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# Exploring practices and perceptions of alcohol use during pregnancy in England and Sweden through a cross-cultural lens

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## **Abstract**

**Background:** Qualitative studies have aimed to understand why some women continue to drink during pregnancy; however, there is a lack of comparative cross-cultural research. We aimed to explore perceptions and practices of alcohol use during pregnancy in England and Sweden.

**Methods:** Semi-structured interviews were conducted with 21 parents in Merseyside, England, and 22 parents in Örebro County, Sweden. Interviews were audio recorded, transcribed verbatim, and translated. Data were analysed using thematic analysis.

**Results:** The majority of women in both countries abstained from alcohol when they found out they were pregnant, despite alcohol being part of many social contexts before pregnancy. Nine of the 17 English women drank at some point during pregnancy, typically on special occasions. Most parents felt women should modify their alcohol intake when they become mothers, though several English parents argued that responsible motherhood did not necessarily equate to abstinence. Swedish parents held strong opinions against drinking during pregnancy and argued that any amount of alcohol could harm the foetus. English parents' opinions were divided; some were skeptical of whether low to moderate drinking was associated with risks.

**Conclusions:** Practices and attitudes towards alcohol use during pregnancy and views on foetal rights and responsibilities of pregnant women differed in England and Sweden. Shared social norms around drinking may be shaped within the policy context of pregnancy drinking guidelines, determining whether women consume alcohol or not.

**Keywords:** Alcohol, pregnancy, qualitative research, cross-cultural research

## **Introduction**

Alcohol use during pregnancy can have negative effects on child development (1), making prevention a public health priority. For many women, pregnancy is a catalyst for behaviour change, including altered drinking habits (2), yet some women continue to drink alcohol, despite no confirmed 'safe' threshold (3).

In the WHO European Region, an estimated 25.2% of women consume alcohol at some point during their pregnancy, with rates varying greatly between countries (4). In the UK, the prevalence is high: 41.3%; whereas in Sweden, less than one in 10 women report drinking during pregnancy (3). Studies have assessed alcohol at different time points, using different consumption measures (5–7), contributing to differences in prevalence rates. However, considering higher per capita consumption in the general population within these countries (9.7 litres and 11.4 litres in 2012 for the UK and Sweden, respectively) (8), cultural factors may also play a part.

While higher levels of drinking before pregnancy and intimate partner violence are strong predictors for alcohol use during pregnancy (9), women's evaluation of risk and perceptions around drinking in social situations may also influence behaviour (10–12). For example, drinking beverages such as wine and drinking in the later stages of pregnancy women considered safe by some women (10). Social aspects of drinking also appear to have significance, specifically in terms of drinking as a social activity (13). Becoming a mother involves re-evaluating social roles and continued drinking, such as in social contexts, might be a way of making sense of the transition into motherhood by continuing "familiar activities consonant with who they see themselves to be through a life-changing event, such as pregnancy" (p.4) (11). However, whilst aspects such as social drinking may influence continued use, social disapproval and perceptions of irresponsibility may lead women to abstain during pregnancy (14).

This study aimed to explore practices and perceptions of alcohol use during pregnancy in England and Sweden, against wider socio-cultural factors and the backdrop in differing policy contexts. At the time of the study, pregnant women in England were advised to avoid alcohol, though if they chose to drink they were advised to limit their intake (15). In Sweden, official guidelines recommended pregnant women to abstain (16).

## **Methods**

### **Sampling**

A qualitative approach was adopted to explore practices and perceptions of alcohol use during pregnancy among parents in two regions in England and Sweden. This study is part of a wider mixed-methods research project involving both parents and midwives. The research was designed based on the socio-ecological model of health, a framework for exploring different factors influencing alcohol use during pregnancy; ranging from individual to policy level. A convenience sample of parents was recruited in Merseyside, England and Örebro County, Sweden.

