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Review

Accounts of women identified as drinking at 'high risk' during pregnancy: A meta-ethnography of missing voices

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ABSTRACT

Background: Drinking alcohol during pregnancy is associated with Foetal Alcohol Spectrum Disorders (FASD), and women who drink at higher levels are more likely to have a baby with FASD. Public health responses focus on population-level approaches to FASD prevention such as promoting abstinence and alcohol brief interventions. Efforts to better understand and respond to 'high risk' drinking during pregnancy have been largely ignored. This meta-ethnography of qualitative research aims to inform this policy and practice agenda.

Methods: Ten health, social care, and social sciences databases were searched for qualitative studies published since 2000 exploring drinking during pregnancy. Studies that included accounts of women who described themselves, or were diagnosed as, alcohol-dependent during pregnancy, or reported drinking during pregnancy at levels considered by the Word Health Organisation to constitute 'high risk' drinking, were eligible. Noblit and Hare's analytic approach to meta-ethnography was used to synthesise the studies and eMERGe reporting guidance was followed.

Results: Nine diverse studies were included. All explored the impact of social norms and relationships, women's knowledge about the risks involved in drinking during pregnancy, the behaviour of women, and the advice they received. Three key themes were identified: drinking is social and relational, knowledge is not enough, and multiple adversities matter. Multiple adversities were interconnected and primarily related to structural inequalities and oppression. The complex needs of women and the wider context in which their drinking occurred were rarely explored or responded to during pregnancy.

Conclusion: This meta-ethnography provides a more nuanced understanding of the complex dynamics involved in women's 'high risk' drinking during pregnancy, the contexts in which they drink and their unmet needs. These findings can inform future policy and practice responses to 'high risk' drinking during pregnancy. Further research should explore women's experiences in a UK context and consider how services could meet women's needs.

Background

Alcohol is considered a teratogen – an agent which affects the formation of the embryo and development of the foetus. The consumption of alcohol during pregnancy is associated with Foetal Alcohol Spectrum Disorders (FASD), an umbrella term describing a range of effects associated with drinking during pregnancy, including increased risk of miscarriage, reduction in foetal growth, birth defects, developmental delay, and neurological abnormalities (British Medical Association (BMA, 2007). The most visible form of FASD is Foetal Alcohol Syndrome (FAS), a birth defect involving growth deficiency, specific facial abnormalities, and central nervous system damage (Astley et al., 2000; Jones & Smith, 1974).

It is difficult to assess rates of FASD due to differences in definition, diagnosis and measurement across the world (Drabble et al., 2011). Despite these challenges, it appears that factors such as (but not limited to) socioeconomic status (SES), smoking, diet, other health conditions, parity, genetics, domestic violence, stress, and other drug use may affect whether a child is diagnosed with FASD, even when drinking behaviour is comparable (Abel & Hannigan, 1995; Armstrong, 2008; Armstrong & Abel, 2000; Drabble et al., 2011). Studies of birth mothers of children with FASD suggest that these women – like women who use illicit drugs

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in pregnancy – have often experienced abuse, are socially isolated and live in poverty (Astley et al., 2000; Badry, 2008; Bell et al., 2009). However, the social contexts in which women live have not been subject to the same level of scrutiny in research, policy and practice as their drinking behaviour (Armstrong, 2008; Bell et al., 2009; Lowe & Lee, 2010; Salmon, 2011). This narrow focus on drinking can serve to individualise risk, placing the sole 'blame' for birth defects on women, ignoring the social and political context in which higher risk drinking takes place (Lupton, 2013a, 2013b).

There is no established threshold of alcohol consumption that is clearly associated with FASD, and UK and World Health Organization (WHO) guidelines also note that there is no safe level of drinking during pregnancy (UK Chief Medical Officers, 2016; WHO, 2022). Systematic review evidence suggests that, during pregnancy, as the quantity of alcohol consumed increases, so does the likelihood of FASD (Bay & Kesmodel, 2011; Henderson et al., 2007; Patra et al., 2011), so women who drink at higher levels may be more likely than others to have a baby with FASD. However, this correlation is not linear or straightforward due to multiple confounding factors (Abel, 1995; Henderson et al., 2007; Jones & Smith, 1974).The World Health Organization defines 'high risk drinking' in the general population as the equivalent of 35 or more UK units of alcohol per week (WHO, 2000), which aligns with the definition used in Bay and Kesmodel's (2011) systematic review of the effects of maternal alcohol consumption during pregnancy on child motor function. Bay and Kesmodel (2011) defined a 'moderate to high' level of daily drinking as 4.5 – 7.5 UK units per day, which equates to 31.5 - 52.5 UK units per week. For the purposes of this review, 'high-risk drinking' refers to 35 or more UK units of alcohol per week, in line with these definitions.Despite the increased risk and complexity associated with women drinking at a 'high risk' level, in the UK, public health responses to FASD overwhelmingly take place at a population-health level. UK guidance for all women who are, or may become pregnant, strongly advocates abstinence, and pregnant women who attend antenatal appointments are routinely asked about their alcohol consumption (NHS Health Scotland, 2017; NICE, 2021; Scottish Government, 2015). Clinical guidelines for antenatal professionals advise that women should be reminded of the abstinence guidance at their first antenatal appointment and asked about their drinking throughout pregnancy, and that women's answers should be recorded (NICE, 2021; NICE 2022).

