those who drank alcohol prior to discovering they were pregnant were generally not overly concerned about this, usually because their GP or midwife told them not to worry.

I remember saying to my GP, it might have actually been when she was giving me the brochures about drinking and smoking and everything. I remember saying to her, well you know I have had a couple of big nights and what do you think? She sort of said it's not worth worrying about. Yes, it happened and there's nothing you can do now and it's probably fine, but obviously don't do it again now that you know.

Attitudes towards drinking during pregnancy

Women's attitudes towards drinking during pregnancy ranged from it's not OK to drink at all, to it's OK to drink a little, occasionally, and appeared to generally reflect their self-reported drinking behaviours.

It's not like the baby is having a choice. You're not going to force something bad into your body... It's not like I'm going to put a drink, or a cigarette in my baby's hand. It's exactly the same.

That was the one thing that was right there, as soon as I got pregnant... Alcohol was something I wouldn't even consider.

I did genuinely think that it was going to be OK and I wasn't drinking every day. It was probably one a week, maybe occasionally twice a week.

Attitudes about drinking alcohol during pregnancy were held with various levels of conviction. For example, some women who said that it was not OK to drink were comfortable with other women's (occasional, light) drinking, and alluded to the possibility that, were their circumstances different, they may have drunk a little themselves.

I'd never stand in judgment of a woman if she's in her second or third trimester and she'd gone all those weeks without, and thought, I need something to just chill out and a little treat, you know... Because, the hormones are changing and you do get emotional and you can get grouchy and you get fat and you feel tired and you're just feeling stressed, and just having a little bit must be good for a woman. Just to relax and de-stress.

I've had friends that might have a glass of wine every now and again and I don't think that that's a problem. I personally haven't done it.



I envied the people that were relaxed enough to have it. Because, it could feel quite nice if everything is just going so well that just having a nice glass of wine's not going to cause a problem. But, I personally didn't feel that way. So I thought no, I don't want to.

3.2 Women's definitions of drinking a little alcohol, occasionally

Women's definitions of 'drinking a little, occasionally', ranged from consuming alcohol two or three times during their pregnancy, to two or three times a week.

Occasionally would be every second or third week in the last trimester... Once every two weeks, a glass, I wouldn't think anything of it.

Both pregnancies I didn't drink for the first three months, but then after that I had the occasional one or two a week.

There were maybe a couple of occasions... So, like if it was somebody's birthday, or if we go out to dinner... On New Year's... just occasionally, dinners with friends.

Reflecting the characteristics of the final sample¹⁹, the women we spoke to who drank during their pregnancies generally said that they limited the quantity of alcohol they drank on any one occasion to a *"few sips"* or *"half a glass"*. However, at least one woman knowingly had two drinks (or more) on an at least one drinking occasion.

I think up to one glass, occasionally... I'd prefer to say half a glass, so only a few sips... I had a couple of ciders... I might just have a glass of wine, but that's about it... I'd never have more than one at a time. I thought one with food was going to be OK... I would have a little bit, like half a glass.

With regard to the quantity of alcohol consumed, it is important to note that all of the women we interviewed believed sustained heavy drinking would be damaging to the baby, and as such, women universally believed frequent drinking and binge drinking should be avoided during pregnancy.

I don't think there's anyone that thinks that binge drinking during pregnancy is OK. The general understanding as I've heard it is it's definitely accepted that binge drinking is really bad and that you would be taking a real risk with your baby's health. It's just the bits underneath that, that are unclear and it seems to fall on that personal judgment. I don't think there's anyone disputing that binge drinking is bad.

¹⁹ Women who continued to drink alcohol at risky levels (i.e. at binge and high-risk levels) following learning they were pregnant, were not included in this research.



3.3 When women believe it's OK to drink alcohol

Women who thought that it was OK to drink alcohol during pregnancy had different opinions about during which trimester(s) it was OK to do so.

Drinking alcohol during the first trimester was generally (but not always) avoided, largely because this period is known to be very important, in terms of the development of the baby's brain and organs and also, because the mother is often feeling unwell.

I think definitely not in the early stages of the pregnancy... I just won't touch it at all. But as time goes on, definitely very occasionally, maybe not even finished a glass but yes, I drank later on.

I think that in the second trimester it is OK for once or twice a week, but try to avoid it during the first trimester because that's the crucial time of development.

I was feeling terrible, so there was nothing I wanted to consume at all!

If women were to consume alcohol during their pregnancy, they were more likely to do so in the second and third trimester, when they were feeling well and the baby was settled.

The middle and last trimester was when I felt like it was most OK. The baby's more settled and developed by then.

I think in the middle, they're just sort of sitting there for a bit chilling out.

It's probably more OK in the last trimester, when the baby's just growing, but the brain is fully developed.

Some women thought it was fine to drink alcohol in the first two trimesters, but that alcohol should be avoided in the third trimester. Reasons women gave for avoiding alcohol in the last trimester included their baby seeming more like a real person to them and concerns about causing labour complications.

I continued to sip right through to the end. But actually drinking half a glass, I stopped that after my second trimester... That's when I actually felt her. I felt the baby. But, in terms of the first and second, I was drinking, yes, half a glass, perhaps a little more.

I guess, because you feel really quite pregnant by then [the last trimester] and the baby's so developed, that you just feel like it is very human to you by then. Even though there's probably no difference between whether you have a drink at the end or the middle, I still would feel worse about it at the end.

Maybe the end of the pregnancy because you're more likely to have a baby early, or have complications during labour or the baby might stop developing a little bit.



3.4 Type of alcohol consumed

Women who consumed alcohol during pregnancy stated that they restricted their alcohol intake to drinks with relatively low levels of alcohol content; in particular, wine, beer and cider.

I was only having a beer or a wine.

So, wine, or cider, or something like that is OK.

It is of note that a number of women also talked about the medicinal qualities associated with grapes, in particular, red wine.

I actually don't even drink red wine, but if I did drink that's what I had... Yes, wine, a bit of grapes in it to justify it a bit...

There are some benefits of some alcohol. Obviously, the red wine benefits are publicised...

Spirits were considered to be too strong, and were therefore avoided.

I wouldn't have touched spirits or anything like that... I just think the higher the alcohol content the more damage it could do.