Study information was distributed on social media (Facebook and Twitter), at Children's Centres (England), general practices (Sweden), and through informal networks in both countries. The study focused on perceptions of the entire pregnancy, as alcohol-related attitudes and behaviours to alcohol may change in later pregnancy (10) and a retrospective approach was therefore considered appropriate. Although retrospective reports are potentially susceptible to recall bias, previous research has suggested that self-reports are accurate up to 13 months post-delivery (17). Parents with an infant aged 18 months or less were invited to take part. As the focus was on overall views rather than specific amounts consumed during pregnancy, this time frame was justified.

Parents who wished to participate were encouraged to contact LS, who provided detailed information. One or both parents could participate. Informed consent was obtained

from all participants and approval for posting information was obtained from appropriate gatekeepers. Ethical approval was granted by Liverpool John Moores University's Research Ethics Committee (13/HEA/078 and 14/EHC/027) and Uppsala Regional Ethics Review Board (2014/132).

### **Data collection**

Semi-structured interviews were conducted by LS between October 2013 and September 2014 in England and between May 2014 and August 2014 in Sweden. Interviews were conducted in participants' homes, at university premises, and in public places. Interviews lasted between 15 and 50 minutes. Two interviews were conducted as paired interviews, with both woman and partner together, whereas the rest were individual interviews. The interview schedule (Supplementary Table S1) was informed by existing literature on alcohol use during pregnancy in collaboration with the research team. It included questions regarding women's and partners' alcohol habits before and during pregnancy, perceptions of women's drinking during pregnancy, and (part of the wider study) guidance and advice in antenatal care around alcohol-related risks. Saturation was reached when no new codes were identified in the final transcripts analysed (18, 19). Participants received a £10 or 100 SEK voucher for taking part.

### **Data analysis**

All interviews were conducted in English or Swedish by LS, who is fluent in both languages. Interviews were audio recorded with permission from participants and transcribed verbatim. Swedish interviews were transcribed in Swedish and translated to English by LS. Back translation was carried out to ensure translation accuracy (20); a sample of two translated interviews was translated back into Swedish by a native Swedish speaker with good command in English. The two Swedish versions were then compared for inconsistencies; however no major differences were identified. Transcripts were analysed

thematically (21) using NVivo10 (22) for initial coding and organisation of main themes and sub-themes. Codes and themes were data-driven, meaning the codes were developed from the transcripts. LS analysed the data independently and LP was consulted in developing a coding framework. Due to time and resource constraints, all transcribing, translating and coding was done by LS and discussed regularly with LP. Themes were refined through an iterative process, as revision of initial codes was necessary as new data was added.

## **Results**

Forty-three parents participated in the study; 21 in Merseyside, England and 22 in Örebro County, Sweden (Supplementary table S2). Whilst recruitment procedures did not specify that partners had to be male, all partners who participated were male.

### **Changing drinking habits when getting pregnant**

All Swedish women stopped drinking once they discovered they were pregnant. Nine English women continued to drink (defined as more than a few sips), although all reduced consumption from their pre-pregnancy drinking levels. Five women drank alcohol more than occasionally and four only drank on special occasions (such as at Christmas). Some women argued that they were ‘not big drinkers anyway’, making the decision to abstain uncomplicated. However, several women who had been consuming alcohol regularly, at times at heavy levels, before pregnancy also found the choice to abstain easy. For many women alcohol had been an important part of their lives before pregnancy, particularly in social contexts, and therefore they missed not drinking (Quote 1, Table 1).

In both countries, some women who planned their pregnancy modified their drinking to avoid potential exposure during the early stages. Five women stopped drinking while they were trying to conceive, while some women did not, at least initially, consider stopping drinking while trying (Quote 2, Table 1). One couple had been trying to get pregnant for a

year, though because shared drinking routines were an important part of their relationship, both changed other parts of their lifestyle before the woman cut down on alcohol. Consuming alcohol before knowing about the pregnancy was relatively common and a few had consulted their midwife due to concerns. In general, midwives responded by suggesting that the baby was unlikely to have been harmed; however stressed the importance of avoiding, or limiting (only in England), exposure for the remainder of the pregnancy (Quote 3, Table 1).

Many Swedish women were cautious about alcohol exposure; some were even uncertain about drinking non-alcoholic cider or wine which contained very small amounts of alcohol. In contrast, some English women who continued to drink described drinking as ‘a treat’ (Quote 4, Table 1) or as part of social settings.