Despite this comprehensive approach to alcohol screening in the UK, guidance on supporting women who may be at the greatest risk of having a baby with FASD (those drinking at a 'high risk' level), is lacking (Lui et al., 2008; Stade et al., 2009). Professionals are advised not to use ABIs with pregnant women who may be alcohol dependent as there is no evidence on their effectiveness in this population (Doi et al., 2015; NHS Health Scotland, 2017). However, clinical guidelines do not state the type of treatment these women should receive, other than to say they should be signposted or referred to an appropriate specialist service, and that commissioners should commission services for women who drink during pregnancy (NICE, 2010; NICE, 2021; NICE, 2022). Evidence is lacking about the effectiveness of interventions for pregnant women who are alcohol dependent (Lui et al., 2008; Stade et al., 2009), and many experiencing alcohol dependence do not access specialist services (Beeston et al., 2016). As such, it seems likely that women who are at greatest risk of having a baby with FASD are not being identified and adequately supported.

Although FASD has been a policy and research priority in the UK and other countries, the perspectives of women who drink during pregnancy, and particularly those who drink at a 'high risk' level, are rarely heard. This may be because there are barriers to these women participating in research due to the stigma surrounding drinking during pregnancy (Phillips et al., 2007), and the marginalisation they face (Bell et al., 2009).

Stigma and marginalisation particularly affect mothers who cannot conform to the idealised 'good mother' role (Klee et al., 2002; Salmon, 2004). 'Mother' is a culturally idealised role with accompanying societal pressures and expectations (Klee et al., 2002; Maushart, 1999; Oakley, 2019). The neo-liberal ideology of a 'good mother' is a woman who is seen as devoted to her husband, children, and home, is self-sacrificing and disciplined, and puts others before herself (Bell et al., 2009; Salmon, 2004, 2011). Staddon argues that mothers' drinking is often problematised because it can be seen as a cultural challenge to these notions of 'good mothering' (Staddon 2012). A strong body of feminist scholarship has explored how idealised notions of the 'good mother' are unrealistic and fail to take into account the power relations and structural conditions that mediate women's experiences of motherhood (Bell et al., 2009; Miller, 2007; Oakley, 1979).

Feminist sociologists have observed that the self-regulation required of everybody within neo-liberalism (Foucault, 1979; Ruhl, 1999) is particularly evident during pregnancy (Lee et al., 2014; Lupton, 2012; Salmon, 2011). Women's bodies can be seen as unpredictable and uncontained during pregnancy (Lupton, 2012, 2013b), and the pregnant body is positioned as a 'threatening Other' to the 'defenceless Self' of the unborn; a risk and threat, rather than protective and nurturing (Lupton, 2013a). Women are expected to exert control over their risky, 'unruly' bodies throughout pregnancy by following government guidelines, with those who do not do this considered 'irresponsible mothers' (Bell et al., 2009; Lupton, 2013a).

This meta-ethnography sought to develop a deeper understanding of women's perspectives on 'high-risk' drinking during pregnancy by synthesising qualitative studies which included the accounts of women who drank at this level during pregnancy. It aimed to explore why women drink during pregnancy, how current services are working from women's perspectives, what types of responses may be needed to address the needs of this marginalised and neglected population, what is foregrounded in the studies, and what potentially important aspects of women's lives are absent or underexplored.

Methods

Approach

Meta-ethnography is a type of qualitative synthesis that seeks to move beyond aggregating studies on a particular topic, enabling the development of new understandings which may not be possible by looking at the individual studies separately (France et al., 2019; Noblit & Hare, 1988). In this review, Noblit and Hare's seven-step process for conducting a meta-ethnography was employed: getting started; deciding what is relevant to the initial interest; reading the studies; determining how the studies are related; translating the studies into one another; synthesising translations; and articulating the synthesis.

