

1 Patterns of alcohol intake of pregnant and lactating women in Perth, Australia
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17 Key words: alcohol, lactation, breastfeeding, pregnancy

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19

1 **ABSTRACT**

2 **Introduction and Aims**

3 Australian alcohol consumption data for women during the period of pregnancy and
4 lactation is limited. The purpose of this paper is to provide current alcohol consumption
5 data for pregnant and lactating women in Perth, Western Australia (WA). Data were
6 collected from 587 women between mid-September 2002 and mid-July 2003.

7 **Design and Methods**

8 Women from two public hospitals with maternity wards in the Perth metropolitan area
9 completed a self-administered baseline questionnaire while in hospital or shortly after
10 discharge. All women regardless of their chosen infant feeding method were followed up
11 by telephone interview at four, 10, 16, 22, 32, 40 and 52 weeks postpartum.

12 Data were analysed to determine alcohol use patterns of the women during the period of
13 pregnancy and lactation and results were compared to national guidelines for alcohol
14 consumption.

15 **Results**

16 Approximately 32% of women stopped drinking alcohol during pregnancy. A remaining
17 35% of pregnant women consumed alcohol during pregnancy with 82.2% of these women
18 consuming up to two standard drinks per week. At four, six and 12 months postpartum,
19 46.7%, 47.4% and 42.3% of breastfeeding women were consuming alcohol, respectively.

1 **Discussion and Conclusions**

2 The majority of breastfeeding women consumed up to two standard drinks per week, which
3 is within levels recommended by national authorities. There is however a small proportion
4 of women consuming alcohol at levels above national recommendations for pregnancy and
5 lactation. The development of 'safe' alcohol intake practices, within national
6 recommendations, during the postnatal period would remove any potential health risks to
7 the infant from alcohol exposure at this vulnerable growth stage.

8

9

1 **Introduction**

2 Alcohol is a teratogen, which in pregnant women may affect the developing fetus. Alcohol
3 passes through the placenta to the fetus and can reach concentrations as high as those in the
4 mother. The ability of the fetus to metabolise alcohol is minimal. Alcohol and its
5 metabolite, acetaldehyde can damage developing fetal cells [1]. Fetal Alcohol Syndrome
6 Disorder (FASD) describes the range of effects that can occur in an individual whose
7 mother drank alcohol during pregnancy. These effects may include physical, mental,
8 behavioral, and/or learning disabilities with possible lifelong implications. FASD refers to
9 conditions such as fetal alcohol syndrome (FAS), fetal alcohol effects (FAE), alcohol-
10 related neurodevelopmental disorder (ARND), and alcohol-related birth defects (ARBD)
11 [2]

12
13 The adverse effects of alcohol consumption during pregnancy are well documented
14 however there is limited information available on the postpartum effect of alcohol in the
15 breastmilk on the developing human infant. In a review of the literature by Giglia and
16 Binns [3], alcohol consumption at a level of two standard drinks per day during lactation
17 resulted in a deficit in motor development [4]. However results of this study failed to be
18 replicated with a different but comparable population [5]. The review also concluded that
19 consuming this amount of alcohol shortly before the beginning of a breastfeed can inhibit

1 lactational performance and negatively disrupt an infant's sleep-wake behavioural patterns
2 [6, 7]. In addition women who consume alcohol during lactation have been shown to have a
3 shorter duration of breastfeeding [3, 8]. One Australian standard drink is equivalent to 10g
4 (12.5ml) alcohol [9].

5
6 Because of the high level of public interest in foetal alcohol syndrome (FAS), alcohol
7 intake during pregnancy is often recorded as part of the antenatal care whereas intake in the
8 postpartum period is not. Numerous international studies have documented alcohol
9 consumption of pregnant women [10, 11]. However there is a paucity of information in the
10 literature on alcohol consumption in women during lactation.

11
12 In Australia it is recommended for lactating women *'not to exceed the levels of drinking*
13 *recommended during pregnancy, and to consider not drinking at all'*. That is *'if they*
14 *choose to drink, over a week, should have less than 7 standard drinks (spread over at least*
15 *two hours)'* (Guideline 11, p16) [9].