I guess any alcohol is bad, but probably spirits is the worst. I just think of them as stronger, more pure.

The one thing I'm really anti is drinking any types of spirits during pregnancy.



4.0 Factors influencing drinking alcohol during pregnancy

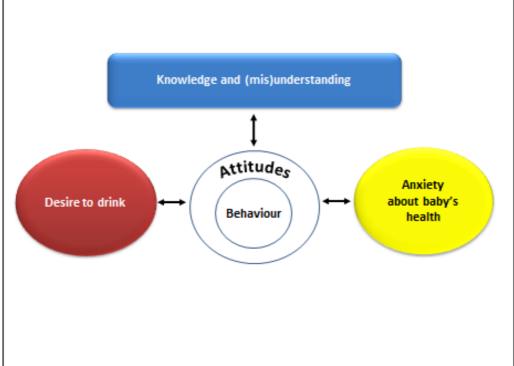
This chapter discusses the factors found to influence women's attitudes and behaviours in relation to drinking alcohol during pregnancy, including: their desire to drink alcohol; their level of anxiety about their baby's health and wellbeing, and; their knowledge and (mis)understanding of the risks and effects of associated with drinking alcohol during pregnancy.

The role of key and other influencers in shaping attitudes and modifying behaviours is discussed in the next chapter.

4.1 Overview

As Figure 2 illustrates, the factors that influence women's attitudes about consuming alcohol during pregnancy and their drinking behaviour include: their desire to drink alcohol; their level of anxiety about their baby's health and wellbeing; and their knowledge and (mis)understanding of the risks and effects of drinking alcohol on their baby.

Figure 2: Factors influencing alcohol consumption during pregnancy

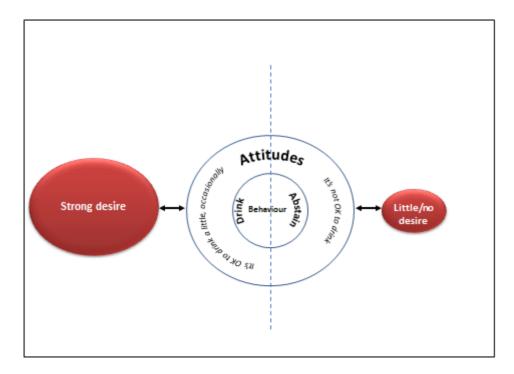




4.2 The desire to drink alcohol

This research suggests that the extent of a woman's desire to drink alcohol is a key factor influencing drinking behaviour during pregnancy (see Figure 3).

Figure 3: Impact of the desire to drink alcohol on drinking behaviour



The desire to drink alcohol during pregnancy is influenced by women's pre-pregnancy drinking behaviour. As such, women who hardly consumed alcohol pre-pregnancy said they found it easy to stop drinking alcohol when they discovered they were pregnant.

Well, before I used to occasionally drink when I'd go out with friends and stuff like that. But, then when I found out that I was pregnant I stopped altogether. So, it hasn't really affected me in a huge way because I'm not really a heavy drinker anyway; so I don't miss it much. If I go out now, I just have like orange juice or lemonade or something. It's not a big deal to me that I'm not drinking. I don't feel I'm missing out on anything.

In contrast, those who enjoyed drinking alcohol before they became pregnant were less inclined to give up drinking completely during pregnancy.

I like the effect alcohol has on me because it's nice. It's a nice feeling. You're relaxed and it's a nice taste. It makes me feel good and if I had to give that up, I'm like, why?

In addition to a woman's pre-pregnancy drinking behaviour, factors that might reduce her desire to drink during pregnancy include the physiological changes some women experience, in which the smell and taste of alcohol becomes unpleasant. Nausea and vomiting also curtailed some women's desire to drink, especially in the first trimester.



I was just so sick all the time so I just didn't feel like it.

I went to have a bourbon and coke, which is what we drink at my friend's place on the weekends, but the smell put me off completely. It just made me feel sick!

Women who continued to drink alcohol during pregnancy, said they did so for relaxation (e.g. to de-stress) and, particularly, because they enjoyed it as a treat on special social occasions (e.g. weddings, New Year's Eve).

It was just at New Year's and it was like everyone was drinking. I don't even think it was a full glass. I think it was like half a glass of red wine. I may have put some juice in with it, or something. It was just it felt like I was missing out. I really just wanted like a sip, just a sip. I may not have even finished it actually. I just wanted to be a part of it.

It's about balancing what's good for me with what's good for the baby. I believe that one drink is going to be OK. That's what I had in my belief system. Just to take the edge off occasionally.

If I came across a social situation where champagne is happening and there was a real celebration happening I'd have a sip of champagne; just to be there and not feel too bad like I was missing out on something.

4.3 Anxiety about their baby's health and wellbeing

Another factor influencing a woman's propensity to drink alcohol during pregnancy is her relative level of anxiety about her baby's health and wellbeing.

Some women appear to be relatively relaxed about their pregnancies.

I think I was quite relaxed both times. I just thought it's a natural thing. I don't fill my head with too much information. It's just a natural process of the body.

Others are more uneasy, even anxious.

I want my baby to be healthy and I didn't want to look after an adult child for the rest of my life. I would say that is enough to put me off.

I'm the kind of person that wants everything to be all right. So if I can help myself in any way, shape or form to be at the best possible place I can be... it's going to be better for everybody.

While the women involved in this research were all adamant that they wanted to give their babies the best possible start to life, they varied in terms of how careful they were about what they ate and drank during their pregnancy and how fastidious they were about looking after their own health and wellbeing. Such behaviours were influenced (at least in part) by a woman's relative anxiety about her baby's health and wellbeing (see Figure 4).



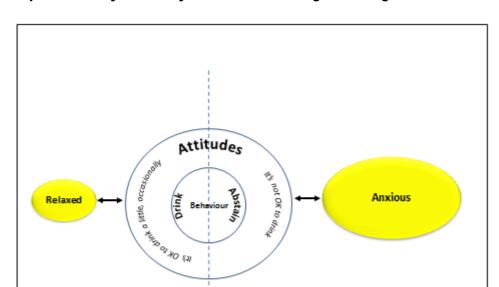


Figure 4: Impact of anxiety about baby's health and wellbeing on drinking behaviour

As might be expected, women who were more anxious about their babies' health and wellbeing were generally more risk averse and, as such, abstaining²⁰ from alcohol was regarded as an obvious and relatively easy choice.