Recent reviews of meta-ethnographies have found that they are often poorly reported and lacking in detail and transparency (France et al., 2014). As such, this study followed eMERGe reporting guidance, which underlines the importance of reporting on all stages of the meta-ethnography, not just the findings (France et al., 2019).

Review questions

- How do women who report drinking at a high-risk level during pregnancy account for their alcohol use, and its effects?
- In what ways, and to what extent, do factors other than alcohol consumption feature in women's accounts of their pregnancy, and in what ways do they intersect with alcohol consumption?
- What are the implications of women's experiences of drinking during pregnancy for UK research, policy and practice?
- What is foregrounded in the studies, and what potentially important aspects of women's lives are absent or underexplored?

Search strategy

A comprehensive approach was taken to the literature search. The search strategy included a mixture of MeSH (or equivalent) headings

Table 1
Databases searched and number of papers identified.

Database	Number of papers identified
Embase	475
Cochrane library	126
Assia	299
Sociological abstracts	209
Social services abstracts	209
CINAHL	315
Medline	352
Psycinfo	510
Pubmed	156
Proquest dissertations and theses	403
From other avenues	1

and keywords, amended to fit the language and key terms used in each database, including identified synonyms and appropriate truncation. Methodological keywords such as 'qualitative' were also included in the search to make the number of articles manageable and increase specificity. The search strategy aimed to capture all qualitative studies exploring the consumption of alcohol during pregnancy, to ensure that all relevant studies were included. Databases spanning medical, health and social care, and social science disciplines were searched. Databases searched and numbers of papers identified are shown in Table 1.

Screening and inclusion criteria

All papers were imported to endnote and screened by title after the removal of duplicates. Once duplicates were removed and titles and abstracts were screened, 88 articles were eligible for full-text screening (as at 14/12/2020).

To be eligible for inclusion, studies had to be peer reviewed (including PhD theses) primary qualitative research whose population included women who described themselves, or were diagnosed as, alcohol-dependent during pregnancy, or reported drinking during pregnancy at the level considered by the Word Health Organisation to constitute 'high risk' drinking (35 units per week). This aligns with Bay and Kesmodel's (2011) systematic review of the effects of maternal alcohol consumption during pregnancy on child motor function, in which a 'moderate to high' level of daily drinking was defined as 4.5 – 7.5 UK units per day, which equates to 31.5 - 52.5 UK units per week (Bay & Kesmodel, 2011). Papers that were published before 2000 were excluded, so that the historical contexts of included studies were similar.

Decisions about exclusion or inclusion were not always straightforward. It was sometimes not possible to tell whether a study included women who drank whilst pregnant. For example some studies, such as Choi et al. (2015) and Holland et al (2014) discussed alcohol consumption during pregnancy but did not identify whether anyone who participated reported drinking during pregnancy. Laing (2015) excluded participants who were alcohol dependent, and while one participant stated she drank until she was sick during a previous pregnancy, there was no available information about how much alcohol this involved, or whether it was an isolated incident. These papers were therefore excluded. Conversely, Salmon (2008) did not provide details of how much alcohol participants reported consuming, but all had a child with a diagnosis of FASD or FAS. Although there are problems with relying on an FASD diagnosis to confirm the level of alcohol consumption (Brown et al., 2011; Gert et al., 2018), as the children had a medical diagnosis and the participants described 'bingeing' and 'drinking every night of the week' (Salmon 2008, p200-201), this article was included. In total 78 papers were excluded. See Fig. 1 for reasons for exclusion.

Ten papers fulfilled the criteria for inclusion in the meta-ethnography (see Table 2). Two reported different aspects of findings from the same study (Watt et al., 2014, 2016), and are treated as one study in this review. References from included papers were examined, but no further studies eligible for inclusion were identified.

Reading studies and data extraction/ noting of interpretive metaphors

A data extraction table was used to extract the key information from each article or thesis, including identification of the population, methodological and theoretical approach and the concepts, themes or metaphors from each paper (see Table 2). At this stage the authors' original wording was retained, to help preserve their interpretation and the meaning of the original text. This stage of the meta-synthesis aims to capture the key findings of each study as intended by the original researchers, or, as Walsh and Downe (2005) state, 'the art of respecting and representing context as intended through the original research' (p209).