16
17 Despite the existence of this guideline there is little or no detailed contemporary Australian
18 data on alcohol use during pregnancy or lactation with which to evaluate the risk level of

1 maternal alcohol consumption. The most recent studies of drinking patterns of Australian
2 women in the pre- and postnatal period include:

- 3 (i) an investigation into the incidence of smoking and alcohol consumption during
4 pregnancy in Tasmania [12];
- 5 (ii) the change in alcohol and nicotine usage during pregnancy in a two year
6 longitudinal study of pregnant women in South Australia [13];
- 7 (iii) the use of the 1985 Victorian Perinatal Morbidity Statistics to document
8 cigarette smoking and alcohol consumption during pregnancy [14]; and
- 9 (iv) the ‘traditional’ population-based Australian health surveys [15-19] which have
10 been designed for men and women of all ages and are limited in scope with
11 regard to the pre- or postnatal period.

12

13 This study documents the alcohol use patterns of women living in Perth, Australia during
14 the period of pregnancy and lactation. In particular, the time of alcohol intake with regard
15 to breastfeeding and number of drinks consumed on a typical drinking occasion is reported.
16 Alcohol intake levels are compared with national guidelines for pregnant and lactating
17 women.

1 **Methods**

2 *Sample*

3 The second Perth Infant Feeding Study (PIFSII) was conducted between September 2002
4 and July 2003. The study used the same methodology (and sites) as the first PIFS study,
5 details of which can be found in Scott et al [20]. Initial results from the PIFSII have been
6 reported elsewhere [21-23].

7

8 Mothers were contacted within the first three days following the birth of their infant.

9 Women were considered eligible for the study if they had delivered a live infant free of any
10 serious health conditions requiring transfer to the neonatal intensive care unit at Perth's
11 major maternity hospital.

12

13 Those women agreeing to participate in the study completed the self-administered baseline
14 questionnaire while in hospital or shortly after discharge. Women declining to participate
15 were asked to provide some basic socio-demographic data in order to determine the
16 representativeness of the sample. All women regardless of their chosen infant feeding
17 method were followed up by telephone interview at four, 10, 16, 22, 32, 40 and 52 weeks
18 postpartum.

1 In the baseline questionnaire women were asked if they consumed alcohol before
2 pregnancy. If they responded in the affirmative they were asked how often (days/week)
3 they usually drank alcohol and how many standard drinks they usually consumed at each
4 drinking occasion. Participants were asked the type of alcohol they consumed most
5 frequently and were prompted with standard drink sizes. As part of the baseline
6 questionnaire these same questions were asked for the period of their pregnancy.

7

8 At each postpartum follow up telephone interview participants were asked if they were
9 drinking alcohol at present, how many days they had consumed alcohol in the previous two
10 weeks, and how many standard drinks and the type of alcoholic beverage they had each
11 time (drinking occasion). In addition respondents were asked at what time they consumed
12 alcohol in relation to feeding the baby or time of day. Questions were modelled on the 1989
13 National Health Survey (NHS) [24].

14

15 One standard drink unit was defined as 10g of alcohol in accordance with the NHMRC
16 Australian alcohol guidelines [9]. Two methods of categorising alcohol intake were used.
17 Firstly, standard drinks consumed per week were calculated by multiplying the usual
18 frequency of consumption with the usual volume of alcohol consumed per occasion (each
19 time). Results were then compared to Guideline 11 [9].

1 Secondly, the number of standard drinks per day consumed in the previous two week
2 period were categorised into the NHMRC guidelines for risk of harm in the long term for
3 the general population. For this categorisation it was assumed that ‘per occasion’ or ‘each
4 time’ of alcohol consumption corresponded to ‘per day’ consumption of alcohol. The
5 number of drinks were categorised for ‘low risk’ (up to two standard drinks per day);
6 ‘risky’ (three to four standard drinks per day); and ‘high risk’ (five or more standard drinks
7 per day). The NHMRC does not recommend these levels of consumption for pregnant
8 women. Missing values were not recoded as zero as this would falsely elevate the number
9 of women who reported not drinking.

10

11 Only the alcohol data of women reporting ‘any breastfeeding’ were analysed. Any
12 breastfeeding includes those infants who receive both breastmilk and other milk feeds or
13 solid foods [25]. This level of breastfeeding was chosen in order to capture the majority of
14 breastfeeding women throughout the study period.

15

16 *Statistical analysis*

17 Statistical analyses were performed using the Statistical Package for Social Sciences,
18 Version 11.0 (SPSS for Windows, SPSS Inc., Chicago, IL, USA). Data were analysed and
19 described using frequency distributions, means and medians. Where confidence intervals

1 are presented these have been calculated by estimating the difference between two
2 proportions by assuming the samples are independent and have been taken from a binomial
3 distribution (success and failure).