### **Changes in drinking habits amongst partners**

Fathers’ drinking remained the same, reduced some, or changed in terms of how and when drinking took place during the pregnancy. In couples where women chose to drink some alcohol, social aspects of drinking together were evident (Quote 1, Table 2). This also played a part in couples where women abstained; three Swedish men explicitly noted they cut down on their drinking due to losing their drinking partner (Quote 2, Table 2). This did not mean the men abstained, but they limited their drinking to situations where the woman was absent, as a form of solidarity; in some cases, the couple had explicitly agreed to this arrangement (Quote 2, Table 2).

From women’s perspective, their partner’s drinking habits did not influence their own behaviour, and some even encouraged their partners to drink in situations where they could not drink themselves. One woman however felt that her partner’s unchanged habits made it harder for her to abstain and expressed she would have wanted support (Quote 3, Table 2). Overall, women in both countries appeared to appreciate support from partners, but this was not essential for changing their own habits.

## **Views on foetal rights versus women's autonomy**

Many women and partners argued that becoming a parent entails certain responsibilities, including abstaining from alcohol during pregnancy. These views differed between the countries; several English parents argued that prenatal drinking does not equate with being a bad mother if kept at responsible levels (Quote 1, Table 3). Some Swedish parents felt that any drinking, whilst one is knowingly pregnant, is irresponsible (Quote 2-3, Table 3). Differences in attitudes towards any drinking were contextualized by some English parents, who acknowledged that guidelines in place at the time allowed for some drinking. This led to more nuanced opinions around moderate drinking, yet heavy drinking was perceived to be an issue (Quote 4, Table 3).

## **Reasons for changing alcohol habits**

Women gave several reasons as to why they changed their drinking habits during pregnancy. Social norms, dictating that expectant mothers should avoid alcohol, were cited as the main reasons why women stopped drinking. All parents described that avoiding alcohol when pregnant was tacit knowledge; most referred to avoidance as abstinence. Women wanted to ensure their babies' health and most felt that giving up alcohol was not a great sacrifice. Alcohol was rather seen as part of a general lifestyle change for pregnant women, including eating healthier or avoiding certain foods (Quote 1, Table 4). While alcohol use in pregnancy was described as associated with risks, some parents did not specify, or were not sure, what the risks were (Quote 2, Table 4). Several parents in both countries, many of whom worked in areas such as education, health care, or criminal justice had heard of Foetal Alcohol Spectrum Disorders (FASD), primarily due to professional experience.

Guidance on drinking from health professionals and official drinking guidelines did not specifically influence Swedish women— it rather confirmed what they already believed; that abstinence was the norm. For many English women, recommendations that some alcohol

could be consumed did not affect their views on abstinence but for those who continued to drink, the guidelines reassured them that small amounts of alcohol were acceptable.

Interestingly, one woman had changed her mind about abstaining after learning that the guidelines allowed for some alcohol (Quote 3, Table 4).

## **Discussion**

This study explored practices and perceptions of alcohol use in pregnancy, to contrast differences in England and Sweden, against wider socio-cultural factors and the backdrop in differing policy contexts. We demonstrated that most women in this sample stopped drinking when they knew they were pregnant. However, nine of the 17 English women consumed alcohol at some point during pregnancy; most commonly on special occasions. Knowledge around modifying drinking habits in pregnancy was based on tacit knowledge, though attitudes appeared to differ within wider social norms. Perceptions of abstinence as the best way of avoiding harm to the foetus can create negative attitudes towards drinking in pregnancy (11), which was true for most women. English women who continued to drink felt that they had made responsible decisions regarding the amount and frequency of drinking, such as only drinking small amounts and/or only on special occasions. Some women who had knowledge of Foetal Alcohol Syndrome (FAS) noted that it is high levels of drinking that are associated with risks for the baby. Parents in both countries attributed high levels of drinking with risk, reflecting previous research that pregnant women are cognisant of the risks associated with heavy drinking (23–25), but smaller amounts of alcohol may not be viewed as risky. We found cultural variation in how parents viewed risks with consuming some alcohol during pregnancy; English parents' views were divided on whether small amounts can harm the baby and some suggested small amounts were acceptable. All parents regarded intoxication as irresponsible, as previously shown (26). Many Swedish parents held strong

attitudes against any drinking, and within these narratives, women who consume alcohol were seen as unfit to become mothers.