Once the data extraction was complete, the excluded studies were revisited to check that no relevant studies had been missed. Although this did not lead to the inclusion of any additional studies, it was useful in confirming the inclusion or exclusion of the screened studies.

Determining how studies are related

This stage of meta-ethnography involves comparing the research design, participant characteristics, study focus and other contextual factors. This process identified that studies varied in the way they defined drinking: Frost-Pineda (2008) did not explicitly define levels of drinking but Pamela, the respondent who met the inclusion criteria for this meta-ethnography, was in residential treatment for alcohol addiction and described alcohol dependence during several pregnancies; Salmon (2008), Zabotka (2012), Thomas and Mukherjee (2019), and Badry (2008) included only women whose children had been diagnosed with FASD or FAS, which avoided the challenge of defining drinking levels, but was not unproblematic as the diagnosis of FASD is far from straightforward (Corrigan et al., 2019; Gert et al., 2018; Watt et al. 2014, 2016) interviewed women who drank any alcohol during pregnancy, many of whom were described as 'binge', 'heavy' or 'hazardous' drinking.

The studies' descriptions of women's drinking varied widely, reflecting the heterogeneity of the studies. Few details were available about the quantity of alcohol consumed. Except for Pati et al., who used the AUDIT tool to screen women before inclusion, none of the studies specified how much alcohol the women reported drinking or had alcohol consumption-related inclusion criteria.

Women across all studies reported drinking before they became pregnant, and many described drinking at an early age. Some described drinking for many years before they became pregnant, although this was often not defined or discussed in detail. The majority described drinking throughout the entirety of their pregnancy, but some said they had stopped or attempted to moderate their drinking when they realised they were pregnant (Zabotka, 2012; Frost-Pineda, 2008; Salmon, 2000). Some women described previous or subsequent pregnancies in which they drank very little or abstained. Women described their drinking in various ways; some described themselves as alcohol dependent, while others described themselves as people who used to do a 'normal' amount of drinking (Salmon, 2008), or who used to 'binge drink' (Thomas & Mukherjee, 2019). Others did not describe themselves as dependent but reported possible symptoms of dependence such as drinking as soon as they woke up in the morning (Watt et al., 2014, 2016). This variance may be partly due to the design, purpose and theoretical perspective of the studies. For example, participants in Watt et al. (2014, 2016) and Pati et al. (2018) were all currently or recently pregnant, whilst Zabotka (2012), Frost-Pineda (2008), Salmon (2008) and Thomas and Mukherjee (2019) all undertook retrospective studies (see Table 2, data extraction).

It is likely that the way women defined and described their drinking was influenced by the country and context in which they lived,

Table 2
Data extraction.