No one has told me if it's OK or not to drink, but I wouldn't even attempt it. You're just so careful about everything you do... You spend that nine months trying to give that baby the best possible chance it can get, through eating well and drinking well. The idea of putting something in my body that I've seen devastate and kill people, just doesn't compute for me. That just wouldn't be an option.

I had three miscarriages before we conceived this baby. So, I've had a lot of hospital attention. Fertility doctors and then they flag you as high risk... In my position, with my history, I'm a lot more nervous and cautious than other people... she's so precious to us that there's no way we are taking any risks.

²⁰ It is important to note that these women's decisions not to drink were regardless of the depth of their knowledge and understanding of the potential effects of maternal drinking on the baby (i.e. learning about the potentially harmful effects of alcohol simply reinforced a course of action they were going to take anyway).



Women were more likely to be anxious about the health and wellbeing of their babies for the following reasons:

- They had experienced fertility problems (e.g. miscarriages), health issues or pregnancyrelated complications (e.g. one vessel umbilical cord, gestational diabetes) during their current and/or previous pregnancies.
- Their pregnancy was planned.

Those who had planned their pregnancies had often taken steps to optimise their chances of getting pregnant and to give their baby the best start possible, including giving up alcohol.

Well before I got pregnant it was really important to get my body into shape and be in a really healthy place. I suppose it was just trying to give him every chance to be a happy, healthy baby.

It was their first pregnancy.

Women were generally more anxious about their first pregnancy than subsequent pregnancies.

It's my first baby so I don't really know what I'm doing. And because it seems to be that the information is a little bit erratic. There's some inconsistencies around general things, things like mozzarella. Yes, you're allowed mozzarella on some websites and others, no. So I just avoid it all, white cheeses anyway. Wherever there's a gap in the info I tend to be a bit more cautious.

We just totally erred on the side of caution about everything, because this is our first.

I think when you're in your late 30s you probably tend to, especially with your first kid, you probably tend to be a little bit more neurotic like I am.

They were at either end of the maternal age spectrum.

Women at the older end of the age spectrum tended to be more anxious about their baby's health and wellbeing, because they were mindful of the greater risks associated with being pregnant at their age and, in some instances, because they believed that their pregnancy would be their last.

I could have, but I chose not to. I didn't want to put the baby at risk really. Yes, pretty much as simple as that. My age... I'm 41 now. I mean the odds... [statistically speaking are not good].



You've got to think of your age, you could have a miscarriage, or things could happen. As a pregnant woman I've been so much more conscious of my age than I ever have in my life. I'm in a high risk category being 36... Because, I just feel like time's running out for me. If my husband wants three kids, then I can't afford to be unhealthy and mucking around and not doing things that are going to help us produce a healthy family.

For very young women, especially those without partners, the prospect of having a baby was frightening. The three young women we spoke to had all moved back home to their mothers, in order to receive the support they needed.

I didn't find out until about 10 weeks when my morning sickness was real bad. I was flatting and stuff for about four months, so lots of partying going on. Once I found out I moved back home to my parents, so they could keep a watch on me. So, there was no drinking after that.

Figure 5 provides a summary of the factors associated with greater anxiety about a baby's health and wellbeing. These factors include: fertility problems, health issues and pregnancy related complications; planned pregnancies; first pregnancy and the mother's age (i.e. at either end of the maternal age spectrum).

Desire to drink

Desire

Figure 5: Factors associated with greater anxiety with a baby's health and wellbeing



4.4 Knowledge and (mis)understanding of the effects of drinking alcohol on the baby

The final key factor influencing a woman's propensity to consume alcohol during pregnancy is her knowledge and understanding or misunderstanding of the risks and the immediate/short-term effects of alcohol on the foetus and potential longer-term/permanent effects.

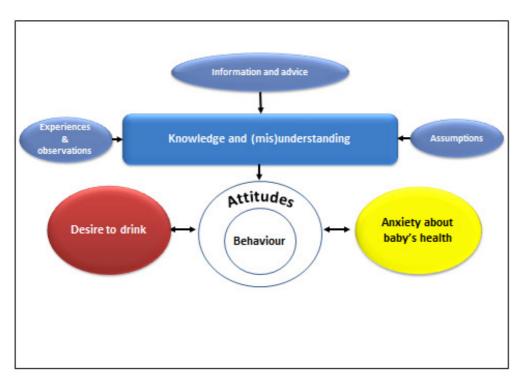
Some of the women we spoke with were very well informed and knowledgeable²¹ about the effects of drinking during pregnancy (i.e. having been exposed to factual information).

I know about foetal alcohol syndrome. For me it makes perfect sense that the only real way to avoid it at all would be to avoid alcohol.

However, more often, women's (mis)understanding of the risks was based on assumptions, personal experiences, observations and advice and information from others (see Figure 6).

I didn't know much about it. It was more like alcohol was the unknown. Everybody says it's not good. But it isn't at all clear why it's not good... It's a big unknown, so you're just making your decision based on the evidence around you.

Figure 6: Sources of knowledge and (mis)understanding



²¹ Women who were well informed had made it their business to study all the information they have been given by their GP and/or midwife in relation to their pregnancies, as well as carry out their own information searches. Information sources, including the role of influencers, are discussed in detail in the next chapter.

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4.4.1 The risks and effects of heavy alcohol consumption

Without exception, all the women who took part in this research understood that sustained heavy drinking and binge drinking during pregnancy, especially in the first trimester, could have lifelong, detrimental effects on their babies.

While some women's knowledge about the risks associated with heavy drinking was based on factual information from trusted sources (e.g. the Ministry of Health and the UK's NHS websites), other women's understanding was based on the following beliefs:

• The assumption that, because heavy drinking is known to be harmful to adults, it will be at least, if not more, damaging to their babies.

I just knew in myself that it wouldn't be something I would ever do. I just knew. I think just from... how it has affected me in the past, but also what I've seen in others. You just know consuming that can't be a positive thing for anything growing inside. So yes, it was just something I just knew.

I don't know how it would affect a baby as their brain is developing. I know how it affects my brain, but my brain is already developed. I don't know if it would intervene in the brain making process, so I'd rather not take that risk.