One main finding was that all parents believed that altering drinking habits is important for a healthy pregnancy. Previous life-course research has found that family building is an important factor for changing alcohol consumption in a restrictive way (27, 28). Before pregnancy, drinking was part of social situations, and generally alcohol is perceived as a positive and attractive function of social contexts (29, 30). For some women, the social function of alcohol may have influenced their behaviour, as women who continued to drink did so in social contexts – especially at festive occasions where alcohol is often an integral part of Western culture (31). It has previously been demonstrated that women who drink in pregnancy may emphasise the use of alcohol in social contexts, rather than toxicological effects (10). Continuing familiar practices can be a way for women to retain their social role, as transitioning into motherhood often means abstaining from behaviours or activities that were common practice before pregnancy (32). Alcohol was mentioned as part of life before, and sometimes during pregnancy, reflecting a study by Meurk and colleagues, which suggested that pressure for non-pregnant women to drink and disapproval of drinking during pregnancy present a difficult situation for women (10).

Among English parents, knowledge of drinking guidelines, allowing for small amounts of alcohol, divided opinions of whether drinking small amounts was harmful and lead to some skepticism towards abstinence. While some women changed their drinking habits whilst they were trying to get pregnant, several women only altered their alcohol consumption when they encountered difficulties conceiving. This confirms previous research that some women consider altering their habits once they know they are pregnant (30), potentially resulting in alcohol exposure during early pregnancy, which is the most vulnerable period (33). Targeting women who are not planning to get pregnant with

interventions focusing on increasing effective contraception use (34), and targeting women who plan to get pregnant with information about avoiding alcohol in the early stages may therefore be priorities for future prevention strategies.

A second finding relates to partners and relationships. Many parents shared drinking habits prior to the pregnancy and absence of a drinking partner seemed to encourage reductions in drinking (23). To some extent partners within the current study changed their alcohol habits during pregnancy, either by cutting down on amount or not drinking when their partner was around. Women were unconcerned about their partners' behaviour and only one woman felt a lack of support. Generally, pregnancy led to changes in social activities, with increased time spent in settings where alcohol is not the central activity, such as the cinema or staying at home.

A third result relates to influences that contribute to changes in behaviours. Pregnancy can be considered a contextual change that can help to break habits - a teachable moment (35) whereby increased emotions, perception of risk and/or vulnerability, as well as a re-definition of self and one's social role encourage behaviour change (36). The current study found that reasons for abstaining from, or cutting down on, alcohol fits well with this theoretical framework. The component of re-definition of self and social role (32) components may explain why some women continue to drink. All women acknowledged that motherhood comes with responsibilities, including changing drinking habits whilst pregnant. The perceived vulnerability of the foetus also influenced women to avoid alcohol in pregnancy and protect the foetus from alcohol exposure further highlights the perceived responsibilities for mothers to ensure their babies' health (35). The current study also indicated that perceived vulnerability can be mediated by focusing on the social use of alcohol rather than toxicological effects. In other words, while parents considered the baby as

vulnerable, occasional or social drinking serves a purpose, and the harmful effect of alcohol may be secondary to the perceived pleasure.

This study has several limitations which should be acknowledged. The sample was fairly homogenous; parents who participated were well-educated, and English women were slightly older than the national average age of first-time mothers (which the majority were). Most pregnancies were planned and views amongst parents with unplanned pregnancies may differ. Furthermore, parents with positive experiences of pregnancy and childbirth may have been more likely to participate and to have different views on drinking than parents with negative experiences. Social desirability and recall bias are always potential issues with social research (19), and women may have chosen not to disclose alcohol use due to perceived stigma or lack of recollection. The findings here, as with all qualitative research, cannot be generalised to the wider population, especially as the sample was recruited from two geographical locations with alcohol consumption patterns that differ from the national averages (38–39).