Study	Country	Aim/ research question	Sample	Methods	Theoretical perspective	Topics covered in topic guide	Themes identified in study
Badry (2008)	Canada	Understanding lived experiences of birth mothers of children diagnosed with FAS	8 women aged 25-60 who had given birth to one or more child with FAS	In-depth interviews	Hermeneutic phenomenology, feminist perspective	No predetermined questions other than 'What was the lived experience of being a birth mother of a child with Fetal Alcohol Syndrome?'	The birth mother's childhood; experiences of alcohol; pregnancy experience; relationship with the father of the child diagnosed with FAS; trauma including violence; child welfare; the meaning of the child diagnosed with FAS to the birth mother
Cloete and Ramugondo (2015)	South Africa	Influence of contextual factors on alcohol consumption during pregnancy	3 women, all low SES, previously or currently 'drunk excessively' during pregnancy	Instrumental case-study using observation and semi-structured interviews	Takes 'a critical occupational therapy stance towards maternal alcohol consumption.' Alcohol consumption as imposed occupation	Interview questions included activities that related to the occupations of work, self-care and socialisation	Nothing comes easy; trying to make this life bearable; rekindling hope; baking bread with little. All the themes relate to the way cultural, economic and political conditions are related to alcohol consumption
Frost-Pineda (2008)	USA	Answer some of the 'why' questions surrounding addiction and fertility	5 women in residential treatment for addiction, one of whom drank during pregnancy	Life story interviews – 2 hour interviews, 5 times with each woman	Anthropological. Focuses on lived experiences	Focus on different stage of life (e.g., childhood/ adolescence) at each interview. Topics include happy memories, school, friendships, parental alcohol/drug use, family relationships, sex, risk-taking, religion, financial issues, contraception, alcohol treatment and relapse, childcare and parenting	Relevant to this review: Family history of addiction; availability of drugs and alcohol; violence, trauma and abuse; substance use by partners; loss, promiscuity, prostitution and arrests; relapse, illness, injuries and near-death experiences; social isolation
Pati et al. (2018)	India	Exploring perceptions and practices related to the consumption of alcohol by pregnant tribal women in India	19 women who reported alcohol consumption during pregnancy (all scored 3 or 4 on AUDIT test)	Face-to-face in-depth interviews	Cultural anthropology	Knowledge about alcohol; practice and opinion about consumption; alcohol and baby	Relevant to this review: Custom, tradition and rituals; indigenous, non-injurious and relaxant; curiosity, addiction and lack of knowledge
Salmon (2000)	Canada	Understand how a group of young Aboriginal mothers… articulate their own needs, interests, concerns and experiences, and how these may be similar to or different from the ways they are constructed in texts of the [FAS/FAE 'prevention'] initiative	6 women recruited from a community FASD prevention initiative, all had experienced substance/ alcohol use during pregnancy, most have either a child with diagnosis of or suspected FAS/FAE	Group interviews attended by all 6 women twice	Feminist, materialist, anti-colonial, anti-ableist	Reflect on experiences in lives and in communities that inform their understandings and experiences of FAS and FAE. Wanted to discss policy approach but women didn't want to talk about this, preferring to talk about experiences and contexts instead	Dis/abling citizenship: negotiating citizenship; claiming Dis/Ability: medicalization as a mechanism for securing substantive citizenship; Dis/Abling states: the contestations and contradictions of medicalization for substantive citizenship and social justice; Getting the information: what Aboriginal mothers want and need to know about FAS/FAE; the role of male partners and friends in women's substance use; Engendering "risk": education, intervention, and the roles of Aboriginal women and men; "Education" and "role modelling": strategies for sharing FAS/FAE knowledge in the context of Aboriginal women's lives

(*continued on next page*)

Table 2 (*continued*)

Study	Country	Aim/ research question	Sample	Methods	Theoretical perspective	Topics covered in topic guide	Themes identified in study
Salmon (2008)	New Zealand	Describe the lived experiences of birth mothers who are parenting a child with FASD	8 biological mothers whose children have FASD	Semi-structured interviews (up to an hour)	Feminist standpoint theory. Focus on lived experience	"Please tell me about your experiences of your pregnancy with your child with FASD": other topic areas related to labour, birth, post-partum period and onwards	Feelings of responsibility and guilt; lack of knowledge about FASD; drinking during pregnancy
Thomas & Mukherjee (2019)	UK	Explore the experiences of birth mothers following a diagnosis of FASD in their children	5 women who are birth mothers of children diagnosed with FASD	Semi-structured interviews, IPA	Phenomenological (researchers are psychiatrist and FASD clinician)	Topic guide used, overarching question: "Please tell me about your experiences as a birth mother of a child with FASD." Also experiences before they became pregnant	Relevant to this review: To blame or not to blame?
Watt et al. (2014/2016)	South Africa	Examine experiences of women, and knowledge and attitudes about maternal alcohol consumption	24 women pregnant or within 12 months postpartum, who drank during pregnancy	Semi-structured interviews (60-90 minutes)	Not stated. Used memoing in analysis (they ref Birke et al 2008), which is generally associated with grounded theory, but this is not explicitly stated	personal experiences with drinking during pregnancy, community norms and attitudes towards maternal drinking, and knowledge about FASD	Competing attitudes about drinking while pregnant; internalization of misinformation; dilemma of drinking; drinking patterns; factors that explain drinking during pregnancy; coping with stress; drinking as a social connection; social norms; lack of attachment to the pregnancy; addiction
Zabotka (2012)	USA	Describe and understand the feelings, coping behaviours and thoughts of biological mothers of a child diagnosed with FAS	11 biological mothers of children with FAS	Telephone interviews (60-90 minutes)	Not stated – focuses on psychological issues, is a Social Work PhD	Drinking and substance use before and during pregnancy, feelings about pregnancy and infancy, thoughts/ feelings re FAS causes and diagnosis, challenges/ services needed re child with FAS	Childhood trauma; separation and loss during childhood; partner abuse during adulthood; possible undiagnosed FAS among birth mothers; attempted moderation of alcohol consumption during pregnancy; lack of knowledge; social norms; denial about the amount of alcohol consumed; unplanned pregnancy