4

5 *Ethical considerations*

6 The PIFSII was approved by the Human Ethics Committee of Curtin University and the
7 Research Ethics Committees of the two participating hospitals. Signed informed consent
8 was obtained from participants.

9

10 **Results**

11 Overall, in the PIFSII 870 women of the 1068 contacted were eligible to participate and
12 587 completed baseline questionnaires, representing 68% of women contacted. No
13 significant differences were found in the age or level of education of participants compared
14 with non-participants.

15

16 Table 1 outlines the characteristics of the women who drank alcohol during pregnancy.

17 Comparison with Western Australian (WA) perinatal demographic statistics [26] suggests
18 that the PIFS II sample was representative of new mothers in WA, with the exception of
19 those who smoke during pregnancy. In 2003 in WA the average age of mothers was 29.3

1 years compared to 28.4 years in this study. Thirty seven percent of mothers in the PIFS II
2 study were primiparous, compared to 41% for the whole state. Caesarean section births
3 were 30.9% for WA compared to 29.3% in this study.

4
5 Table 1 shows that women who consumed alcohol in pregnancy were more likely to be
6 aged 30 years and over and from a higher income family (54.3%, $p=0.001$). A greater
7 proportion of Caucasian women drank during pregnancy (92.3%, $p<0.001$). Alcohol
8 consumption was also associated with attendance at antenatal classes (72.9%, $p=0.003$).

9
10 Table 2 presents the amount of alcohol consumed before pregnancy, during pregnancy and
11 during the postpartum period. Three hundred and ninety five women (67.3%) reported
12 drinking alcohol before pregnancy. This decreased to 208 women (35.4%) during
13 pregnancy with almost a third of women (31.9%) discontinuing drinking at this time.

14
15 Before pregnancy median alcohol intake was two standard drinks on each occasion
16 (mean=2.9 standard drinks/occasion). After recognition of pregnancy the median alcohol
17 intake was one standard drink per occasion (mean=1.5 standard drinks/occasion). Alcohol
18 intake before pregnancy ranged from half a standard drink to 19.5 standard drinks. This
19 range decreased to half a standard drink to 9.5 standard drinks during pregnancy. The

1 number of days that women consumed alcohol also decreased from a mean of 1.7 days per
2 week before pregnancy (median=1.0 day/week) to a mean of one day per week
3 (median=1.0 days/week) during pregnancy.

4

5 Prior to pregnancy 47.8% of women consumed less than two standard drinks per week
6 however this increased to 82.2% during pregnancy. Prior to pregnancy approximately 25%
7 of women were drinking above national recommendations for pregnancy however this
8 decreased to approximately 4% during pregnancy. Less than 7% of pregnant women were
9 drinking at levels considered 'risky' and/or 'high risk' for harm in the long term for the
10 general population.

11

12 The majority of breastfeeding women who consumed alcohol at four, six and twelve
13 months postpartum reported consuming up to two standard drinks per week. At four and six
14 months postpartum more than 10% of the sample of breastfeeding women were consuming
15 more than the recommended seven standard drinks per week. At all postpartum time points
16 a greater proportion of non-breastfeeding women were consuming more than two standard
17 drinks compared to women reporting any breastfeeding.

18

1 Using the NHMRC alcohol guidelines for risk in the long-term, a small proportion of
2 breastfeeding women were drinking at levels considered risky at four (17.9%), six (20.2%)
3 and twelve (23.4%) months postpartum. Very few women were drinking at high risk levels
4 at four (4.5%), six (5.9%) and twelve (0%) months postpartum.

5
6 Of those women who consumed alcohol throughout the study most women reported
7 drinking alcohol before or with the evening meal (46.2%). Two women (1.3%) ever
8 reported drinking alcohol just before a breastfeed (see Table 3). Wine and champagne were
9 the main alcohol types consumed by breastfeeding mothers followed by regular beer or
10 cider (see Table 4).

11

12 **Discussion**

13 This prospective study provides information about the alcohol consumption patterns of a
14 cohort of women during pregnancy and after giving birth. A total of 35.4% of women
15 reported drinking alcohol during pregnancy in this study, with 3.8% drinking above
16 national recommendations for pregnancy [9]. The proportion of women consuming alcohol
17 is lower than reported in earlier Australian research [12-14] and this decrease is most likely
18 due to a greater public health awareness of consuming alcohol during pregnancy [27].