 Their observations of children with problems, whose mothers were known to have drunk alcohol heavily during pregnancy.

I actually have a cousin that drank through her pregnancy. It was just shocking. I'm not really close to that side of the family, but we gathered together for her Dad's 50th and she had a box and I was like, Oh my God! She drank as if it's like normal. The baby, developmental-wise, is slow.

I'm a teacher and I hear foetal alcohol syndrome talked about a lot and, even though it's one of those things that actually can't be diagnosed necessarily, I see children that have terrible learning needs and you see the families that they come from. So I think it was just one of those things I just assumed, that alcohol abuse totally affects their brain development.

A bit slower; they can be a bit slower. I've got a nephew who's definitely not as quick as his siblings. His mother drank a lot while she was pregnant. But yes, that foetal syndrome thing.

Similarly, while some women had been exposed to information stating that drinking was particularly risky in the first trimester, others generally assumed this was the case on the basis of their knowledge of the significant amount of development that occurs to the baby's organs and brain during this stage of the pregnancy.

I'd somewhere found out that it's going to have more of an effect, or it's more important during those first three months. That's when maybe the foetus is more vulnerable



While those women who were knowledgeable about the risks of drinking alcohol during pregnancy were able to state with confidence what the effects of heavy drinking might be, others based their observations, or simply guessed that the effects might include miscarriage, brain damage and physical defects.

I was fairly careful because I know about the foetal alcohol syndrome and what it does to babies. I think it was something about premature baby and development. It just sounded like it was going to be a long-term effect, which would be difficult for the child and also for the parents.

I remember one of them [the pamphlets] talked about foetal alcohol syndrome or something like that. Also premature birth, one of them talked about that... In the severe situation the baby is born with an intellectual disability and birth defects and an unusual face and stuff like that.

I'm going to make guesses here, because I haven't done research. I would suspect that it would affect baby's growth, baby's brain development, and possibly the baby could possibly come out, having withdrawals.

4.4.2 The risks and effects of moderate-occasional alcohol consumption

Women were a lot less knowledgeable and sure about what the effects of moderate-occasional drinking might be, including whether these might be long-term.

I think it [alcohol consumption] needs to be quite sustained. I'm not sure about that [what the effects of moderate, occasional alcohol consumption would be], to be honest. I'm uncertain...

Women who believed there could be long-term effects, generally imagined these to be relatively minor (compared to those associated with heavy, sustained drinking or binge drinking). For example, the effects might include allergies, or relatively minor learning disabilities and behavioural problems.

My understanding is that there are some effects that maybe get lumped under other categories, and don't necessarily get identified as a result of alcohol, like allergies and ADHD that so many children have these days.

It's a really grey area. There's no black and white... I think maybe their learning later in life, as well as their developmental stages. They might be a little bit slower.

Learning disabilities maybe, less extreme problems, but maybe something slight.

Those (few) women who had researched the topic thoroughly found the evidence in relation to the risks of moderate-occasional drinking inconclusive (i.e. while some websites clearly state that women should not drink alcohol during pregnancy, others give the impression that it's OK, by providing guidance in relation to how much a woman can drink safely).



I came to the conclusion that it's unknown whether a few is OK, or not. From the information that I looked at it became clear that there was evidence that binge drinking can affect your baby and especially like an alcoholic is highly likely to have effects on their baby. But there wasn't much evidence to prove that drinking in small quantities can affect your baby. That was the conclusion that I came to anyway.

I have done like a little bit of research online and there are different views. I think it was Baby Centre UK said that if you're going to drink you should only have this much, I think it's units, once or twice a week. So they're saying the occasional once or twice a week a glass of wine is OK, but not heavily drinking throughout the pregnancy. So, I think that that probably would be OK. If you had a glass a week, I don't think it would have a major impact.

In the absence of information to the contrary, women who concluded it was OK to drink a little alcohol, occasionally during pregnancy, assumed the foetus was protected by the placental barrier. Such women also drew on their and others' experiences of drinking during pregnancy, as evidence that drinking moderately would not have any detrimental long-term effects on their baby.

It [the foetus] doesn't directly drink what you drink. Obviously it would end up getting some alcohol because you've got alcohol in your system. But it's not having the same amount of alcohol as you're drinking. I don't think so anyway, my logic tells me that it wouldn't.

I would imagine just that gentle kind of soporific effect that you would have from a glass of wine if you weren't used to it, but it would be in a much more diffused level for a baby as it passes through your system. So, I don't think it would be too bad.

I guess when the baby is inside you, you tend to think that your body absorbs it more so than the baby. Like the breakdown happens and I guess it's like medication, it goes through a system first and gets broken down, and then little bits sort of filter out and everything.

In contrast, (the few) women who knew, or assumed, that the immediate effects of alcohol on the foetus would be amplified and longer lasting (than the effects of the same amount of alcohol on an adult) had decided to completely abstain from drinking during their pregnancies.

You don't want to be giving anything toxic to your baby and obviously, babies are smaller. So you don't want to be drinking even little bits because it's going to affect them more.

I guess the way I see it is if I go out and I get really drunk, if I'm carrying a baby, it's going to affect them because I feel extremely out of it at the time and the next day I feel like crap. So, if it's having those kind of effects on me, it's having effects on the baby that I'm carrying. But if I have a drink and it has no effect on me, it's probably not having any effect on my baby either.



4.4.3 Knowledge about breastfeeding and drinking alcohol

Although outside of the scope of this research, it should be noted that some women stated that their knowledge and understanding about drinking alcohol and breastfeeding was less than optimal. Despite the strong push to breastfeed, women had many questions, especially about how to safely combine drinking alcohol and breastfeeding (e.g. how long to wait after having a few drinks before feeding their baby).

I've looked that up a little bit online because I'm breastfeeding and I want to be able to drink again. A lot of [web]sites say, just keep in mind that whatever alcohol you're drinking is what's the same quantity is in your breast milk, which doesn't really make sense to me. That can't be true because it doesn't all go in there. But, I sort of thought it's OK for me to have a couple of drinks and breastfeed because I think that's fine.