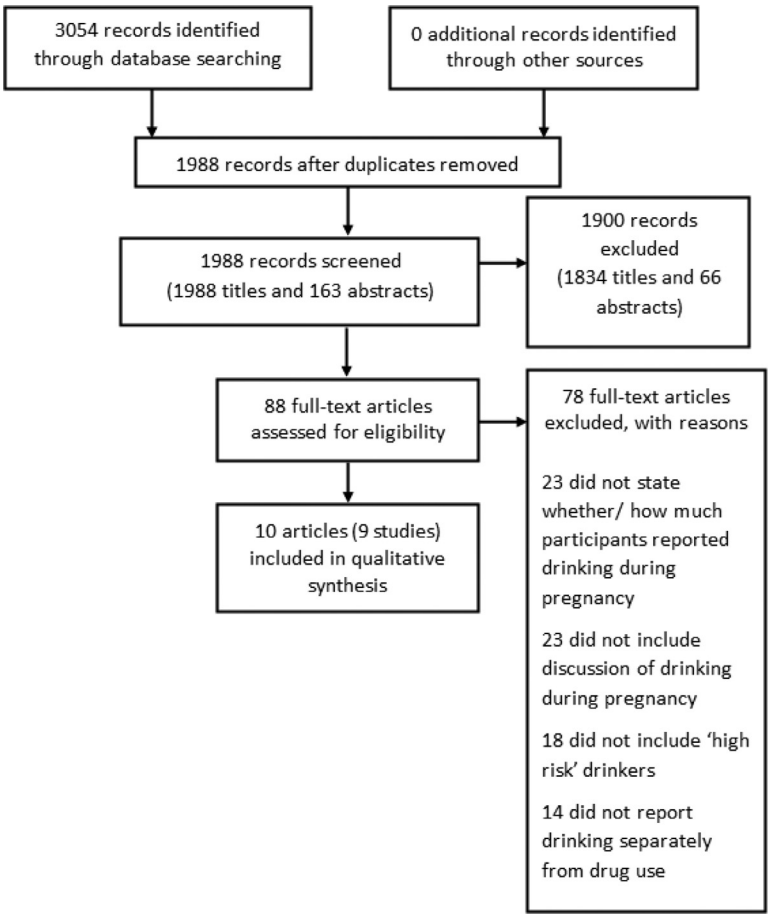

Fig. 1. PRISMA flowchart.

their stage of life, whether they had sought treatment or support relating to their alcohol use, and dominant discourses of addiction in each country. For example, Frost-Pineda (2008), Badry (2008) and Zabotka (2012) all included women who described themselves as alcohol dependent, and they were all undertaken in the US where the dominant discourse around alcohol dependence is biomedical, in contrast to the South African studies, in which women described their drinking as a normal part of life (Cloete and Ramugondo, 2015; Watt et al., 2014, 2016).

The studies differed in focus, aim and theoretical perspective (see Table 2, data extraction). The studies were geographically diverse, taking place in New Zealand, South Africa, North America (Canada and the US), India and the UK. The cultural history of each place and population has potential implications for the way the data is interpreted and understood, and for the meanings ascribed to discussions by both the women being interviewed and the researcher. Watt et al.'s study took place with Black or 'Coloured' (a term used in South Africa to describe those with mixed ancestry) women in South Africa against the backdrop of the post-apartheid 'dop' system whereby farmers paid workers with alcohol. Cloete and Ramugondo (2015) was also South African and focused on rural communities and low SES. The US studies (Zabotka, 2012; Frost-Pineda, 2008) took place within a country with a history of a moral panic about FAS and a biomedical approach to the condition (Armstrong, 2008); an approach largely shared in Canada, where Badry's (2008) and Salmon (2000) studies were situated. Salmon's (2008) study took place in New Zealand where, according to Salmon, there was a culture of heavy alcohol use. Some findings were highly dependent on context. For example, the extent to which alcohol use during pregnancy was normalised, and differing child protection processes in each country, so it was not possible to transfer findings to a UK context. Only one study included in this review took place in the UK (Thomas & Mukherjee, 2019), but this study provided little contextual information about women's lives before or during pregnancy, as its focus was on women's experiences following their children's FASD diagnosis, perhaps reflecting the researchers' paediatric perspective.