While reported alcohol use during pregnancy differed between Swedish and English parents, this study showed that underpinning views on foetal rights and responsibilities of pregnant women was part of wider social attitudes towards prenatal alcohol use, tied in with the policy context. Considering the changes in the drinking guidelines from the UK's Chief Medical Officers in 2016 (40), future research should explore whether these attitudes will change over time.

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The study did not receive any funding.

## **Conflict of interest**

The authors have no competing interests.

## **Key points**

1. We found that moral values of foetal rights were a strong theme among Swedish parents, whilst English parents also emphasised women's autonomy.
2. Swedish parents believed that any alcohol use during pregnancy was a risk to the unborn child and expressed strong disapproval, whereas English parents' views were less clear-cut about whether small amounts of alcohol present a risk to the baby.
3. Our study suggests that wider social norms and attitudes, interlinked within the policy context, may influence whether pregnant women drink alcohol, which has implications for tailoring on health promotion messages.

## References

1. Jones KL. The Effects of Alcohol on Fetal Development. *Birth Defects Res C Embryo Today* 2011; 93: 3–11.
2. Smedley J, Jancey JM, Dhaliwal S, Zhao Y, Montieri SMDR, Howat P. Women's reported health behaviours before and during pregnancy: A retrospective study. *Heath Educ J* 2014; 73: 28–40.
3. Flak AL, Su S, Bertrand J, Denny CH, Kesmodel US, Cogswell ME. The association of mild, moderate and binge prenatal alcohol exposure and child neuropsychological outcomes: a meta-analysis. *Alcohol Clin Exp Res* 2014; 38: 214–226.
4. Popova S, Lange S, Probst C, Gmel G, Rehm J. Estimation of national, regional, and global prevalence of alcohol use during pregnancy and fetal alcohol syndrome: a systematic review and meta-analysis. *Lancet Glob Health* 2017; 5:e290–e299.
5. Skagerström J, Alehagen S, Haggstrom-Nordin E, et al. Prevalence of alcohol use before and during pregnancy and predictors of drinking during pregnancy: a cross sectional study in Sweden. *BMC Public Health* 2013;13:780.
6. Smith L, Savory J, Couves J, Burns E. Alcohol consumption during pregnancy: cross-sectional survey. *Midwifery* 2014;30:1173–8.
7. McAndrew F, Thompson J, Fellows L, Large A, Speed M, Renfrew MJ. *The Infant Feeding Survey 2010*. London, United Kingdom: Department of Health, 2012.
8. Global Information System on Alcohol and Health (GISAH). Geneva: World Health Organization: <http://apps.who.int/gho/data/node.main.GISAH?lang=en&showonly=GISAH> [8 August 2017].
9. Skagerström J, Chang G, Nilsen P. Predictors of Drinking During Pregnancy: A Systematic Review. *J Womens Health* 2011;20:901–13.

10. Loxton D, Chojenta C, Anderson AE, Powers JR, Shakeshaft A, Burns L. Acquisition and Utilization of Information About Alcohol Use in Pregnancy Among Australian Pregnant Women and Service Providers. *J Midwifery Womens Health* 2013;58:523–30.
11. Elek E, Harris SL, Squire CM, et al. Women's knowledge, views, and experiences regarding alcohol use and pregnancy: opportunities to improve health messages. *Am J Health Educ* 2013; 44: 177–190.
12. Meurk CS, Broom A, Adams J, Hall W, Lucke J. Factors influencing women's decisions to drink alcohol during pregnancy: findings of a qualitative study with implications for health communication. *BMC Pregnancy Childbirth* 2014;14:246.
13. Kelly JF, Ward CL. Women who drank while pregnant: The importance of social context in the lives of South African pregnant women. *Drugs (Abingdon Engl)* 2017; Early Online: 1–8.
14. Jones S, Telenta J, Shorten A, Johnson K. Midwives and pregnant women talk about alcohol: what advice do we give and what do they receive? *Midwifery* 2011;27:489–96.
15. National Institute for Health and Care Excellence (NICE). NICE Guideline 62 - Antenatal care for uncomplicated pregnancies. London: NICE, 2008.
16. National Board of Health and Welfare (NBHW). Kunskapsstöd för mödrahälsovården [Knowledge support for Maternal Health Care]. Stockholm: NBHW, 2014.
17. Alvik A, Haldorsen T, Groholt B, Lindemann R. Alcohol Consumption Before and During pregnancy Comparing Concurrent and Retrospective Reports. *Alcohol Clin Exp Res* 2006;30:510–5.
18. Baker S, Edwards R. How many qualitative interviews is enough? - Expert voices and early career reflections on sampling and cases in qualitative research. Southampton: National Centre for Research Methods, 2012.