19

1 The National Drug Strategy Household Surveys (NDSHS) asks respondents about their
2 alcohol consumption in the previous twelve months. Results from our study differ
3 considerably from the NDSHS in which 64% and 62% of pregnant women reported
4 drinking in the 2001 and 2004 NDSHS, respectively [15, 16]. The difference in results is
5 most likely due to the difference in methodology between the NDSHS survey and the
6 PIFSII questions. The quantity frequency (QF) method used in the NDSHS involves asking
7 respondents the volume of alcohol they usually consume and how frequently they consume
8 alcohol (with responses ranging from daily, several times a week, weekly, monthly, and
9 less often). Whereas the questions in the PIFSII were based on the NHS which uses an
10 Exact Recall method and involves asking respondents to recall the quantities of alcohol
11 they consumed over a specific time period, typically during the last seven days [28].

12

13 Internationally figures range from 41.6% in New Zealand [11] to 62% in the United
14 Kingdom [29] of women drinking during pregnancy. In America, the Centers for Disease
15 Control and Prevention (CDC) Behavioral Risk Factor Surveillance System (BRFSS) have
16 reported figures of any alcohol use by pregnant women in the previous 30 days of 12.4%
17 in 1991, 16.3% in 1995 and 10.1% in 2002 [30].

18

1 However comparisons of alcohol consumption levels between studies should be interpreted
2 with caution due to differences in research methodology and reporting of alcohol intake
3 [31].

4

5 Wine was the most popular beverage choice for pregnant women in this study which is not
6 dissimilar to previous research from England and America [29, 32]. Prior to pregnancy
7 wine and spirits were equally as popular however spirit consumption decreased
8 dramatically during pregnancy. It is likely that spirits are perceived as being a stronger
9 drink and are therefore avoided during pregnancy.

10

11 As in other studies [11, 12, 14, 33] our study also showed a predominance of drinkers in the
12 older age groups, higher income and employment levels, in married women, and in those of
13 Caucasian origin. These women do not fit the stereotype of women at risk of adverse
14 pregnancy outcomes and consequently practitioners need to bear this in mind when
15 developing and targeting screening and intervention programs.

16

17 It is possible that drinking may be more acceptable among women from higher socio-
18 economic groups and that these women attend more social occasions where alcohol is

1 available. Alternatively, these women may have a greater amount of disposable income to
2 spend on alcohol [11].

3

4 The proportion of lactating women consuming alcohol was 46.7% at four months
5 postpartum, 47.4% at six months postpartum and 42.3% at 12 months postpartum.

6 Although there were slightly less women drinking and breastfeeding at 12 months
7 postpartum; than at four months (95% CI: -0.154 to 0.066); and six months postpartum
8 (95% CI: -0.165 to 0.063), this difference in intake was not significant. In contrast the 2001
9 and 2004 NDSHS report 72% and 70% of lactating women consuming alcohol during
10 lactation, respectively [15, 34]. A figure of 80% of women breastfeeding at six months
11 postpartum and consuming alcohol has been reported internationally [35].

12

13 The majority of breastfeeding women were consuming alcohol within levels recommended
14 by the NHMRC for lactating women, however there remained a small proportion that drank
15 above this level. Almost a quarter of the lactating women drank at levels considered 'risky'
16 and/or 'high risk' for harm in the long term throughout the period of lactation whereas less
17 than 7% drank at this level during pregnancy [9]. However it is a limitation of the study
18 questionnaire that lactating mothers were not specifically asked how many standard drinks
19 they consumed each day as opposed to 'each time' or 'drinking occasion', and future

1 research should endeavour to align more closely with relevant alcohol consumption
2 guidelines for ease of analysis and comparison.

3

4 Depending on the timing of consumption both breastfeeding and non-breastfeeding women
5 may be putting their infant at risk through not being able to exhibit the level of concern or
6 responsiveness required to care for a young infant. More specifically breastfeeding women
7 may have a lower tolerance to alcohol if they have abstained or reduced their alcohol use
8 during pregnancy. Further to this, the potentially harmful effects of high levels of alcohol
9 conveyed through the breastmilk to the infant are also of concern.