Translating studies into one another

The next stage of meta-ethnography involves extracting all data (direct quotes) from the reviewed papers, initially keeping them under the headings (usually themes) in which the authors had placed them, so that the data retained the context it had been initially presented by the study authors. The lead reviewer (AT) then generated new themes by grouping data across more than one study that appeared to be about a similar issue or meaning, taking a flexible, iterative approach to the production of themes. This process highlighted how themes which had originally appeared different to one another could sometimes be seen as similar (for example 'lack of attachment to the pregnancy', a theme identified in Watt et al. (2014, 2016), when viewed alongside the quotes, could be compared to Badry's (2008) theme 'the birth mother's pregnancy experience', and eventually both contributed to a theme which the lead researcher later categorised as 'drinking during pregnancy is social and relational').

Some themes which resulted from the meta-ethnography were not highlighted as themes in the original studies but were important when data from the studies were viewed together, either as 'reciprocal translations' (similar concepts), or 'refutational translations' (findings that appeared to contradict one another or offer alternative explanations). See Fig. 2 for a concept map of the translation of themes, and Table 3 for a summary of themes included in the final synthesis.

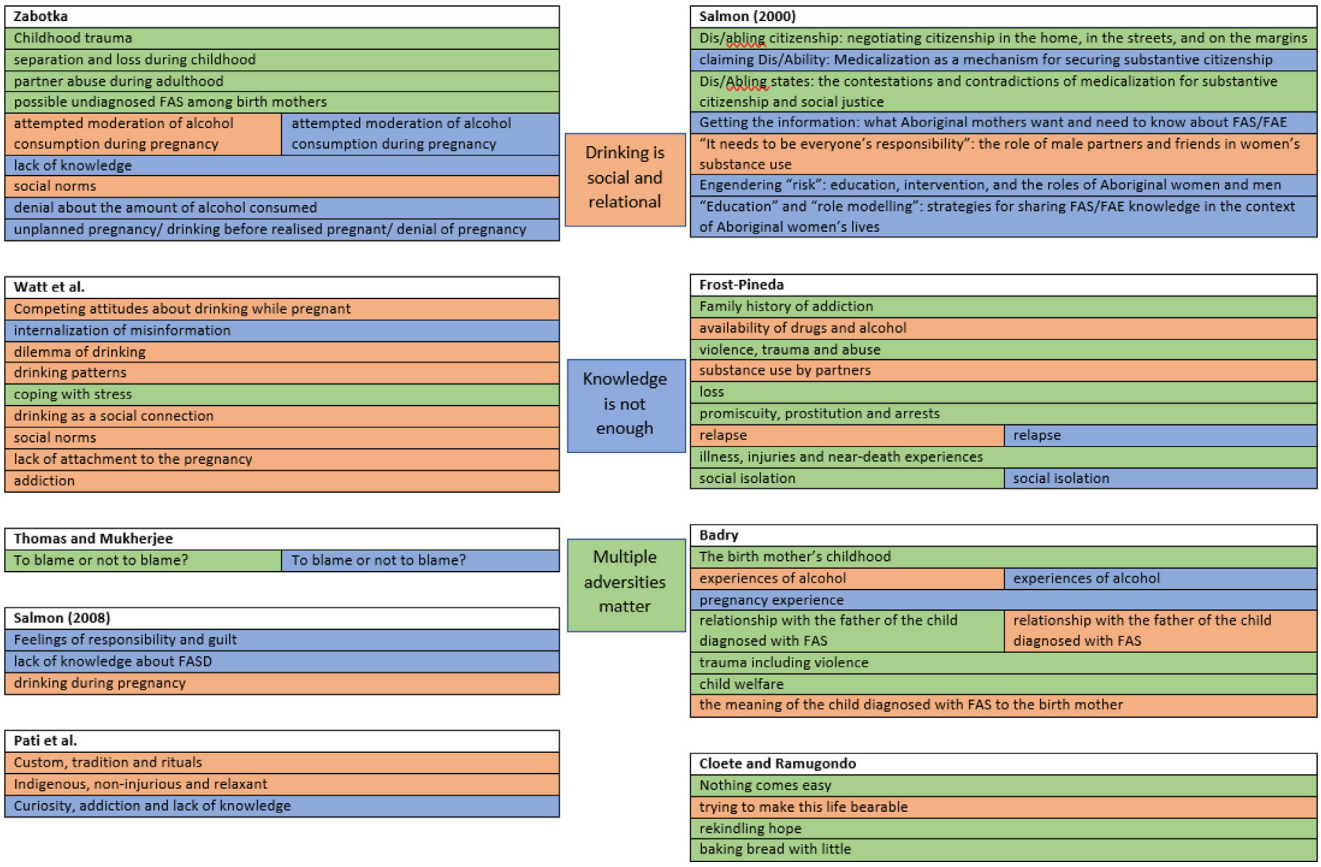

Fig. 2. Translation of themes.