19. Green J, Thorogood N. *Qualitative Methods for Health Research*. 3rd edition. Los Angeles: SAGE, 2014.
20. van Nes F, Abma T, Jonsson H, Deeg D. Language differences in qualitative research: is meaning lost in translation? *Eur J Ageing* 2010;7:313–6.
21. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol* 2006;3:77–101.
22. NVivo qualitative data analysis software. QSR International Pty Ltd. Version 10, 2012.
23. van der Wulp NY, Hoving C, de Vries H. A qualitative investigation of alcohol use advice during pregnancy: experiences of Dutch midwives, pregnant women and their partners. *Midwifery* 2013;29:e89–98.
24. Anderson A, Hure A, Kay-Lambkin F, Loxton D. Women’s perceptions of information about alcohol use during pregnancy: a qualitative study. *BMC Public Health* 2014;14:1048.
25. Kesmodel US, Schiøler Kesmodel P. Drinking during pregnancy: attitudes and knowledge among pregnant Danish women, 1998. *Alcohol Clin Exp Res* 2002;26:1553–60.
26. Hammer R, Inglin S. ‘I don’t think it’s risky, but...’: pregnant women’s risk perceptions of maternal drinking and smoking. *Health Risk Soc* 2013;16:22–35.
27. Staff J, Schulenberg JE, Maslowsky J, et al. Substance use changes and social role transitions: proximal developmental effects on ongoing trajectories from late adolescence through early adulthood. *Dev Psychopathol* 2010;22:917–32.
28. Little M, Handley E, Leuthe E, Chassin L. The impact of parenthood on alcohol consumption trajectories: variations as a function of timing of parenthood, familial alcoholism, and gender. *Dev Psychopathol* 2009; 21:661–82.
29. Grønkjær M, Curtis T, De Crespigny C, Delmar C. Acceptance and expectance: Cultural norms for alcohol use in Denmark. *Int J Qual Stud Health Well-being* 2011;6.

30. Skagerström J, Häggström-Nordin E, Alehagen S. The voice of non-pregnant women on alcohol consumption during pregnancy: a focus group study among women in Sweden. *BMC Public Health* 2015;15:1–9.
31. Room R, Babor T, Rehm J. Alcohol and public health. *Lancet* 2005;365:519–30.
32. Bailey L. Refracted selves? A study of changes in self-identity in the transition to motherhood. *Sociology* 1999;33:335–52.
33. O'Leary CM. Fetal alcohol syndrome: diagnosis, epidemiology, and developmental outcomes. *J Paediatr Child Health* 2004; 40, 2–7.
34. Schölin L. Prevention of harm caused by alcohol exposure in pregnancy – Rapid review and case studies from Member States. Copenhagen: WHO Regional Office for Europe, 2016.
35. Edvardsson K, Ivarsson A, Eurenus E, et al. Giving offspring a healthy start: parents' experiences of health promotion and lifestyle change during pregnancy and early parenthood. *BMC Public Health* 2011;11:936.
36. McBride CM, Emmons KM, Lipkus IM. Understanding the potential of teachable moments: the case of smoking cessation. *Health Educ Res* 2003;18:156–70.
37. Liverpool City Council. Liverpool Health and Wellbeing Strategy 2012-2015 - Laying the foundations. Liverpool: Liverpool City Council, 2012.
38. Office for National Statistics. Drinking Habits Among Adults, 2012. London: Office for National Statistics, 2013.
39. Public Health Agency. Folkhälsan i Sverige - Årsrapport 2014 [Public Health in Sweden - Annual Report 2014]. Solna/Östersund: Public Health Agency of Sweden, 2014.
40. Department of Health. UK Chief Medical Officers' Low Risk Drinking Guidelines. London: Department of Health, 2016.