Drinking alcohol while you're breastfeeding... I actually have had no discussion with a healthcare provider about that... Some of the women in my coffee group might have a glass of wine at the end of the day when the baby's sleeping. I don't know how they decided that, but I guess the alcohol goes through your system before the morning.

Now probably the biggest thing is breastfeeding. I feel better and I want to have a drink. We've both found it really hard researching about that. There're no guidelines that say you can and there're no guidelines that say you can't... The advice they're giving seems to be for people who want to have three or four drinks in a session. Whereas, just the occasional drink, there just doesn't seem to be anything on that at all. So, we've kind of made up our own rules.



5.0 The role of influencers – information, advice and social pressure

This chapter identifies the (key and other) <u>influencers</u> of women's decisions to drink alcohol, or not, during pregnancy and discusses how they exert their influence through the provision of advice, information and social pressure.

5.1 Key influencers and the role of information and advice on shaping attitudes

Key influencers (especially lead maternity carers) have the potential to shape women's attitudes towards drinking alcohol during pregnancy, through the provision of quality advice and information.

5.1.1 Lead maternity carers

The role of lead maternity carers, especially midwives

It is evident from this research that a woman's lead maternity carer, ²² in most cases her midwife, is often the most important influencer, in terms of determining her pregnancy-related behaviours (e.g. what she eats and drinks).

I used my midwife. I was very proactive with my midwife. Like any questions I would text her or ask her. She would be my first point of call for expert advice. Midwives are specialists in their field. I felt I could trust her. She's someone who's walking alongside you.

She [my midwife] was fantastic. The second one [my midwife], I really liked her and we had a good rapport, really good rapport, yes.

As might be expected, the stronger the relationship the woman has with her midwife, the more likely she is to ask for/listen to and take on-board their advice.

I just wanted to clarify. My midwife said, no [to drinking alcohol during pregnancy], so I took her word for it.

²² While all the women we spoke to had midwives, three women were also under the care of an obstetrician. It is of note that all, but one, of the women involved in this research regarded their midwife as their lead maternity carer.



In the current research, the relationships that women had with their midwives were trusting, and generally strong. Women had particularly strong relationships with their midwife when they had the same midwife for more than one pregnancy; their midwives were family members; and when women had particular concerns about their pregnancies (e.g. a history of miscarriages).

I've had [midwife] for all of my babies. She's just amazing and I totally trust her. If she says, no, then it's, no.

My auntie is the head midwife at the hospital. She's been my main go-to person, as well as mum.

The quality of information and advice coming from lead maternity carers

Most women recalled receiving advice not to drink alcohol from their midwife and/or doctor, but few recalled this being backed up with any information or discussion about the topic.

They ask you at the original midwife appointment: Do you smoke? Do you drink? Do you do drugs? Then they note it down. I guess if I'd said yes to any of those questions they might have probed. But if it's no, they don't, I could have lied as well I guess. Which I'm sure people would, because I remember thinking afterwards, I wonder if you did binge drink whether you'd tell them, or not?

I think that my midwife and my GP didn't feel like they had to get too in-depth, because they felt like I already knew. They kind of just went, you know that you can't smoke or drink when you're pregnant, right? I was like, yes I know, and then they were like, OK cool. They gave me the brochures. If they thought that I was a heavy drinker then they probably would have, but because I obviously don't come across as a heavy drinker then I don't think they needed to.

I think maybe if a midwife said this is what can happen if you choose to drink during your pregnancy, you're running the risk of doing this to your baby. We do not advise that you drink. Then the mother can take it from there. I think it might have more impact. She's dealing with you and the baby. She's the expert.

It is of note that some women recalled that the advice they received from their doctor or midwife was, that it was OK to drink a little alcohol, especially in the last trimester.

I've had a few people try to say, it's OK to have a glass of bubbles. Even my doctor, who is an obstetrician, he said if you're going to drink some alcohol make sure it's the best champagne you can possibly buy, so at least it will be worth it. He said, you could have a glass. Then the other thing, to have your breast milk come in you could have a glass of Guinness, or something.

I've been told by that midwife it's OK in the last trimester to have that glass of wine.

What I'm getting from my maternity carers and all the other people is that a glass of wine or one drink is OK. So it's all right to have one occasionally, but not to go crazy.



If women recalled receiving any information about drinking alcohol during pregnancy, this was thought to be within the pack of pamphlets they received from their GP or midwife.²³ However, memories of this information were generally overshadowed by their recall of the long list of foods they were advised not to eat during pregnancy.

There is a booklet that comes with the pack and it says it's not advisable to drink, because it can harm your unborn child. I think it just touches lightly, they don't go into detail.

Nutrition and exercise are the main ones. Just all the things you're not supposed to eat and especially not to smoke. Smoking actually was the main thing I remember that was really pushed.

We got the Ministry of Primary Industries hand-out about the foods you should and should not eat, yes. Oh, it's quite intensive... I remember showing my Mum and showing some of my older friends and they were like, Oh, my gosh! I remember having a discussion with one of my girlfriends and she was like, so what can you eat?

The impact of advice without supporting information

For women who were anxious about the health and wellbeing of their babies (e.g. because of pregnancy related complications), especially if they had little desire to drink alcohol, advice alone (i.e. without supporting information or discussion) from their lead maternity provider not to drink was generally enough to convince them to abstain throughout their pregnancies.

I had her in April, so it was over the Christmas, New Year period and I said, can I have a sneaky little drink? She [my midwife] said, no it's not advisable to drink, so I just took her word on it.

In contrast, women who had a stronger desire to continue to drink alcohol (a little, occasionally) during their pregnancies, who had no particular concerns about their baby's health and wellbeing, were the most likely to ignore their doctor's or midwife's advice (not to drink alcohol), if this was not supported with a convincing rationale, and to seek information from other trusted sources, in order to justify their decision.

On New Year's, I was talking to my partner about how I was gutted that I couldn't drink and I remember us both looking up online how many drinks could you have if you're pregnant. Obviously the information varies, but some websites would say you can have two drinks and some would say don't have any, because we don't know you know how much damage a little bit of alcohol does. But, I ended up just making an informed decision myself that I was OK with having a couple of drinks.

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²³ Comments from women suggest that this information was most likely to be in the Ministry for Primary Industries' booklet, *Food safety in pregnancy*.