10

11 Most women consumed alcohol before or with the evening meal however the authors were
12 unable to determine this time in relation to breastfeeding with only two women ever
13 reported drinking alcohol just before a breastfeed. It appears therefore that women in this
14 study may be conscious of not breastfeeding when the alcohol content of their milk is at its
15 peak. In previous research from Canada, 38% of women reported drinking before or during
16 a breastfeed as advised by health professionals to relax the mother and aid the letdown
17 reflex [36]. Given that most of the women were not exclusively breastfeeding it is possible
18 that the women were timing their alcohol intake with formula feeds. Future research should

1 include more detailed data on alcohol intake, and feeding timing and type to overcome this
2 limitation.

3

4 A further limitation of the study is having less than 60% of eligible women participate.

5 Nevertheless, the sample size is still relatively large (>500), and there was no significant
6 difference in maternal age and level of education between participant and non-participants,
7 suggesting that the sample was representative of the population from which it was drawn.

8 The study excluded those women with serious health conditions, which may have biased
9 the sample, however, this represented only 5% of the eligible population and hence may be
10 negligible.

11

12 This study presents data detailing alcohol consumption during the period of lactation not
13 previously reported in the research literature. In addition, it provides the latest detailed data
14 on alcohol intake during pregnancy on Australian women in almost two decades.

15

16 As in most studies of alcohol consumption, all intakes were self-reported during a
17 telephone interview, and actual intake may have been underreported particularly during the
18 antenatal period when there is an increased stigma associated with drinking. In addition,
19 given the close proximity of the baseline survey to the infant delivery, there may be the

1 potential for recall bias regarding pre-natal and antenatal alcohol intake of the mothers.
2 Nevertheless, self-reported alcohol consumption using a telephone interview is considered
3 to be reasonably accurate compared with self-administered questionnaires [37].
4

5 **Conclusions**

6 The majority of pregnant and breastfeeding women consume alcohol at levels
7 recommended by national authorities, however there is a small proportion of women who
8 consume alcohol at higher levels. Considerable education opportunities still exist
9 antenatally for promoting 'safe' alcohol consumption, particularly aimed at those with
10 characteristics identified here. The potential health and developmental risks to the infant
11 and mother of drinking alcohol during lactation is a relatively unfamiliar area for lactating
12 women and the development of guidelines for 'safe' alcohol consumption at this time is an
13 area for further public health education.
14

15 **Acknowledgements**

16 Roslyn Giglia is supported by a Public Health Postgraduate Research Scholarship from the
17 National Health and Medical Research Council. This study was funded by the Australian
18 Government Department of Health and Ageing and the Alcohol Education and
19 Rehabilitation Foundation, Canberra.

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18

1 Table 1. Characteristics of drinking and non-drinking women during pregnancy (n=587).

2 Figures are percentages if not otherwise stated

	n=	Percentage drinking	Women who did not drink in pregnancy (n=377)	Women who did drink during pregnancy (n=208)	<i>p</i> ^a
Maternal age (yr)					
<20	32	15.6	7.2	2.4	0.001
20 – 24	122	24.6	24.4	14.4	
25 – 29	169	35.5	28.9	28.8	
30 – 35	177	44.1	26.3	37.5	
35+	85	41.2	13.3	16.8	
Family income level (AUD)					<0.001
<\$15000	133	19.5	29.0	12.8	
\$15000 - \$25000	181	30.4	34.1	27.1	

\$25 000 - \$40000	102	44.1	15.4	22.2	
>\$40000	156	49.4	21.4	37.9	
Marital status					0.045
never married	39	20.5	8.2	3.8	
married/defacto	538	37.0	89.8	95.7	
divorced/separated/married	8	12.5	1.9	0.5	
Education level					0.760
did not complete highschool	210	34.3	36.6	34.6	
completed highschool or trade	306	36.9	51.2	54.3	
bachelor degree or higher	69	33.3	12.2	11.1	
Mother's occupation					<0.001
admin/mgr/professional	113	44.2	16.7	24.0	
/paraprofessional					
clerical/sales/personal	327	37.6	54.1	59.1	

services					
trades/labourer/plant operator	71	33.8	12.5	11.5	
other ^b	74	14.9	16.7	5.3	
Parity					0.661
Primiparous	215	34.4	37.4	35.6	
Multiparous	370	36.2	62.6	64.4	
Country of birth					<0.001
Aust/New Zealand	427	38.2	71.2	78.4	
UK/Ireland	53	54.7	6.5	13.9	
Asia	59	11.9	14.0	3.4	
Other ^c	40	22.5	8.4	4.3	
Smoking in pregnancy					0.824
Non-smoker	427	35.6	73.9	26.1	
Smoker	153	36.6	73.1	26.9	
Timing of pregnancy					0.341
Planned	279	38.7	47.5	52.7	
Mistimed	181	32.0	34.2	28.3	

Unplanned	105	37.1	18.3	19.0	
Mother attend antenatal classes for this or previous pregnancy					0.003
No	203	27.5	39.1	27.1	
Yes	380	39.7	60.9	72.9	

1 ^aChi-square test

2 ^bIncludes self-employed, disabled/invalid pension, student, home duties, unemployed, other
3 pensions.