### **Table 1. Changing drinking habits when getting pregnant**

#### **Quote 1**

*I was a big drinker. I would probably say (I drank) every Friday, Saturday and maybe once during the week, it was a big part of my life because that's a way of socialising (...) so I did struggle with it and it was really hard not drinking and towards the end all I could think of was "as soon as I've given birth I want a vodka and lemonade"*

*[laughing]* (English woman 3)

#### **Quote 2**

*We didn't do anything the first six months or something like that but so we just lived on like usual just as normal as possible* (Swedish woman 16).

#### **Quote 3**

*When I found out that I was pregnant and I knew I had been out for my birthday and so I went for my scan and I was "oh I had too much to drink" and the midwife said "to be honest it won't really matter, because in the early stages they are literally just a pea". So she said not to worry too much about it, "you know now so just don't worry about it, but don't carry on drinking heavily"* (English woman 17)

#### **Quote 4**

*I'd give myself a break and not give up everything that I enjoy so the odd glass of wine I thought was fine [...] I was still a little bit of me rather than so much change in one go but yeah I wouldn't drink heavily* (English woman 2)

**Table 2. Changes in drinking patterns amongst partners during pregnancy**

**Quote 1**

*There was never any single occasion where she would have more than that (one glass) so it was maybe that she would have a glass to keep me company (English partner 2)*

**Quote 2**

*“It was a social choice of course and when she didn’t drink I didn’t drink either”*

*(Swedish partner 2).*

*I wouldn’t ordinarily drink in the house if she wasn’t drinking. Sometimes over the weekend, yeah I probably would drink over the weekend so would have one or two in the house. Then it wasn’t a total ban on drinking, I would just drink less when she was there*

*(English partner 4)*

**Quote 3**

*I thought he was gonna be a bit more supportive with having the child, we wouldn’t drink together or he would slow down but, he just carried on as before (English woman 3)*

### **Table 3. Views on foetal rights versus women's autonomy**

#### **Quote 1**

*(Drinking is a) personal choice, keep it at a lower level. Because it isn't for very long, but equally I don't think that it helps women to be public property, when they are pregnant.*

*To disengage their own brains (English woman 13)*

#### **Quote 2**

*I think it is disgraceful, but that's just what I think. I don't think it is [pause] and if you have you chosen to have a child and you get pregnant then you have a responsibility*

*(Swedish partner 1)*

#### **Quote 3**

*It really sparks something within me. Yeah that you, but the baby can't choose. They just get it (alcohol) in them. No so I get really annoyed. Now I have never had anyone close who has done that then I would really have told them off [pause] no that is so not okay*

*(Swedish woman 12)*

#### **Quote 4**

*If it's in moderate you know it is their decision isn't it. I would never do it but if it was, I don't feel like it's right to judge somebody else, especially when they have, that you say health professionals that advise it [...] it's not gonna harm the baby if they have a glass of wine every now and again. If I saw somebody going into an off-licence maybe buying loads of [laughing] like a big bottle of vodka it might be a bit... (English woman 1)*

**Table 4. Reasons for changing alcohol habits****Quote 1**

*“I don’t think that it’s a sacrifice, there are no major things for me this thing about not eating brie cheese or eat Parma ham. It’s nine months” (Swedish woman 10)*

**Quote 2**

*Well I can imagine that it affects the whole life so that it can have sustained effects but, exactly what disabilities you can get, I don’t know but I can imagine that it is related to delays in development, perhaps some form of retardation (Swedish woman 1)*

**Quote 3**

*I was just always of the opinion that I just wouldn’t have anything but then when I actually got pregnant I did slack in a little bit and like “ah I don’t think the odd glass of wine is not going to matter too much” so I think my views before becoming pregnant were different to after (English woman 5)*