5.1.2 Other mothers

The role of other mothers

Other women, who had had babies, especially close family members (e.g. mothers and sisters) and close friends, were often called upon for advice and support and, as such, are also important influencers.

My sister was pregnant as the same time as me, she has another child too. So she was great for asking questions about everything.

I talked to my friends who have had children definitely, because they have been through it all before.

Information and advice from other mothers and other sources

In the absence of being provided with a convincing rationale for not drinking alcohol during pregnancy from their lead maternity carer, women who wanted to continue to drink tended to canvas the opinions of other mothers, to help them come to a decision about whether to drink, or not.

Other mothers, who were comfortable with women drinking alcohol during pregnancy, condoned and sometimes even encouraged pregnant women to drink.

My friends drank as well, and all their children are perfectly healthy. I think everything in moderation is fine.

So, my mum said, actually, you can have one, just one, one glass, a red wine.

In contrast, other mothers, who took the view that women should abstain from drinking alcohol during pregnancy, were likely to actively discourage pregnant women from drinking.

I'd get a slap around the ears anyway, by my mother and his mother, if they ever saw me drinking.

My aunty, the one who I confided in a lot, she was no, no, no!

As previously discussed, as well as talking to other mothers, women who wanted to drink alcohol during pregnancy justified their decision on the basis of their own experiences and/or observations of their own and others' children not having suffered any adverse effects as a consequence of alcohol being consumed during pregnancy.

Well one of my good friends used to have one a day. I probably wouldn't do that myself, but yes, just their attitude probably influenced me as well.



I've known other women that have drunk up until they've found out their pregnant as well, and they've had perfectly healthy babies, yes. So, I sort of sit between the two, it's OK in the second or third trimester if you had half a glass or a glass occasionally. I don't see the problem. We can look at other countries as well that drink a lot of alcohol, like red wine that's full of nutrients.

I look at the generations and we go back a couple of generations where we had women drinking and smoking all the way through their pregnancies and they had perfectly healthy babies.

I probably had had the occasional one with my first... So I suppose that informs you as well, you think Oh, it's fine...

It is of note that women's decisions to continue drinking during pregnancy were also justified on the basis of information they found from trusted sources on the internet.²⁴ In this regard, the UK's NHS website was often quoted as a reputable information source that states how much alcohol women can safely drink during pregnancy.

I found online on the UK NHS public health site that it wasn't a blanket no, that they have a recommendation that you definitely cut back and you have less alcohol than usual and you keep it to a standard drink.

5.2 Other influencers and the role of social pressure in modifying behaviour

Key influencers (i.e. lead maternity carers and other mothers) have the potential to shape women's attitudes towards drinking alcohol during pregnancy; thereby ensuring women regulate their own drinking behaviour. However, the extent of the impact (if any) of other influencers is to modify women's drinking behaviour in certain circumstances.

5.2.1 Other influencers

Other influencers include pregnant women's partners/husbands, families, other social networks (e.g. work colleagues) and the general public.

5.2.2 The role of social pressure

If the influencer and the pregnant woman are likeminded, they have the potential to reinforce the woman's decision to drink alcohol, or not, during pregnancy. However, if their views are divergent, the influencer may pressure them to modify their drinking behaviour in certain circumstances.

²⁴ Trusted websites about pregnancy-related information include Huggies, Treasures, the Baby Centre, NHS. Some women also had access to mobile Apps which provided a daily source of information about the ongoing development of their baby and a constant source of pregnancy-related tips and advice.



As such, depending on whether their views are in keeping, or at odds, with the pregnant woman's, other influencers can make her decision to abstain or drink alcohol easy and comfortable, or difficult and uncomfortable.

For example, if a woman wants to drink alcohol, but others in her company don't think she should, she will most likely continue to drink, but not in their company. As such, she will continue to meet her own needs and avoid the disapproval of others.

Probably with my parents, like I remember Christmas and we'd bought a really nice bottle of champagne. I was thinking, OK, I'll just have one little glass of champagne, but my mum was really against it. She was making me feel bad about it. I felt uncomfortable, so I didn't drink in front of my parents.

For the same reasons, women who want to drink are less likely to drink in public places (e.g. bars, restaurants), when their pregnancy became obvious.

I think if I went out to a bar and I started drinking and I'm looking pregnant and people saw me drinking, I think, yes, I would get some really bad looks!

Like I wouldn't go to a bar and order a drink... I wouldn't have wanted other people to judge me pretty much, because they would. There would be people in there that would think that it's wrong.

Conversely, women who don't want to drink, but are pressured, or anticipate being pressured to do so avoid such situations and company (e.g. either by not attending or leaving events) or feel they need to come up with a good excuse as to why they are not drinking.

We went to a party and my partner and I both pretended we were on health kick, so I didn't get hassled to drink.

We were at my uncle's 50th and there was lots of drinking going on and the cousins were giving me a hard time because I wasn't drinking. I got so sick of it we just left.

5.2.3 Factors increasing the influence of others

Other influencers are likely to have the greatest influence on the behaviour of women whose attitudes about drinking alcohol during pregnancy (i.e. to drink, or not) are not held strongly.

He's [my partner is] French and he thinks that it's better to have one and relax a little bit, than be stressed out... French women, they'd have wine and it's just a part of everyday. You have it at lunch with your meal. He's got these beliefs and, yes, they definitely influenced me.

He [my partner] was like, let's not touch it; let's not have it. I only didn't because I didn't want him to be upset. So, that pressure.



In contrast, social pressure to drink alcohol, or not, is less influential if women's attitudes in relation to drinking alcohol during pregnancy are held strongly. That is, the stronger a woman's conviction to drink, or not, the less likely she will be influenced by others' opinions.

Others likely to have the greatest influence on women's drinking behaviour during pregnancy are those with whom women have the closest relationships and spend the most time with (and as such, are in the position to apply persistent pressure).

For these reasons, partners and husbands are likely to have some influence over women's drinking behaviour. As such, if their views about drinking during pregnancy are conflicting, depending on the level of conviction with which they each hold their views, the pregnant woman will either continue to behave as she wants, or more likely, she and her husband/partner will agree on a compromise.