4 ^cIncludes women from Europe, Africa, South America, North America and small island
5 nations.

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2 Table 2 Alcohol use before and during pregnancy; and in lactating women reporting 'any breastfeeding' at
3 4, 6 and 12 months postpartum (%)
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	Before pregnancy (n=587)	During pregnancy (n=587)	4 mo postpartum n=587		6 mo postpartum		12 mo postpartum	
			Yes (n=287)	No (n=199)	Yes (n=251)	No (n=232)	Yes (n=111)	No (n=344)
Any Breastfeeding								
Any alcohol	395 (67.3)	208 (35.4)	134 (46.7)	86 (43.2)	119 (47.4)	120 (51.7)	47 (42.3)	174 (50.6)
Standard drinks/week								
0 – 2.0	189 (47.8)	171 (82.2)	80 (59.7)	42 (48.8)	68 (57.1)	59 (49.2)	30 (63.8)	74 (42.5)
2.1 – 6.9	109 (18.6)	29 (13.9)	40 (29.9)	26 (30.2)	32 (26.9)	37 (30.8)	13 (27.7)	61 (35.1)
7.0 or more	97 (24.6)	8 (3.8)	14 (10.4)	18 (20.9)	19 (16.0)	24 (20.0)	4 (8.5)	39 (22.4)
NHMRC Risk levels ^a								
Up to 2 std drinks	233 (59.0)	192 (92.3)	104 (77.6)	52 (60.5)	88 (73.9)	66 (55.0)	36 (76.6)	88 (50.6)
3 to 4 std drinks	99 (25.1)	13 (6.3)	24 (17.9)	26 (13.1)	24 (20.2)	39 (16.8)	11 (23.4)	73 (21.2)
More than 5 std drinks	63 (15.9)	3 (0.2)	6 (4.5)	8 (9.3)	7 (5.9)	15 (6.5)	0	13 (3.8)

- 1 ^aNHMRC risk levels: Low risk: up to 2 standard drinks/day, Risky: 3 to 4 standard drinks/day, High risk:
- 2 more than 5 standard drinks/day

1 Table 3. Time of alcohol consumption of breastfeeding mothers (%)

Time	1 month (n=158)	4 months (n=134)	6 months (n=119)	12 months (n=47)
Just before or with evening meal	73 (46.2)	82 (61.2)	86 (72.3)	36 (76.6)
Just after breastfeeding	39 (24.7)	28 (20.9)	9 (7.6)	4 (8.5)
In between breastfeeds	26 (16.5)	10 (7.5)	11 (9.2)	4 (8.5)
No particular time	15 (.5)	10 (7.5)	8 (6.7)	-
Just before breastfeeding	2 (1.3)	-	-	-
Various	3 (1.9)	4 (3.0)	5 (4.2)	3 (6.4)

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1 Table 4. Main alcohol type of breastfeeding mothers (%)

	1 month	4 months	6 months	12 months
Wine/champagne	76 (48.1)	59 (44.0)	61 (51.3)	22 (46.8)
Beer/cider reg	24 (15.2)	23 (17.2)	12 (10.1)	2 (4.3)
Beer/cider light	13 (8.2)	15 (11.2)	11 (9.2)	6 (12.8)
Spirits	19 (12)	22 (16.4)	20 (16.8)	13 (27.7)
Premix/Alcopops ^b	13 (8.2)	8 (6.0)	10 (8.4)	3 (6.4)
Others ^a	13 (8.2)	7 (5.2)	5 (4.2)	1 (2.1)
Total	158 (100)	134 (100)	119 (100)	47 (100)

2 ^aIncludes fortified wine, liquers, cocktails, non-specified drinks

3 ^bPremix refers to pre-mixed spirits sold in either a can or bottle. Alcocops refers to
 4 alcoholic sodas most often sold in a bottle.

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