My husband was quite particular about that. I don't know why. He didn't want me to drink anything. But I actually remember every time I would just I'd try a little bit. I'd be like can I just try your beer please? Or your wine, can I have a sip please? Then just like wet my palate a bit, and Oh, that's good! So I would always offer to get his beer for him. So, it just took the edge off it, if I could just get a taste of it.

My husband was really big on that stress was harmful for the baby, so relax and have a small glass of wine is good.

I really wanted to drink, but he [partner] didn't want me to. So we compromised and I'd have half a glass.



6.0 Implications of the research findings

This final chapter discusses some implications of the research findings.

6.1 Implications

The importance of the HPA's work programme to address drinking and pregnancy

The findings of this research confirm the importance of addressing the issue of drinking alcohol during pregnancy. It is particularly important, given that in the current environment, GPs and lead maternity carers do not appear to be providing consistent, convincing advice and information about drinking during pregnancy. As such, women who wish to continue to drink throughout their pregnancy look for and readily find advice and information from other influencers and information sources (especially the internet) to justify their behaviour.

Engaging GPs and lead maternity carers, especially midwives

This research highlights the importance of working with GPs' and lead maternity carers, in particular midwives, to ensure that their potential as powerful influencers is harnessed and optimised through their provision of consistent advice, convincing information, and initiation of discussions about drinking behaviour during pregnancy.

A health promotion programme targeting pregnant women

These findings also have implications in relation to the development of a health promotion programme to address drinking and pregnancy. However, given GPs' and lead maternity carers' roles as key influencers, it is important to note that the success of such a programme is likely to be limited without effectively engaging their support.

Key messages

This research suggests that, in order to convince women who wish to continue drinking during their pregnancy to abstain, information needs to do more than simply outline the facts about the risks and effects of drinking alcohol during pregnancy.

In order to effectively convince women who wish to continue drinking during their pregnancy to abstain, communications materials and discussions need to tap into a powerful, positive motivator, such as, women's desire to give their babies the best start in life, at the same time as increasing their concern about the effects of alcohol on their baby. This could be achieved by dispelling some of the commonly held misunderstandings about the risks (e.g. that it's safe to drink in the second and/or third trimester).



However, this research suggests that the information likely to have the most profound impact on a woman's drinking behaviour is learning that her baby is not protected by the placental barrier from the immediate effects of alcohol (i.e. the effects will be amplified and longer lasting than the effect on them).

Target audience

Given the immediate and high personal relevance of the topic, this research suggests that the primary target audience for a health promotion programme should be pregnant women and women planning to get pregnant; in particular, those women who wish to continue drinking alcohol through their pregnancies. Given their roles as influencers, secondary target audiences would include other mothers, partner/husbands and the general public.

Targeting adolescents and women of childbearing age

The research finding that women with unplanned pregnancies may continue to drink alcohol at binge levels early on in their pregnancies (i.e. before recognising that they are pregnant), highlights the importance of mainstream programmes aiming to reduce the binge drinking culture, and programmes specifically aiming to reduce the alcohol consumption of adolescents and women of childbearing age.



Appendix A – Recruitment material



Information sheet

FREQUENTLY ASKED QUESTIONS

What's the purpose of the research?	This research will help inform the Health Promotion Agency's (HPA) work programme to address pregnancy and drinking by providing an in-depth understanding of the factors influencing drinking behaviour during pregnancy.
Is Research NZ part of the Health Promotion Agency?	No, Research New Zealand is an independent research company that has been asked to conduct this research on behalf of the Health Promotion Agency.
Do I have to take part in the research?	No, you do not have to take part in the research. Your participation is completely voluntary.
What does the research involve?	The research involves participating in an individual face-to-face interview with Research New Zealand's researchers at Research New Zealand's inner city offices:
	Resimac House, Level 7, 45 Johnston Street, Wellington city
	The interview will take up to 90 minutes and you will be offered a koha of \$60 to thank you for your time an input.
	There are no right or wrong answers and no preparation is required on your part.
Is the interview confidential?	Yes, the interview is <u>completely</u> confidential. The Health Promotion Agency will not know who participates in the research. Your responses will be grouped together with those from everyone else who takes part. Individuals will not be identifiable in any way when the results are reported to the Health Promotion Agency.
	The researchers are bound by the professional code of practice of the Research Association New Zealand , which prohibits them from identifying any person who takes part in research, unless they have explicit consent from that person to do so.
	The researchers will ask your permission to audio record the interview and make a transcript that only will be used for analysing the results. All identifying information in the material collected for the research will be destroyed at the completion of the project.
What if I want to find out more about the research?	If you have any questions about the research, please call XXX (Research New Zealand) on Free phone: 0800 500 168.



HPA – DRINKING AND PREGNANCY

Research NZ PN #4620

BACKGROUND INFORMATION IF NEEDED:

- This is genuine research. I'm not selling anything.
- Client is the Healthy Promotion Agency (HPA).
- Panel/snowballing
- Qualitative research (individual interviews, 90 minutes) are being conducted with a range of people to discuss attitudes to drinking and pregnancy.
- Information you provide is confidential. We report summary results only; i.e. we do not identify
 which individuals have said what, and the client does not know whom we have contacted. (NZ
 Research Code of Ethics)
- Interviewers are from Research New Zealand and are independent of the HPA.

Good morning/afternoon, my name is..... from PFI, we're recruiting on behalf of Research New Zealand, an independent research company.

Research New Zealand is conducting research on behalf of the Health Promotion Agency to understand more about women's attitudes towards drinking alcohol during pregnancy. The research will involve women who are pregnant and those who have recently been pregnant (i.e. with their youngest child under three years)

Individual interviews (90 minutes) will be held in Wellington at Research New Zealand's inner city offices (Resimac House, Level 7, 45 Johnston St – opposite Midland Park), in the first few weeks of July.

Participation in the research is **voluntary**, **and confidential**. The Health Promotion Agency will not know who we speak to.

All participants will be offered \$60 cash as thanks for their input.

Screener question

Do you/anyone in your household work for the Health Promotion Agency?

Yes.....THANK AND CLOSE
No→CONTINUE

To make sure we talk to a good cross-section of people, we have a few questions to ask you first. This will only take a few minutes.



Demographics - Code & check quotas

All participants <u>must</u> either be pregnant or have been pregnant within the last 3 years (i.e. youngest child under 3 years).

Are you pregnant now/have been within the last 3 years?

Pregnant now

Pregnant within last 3 years

What best describes your age group?

15-20 years 21-30 years 31+ years

What best describes your household income (after Tax)?

<\$40,000 \$41-70,000 >\$71,000

What best describes your ethnicity?

Mäori Pacific

NZ European/other ethnicity

How many pregnancies have you had?

One

More than one

Attitudinal primary sampling criteria - Code & check quotas

What best describes your attitude toward drinking alcohol during pregnancy?

It's OK to drink at all

It's OK to drink a little, occasionally (e.g.1-2 standard drinks every now and then)

It's OK to drink more than a little, frequently (e.g.3 or more standard drinks regularly, e.g. weekly or more often)

A standard drink is a **small** glass of wine, beer, cider, RTD, one shot of spirits.

Since you knew you were pregnant, have you ever drink 7 or more standard drinks on one occasion, or more frequently?

Yes.....THANK AND CLOSE (TERMINATE – 'RISKY DRINKER')
No→CONTINUE



The interview will last about 90 minutes and will be held at Research New Zealand's inner city offices in – Resimac House, Level 7, 45 Johnston St, Wellington city (opposite Midland Park).

Can I please have your correct address/email, so that I can send you a confirmation letter/email to remind you of the appointment?

We will also give you a call/txt you the day before to make sure you're still available – should we call back on this number? (if not record call back details).

Please ask for cell phone number so we can call them, if late, etc.

PLEASE ASK FOR THEM NOT TO BRING CHILDREN/BABY TO AVOID DISTRACTION.

Thank you very much. If you have any questions about this project, please ring Jane Falloon, on 0272 555 133.

QUOTA CRITERIA - TOTAL SAMPLE OF n=24

Table 1: Sample overview

Ethnicity	Attitude to drinking during pregnancy							
	Not OK	A little/occasionally is OK	More than a little frequently is OK					
Maori	2	2	2					
Pacific	2	2	2					
Euro/other	2	2	2					
Any ethnicity	2	2	2					
TOTAL	8	8	8					

Across the total sample of n=24:

Age: 15-20 years (no less than n=4); 21-30 years (no less than n=8); 31+ years (no less than n=8).

SES: <\$40,000 (no less than n=4); \$41-70,000 (no less than n=4); >\$71,000 (no less than n=8)

Number of pregnancies: one or more than one (approximately 50:50 split).

Please identify if pregnant/been pregnant in last 3 years – no quotas.



Appendix B – Interview material



Interview Consent Form

I have read the information relating to the interview and understand that the research is being conducted by Research New Zealand on behalf of the Health Promotion Agency to help inform their work programme to address pregnancy and drinking.

I understand that:

- My involvement in this interview is voluntary.
- ◆ I do not have to answer any questions that I do not want to, or disclose any personal information.
- ◆ The information I provide in the interview will remain completely **confidential** and I will not be identifiable in any way in the reporting to the Health Promotion Agency.
- Any identifying information collected about me in relation to this research will be destroyed at the completion of the project.
- ◆ I agree to the interview being **audio recorded** and for a **transcript** to be made of the recording for the researchers to use for their analysis.

Signa	ture:	 	 	 	 	 	
Date:		 	 	 	 	 	



DISCUSSION GUIDE

HPA – Drinking And Pregnancy (DAP) #4620

Introduction (5 min)

- Introduce and explain Research New Zealand's role in the research: Independent research to help the Health Promotion Agency understand more about people's attitudes to drinking and pregnancy.
- Interviews are confidential and reporting will be on a thematic basis no identifying information will be included in the reporting.
- Confirm they have received & read the FAQ sheet and sign the Consent form.
- Timing approximately 90 minutes and confirm audio recording for analysis purposes.

Background (10 min)

- Number of children? Planned pregnancy(ies) or not?
 - At what stage in the pregnancy(ies) became aware pregnant?
- Household composition?
 - Who do/did talk to about pregnancy?
 - Anyone/anywhere else sought/offered advice/information about pregnancy?

Beliefs about health and wellbeing of woman and unborn baby (15 min)

Discuss general beliefs.

- Considerations taken into account in relation to own and unborn baby's health and wellbeing while pregnant?
 - Kinds of things that are good for the baby?
 - How might baby benefit?
 - Kinds of things that might harm the baby?
 - How might baby be harmed?
- How found out about these considerations?



- Where information was from?
- How did being pregnant/taking these considerations into account change behaviour (if at all)?

Drinking and pregnancy (20 min)

Discuss attitudes/behaviours with regard to drinking alcohol during pregnancy.

- (Confirm/discuss) how does drinking alcohol fit into the picture of what's good/harmful for baby during pregnancy?
- When (if at all) is it OK to drink during pregnancy (stages of pregnancy, certain circumstances)?
 - Any things that might influence whether it's OK or not?
 - How much/frequently is it OK to drink?
- Same views held throughout pregnancy/previous pregnancies?
- How managed alcohol during pregnancy?
 - Did drinking behaviour reflect feelings about drinking and pregnancy?
 - How hard/easy was/is it?
 - Times/occasions it was easier/more difficult to manage alcohol?
 - Barriers/support to achieve what level of alcohol intake believe is OK during pregnancy?

Factors influencing attitudes/beliefs (20 min)

Discuss knowledge and sources of information.

- Knowledge of the effects of alcohol on unborn baby?
 - What are the effects?
 - Are the effects variable?
 - Depending on what circumstances?
- Sources of information?
 - What did the information/informer say the effects were?
 - Consistent information/views or conflicting advice/information?



- What sources are believed to be accurate/not?
- What makes some sources more credible than others?
- How did information/others' beliefs/attitudes influence drinking behaviour during pregnancy?
 - What role did partner play?
 - Other key influencers?
 - Which were the strongest influencers?

HPA messaging (20 min)

Discuss how HPA should communicate/fully inform people about the risks of drinking alcohol during pregnancy.

- How should the HPA get the message across?
- Who are all the people they should target/get the message across to?
- What should the message be?
 - Factual information?
 - Neutral?
 - Shame/guilt?
 - What would have the most impact on behaviour?
- What channels/who should deliver/carry the message?
- What's the best timing for people (and whom, e.g. pregnant women, support people, general public) to receive the message?

Thanks and close.