Findings

Phases six and seven of meta-ethnography, synthesising translations and expressing the synthesis (Noblit and Hare, 1988), are presented in this section. Despite the disparate nature of the studies, it was possible to identify three key themes, each discussed in turn below. As suggested by France et al. (2019) alternative interpretations of findings are discussed where appropriate. These are not intended to replace the researchers' original interpretations, but to highlight the possibility of alternative readings. While attention is paid to the original context of the findings, and the researcher's own interpretation of these, meta-synthesis underlines the importance of exploring alternative readings, and these are noted where relevant.

Drinking during pregnancy is social and relational

Social norms and relationships

Women across the studies emphasised that experiences of drinking during pregnancy were affected by social norms and relationships. Across all studies the role of social norms in changing or maintaining drinking behaviour was key. Women described cultures in which drinking during pregnancy was normal and acceptable (Watt et al., 2014, 2016; Cloete and Ramugondo, 2015; Pati et al., 2018), their partners were drinking heavily (Salmon, 2000; Salmon, 2008; Frost-Pineda, 2008, Watt et al., 2014, 2016; Cloete and Ramugondo, 2015; Pati et al., 2018), or friends told them they themselves drank during pregnancy and it did not do them any harm (Zabotka, 2012; Watt et al., 2014, 2016; Pati et al., 2018; Salmon, 2000). Watt et al. (2014, 2016) reported that many participants said they knew that drinking during pregnancy carried some risks, but social norms that support drinking during pregnancy were more powerful. There were cultural differences between the populations in each study and there were differences in drinking-related social norms between countries. Watt et al.'s study, for example, took place in post-apartheid South Africa, where past economic structures embedded the use of alcohol in everyday life, so it may be that pro-drinking cultural norms were particularly strong. Similarly, Pati et al. (2018) reported that traditional alcoholic drinks in the Odisha tribe were embedded in the culture of the tribe, and viewed by women as healthy and natural, and therefore a good drink to consume during pregnancy.

Despite these cultural differences, women across the studies emphasised the importance of social connections, and many suggested that their support networks had comprised fellow drinkers. Women in Watt et al. (2014, 2016) and Cloete and Ramugondo (2015) suggested that drinking was an important part of their social lives, without which they would be excluded. Zabotka (2012) and Badry (2008) found that women relied on the support of their drinking friends due to lack of support from others.

Women described concerns about their drinking being allayed by the fact that the people around them were drinking too, and that those people also drank alcohol whilst pregnant (Zabotka, 2012; Watt et al., 2014, 2016). Some women described the way in which their social circles - consisting of other drinkers - affected their own perceptions of a 'normal' amount of drinking (Zabotka, 2012). Conversely, women in Watt et al. (2014, 2016) talked about people in the community telling them they should not be drinking, and women in Salmon (2000) study described how they had been encouraged to stop drinking by seeing women who abstained during pregnancy.

Impact of partners

Women in Watt et al. (2014, 2016), Salmon (2000, 2008), Badry (2008), Cloete and Ramugondo (2015), and Frost-Pineda (2008) all talked about their partners' drinking behaviour. The woman in Frost-Pineda described a succession of relationships

Table 3
Meta-ethnography summary of themes.

Theme	Badry	Cloete and Ramugondo	Frost-Pineda	Pati et al.	Salmon (2000)	Salmon (2008)	Thomas and Mukherjee	Watt et al.	Zabotka
Drinking is social and relational	■	■	■	■	■	■	■	■	■
Social norms around drinking	■	■	■	■	■	■		■	■
Impact of partners	■	■	■		■	■		■	
Feelings/ attachment	■	■	■		■	■		■	■
Knowledge is not enough	■	■	■	■	■	■	■	■	■
Knowledge of risks of drinking during pregnancy	■	■	■	■	■	■	■	■	■
Advice about drinking during pregnancy	■				■		■	■	■
Multiple adversities matter	■	■	■	■	■	■	■	■	■
Traumatic experiences and repeat victimisation	■	■	■		■		■	■	■
Poverty/ marginalisation	■	■	■	■	■			■	

with men who drank heavily and used drugs; many of the women in Watt et al. talked about drinking with their partners; all but one of the women in Salmon (2008) had alcohol dependent partners when they became pregnant, and they described drinking with them. Women in Badry (2008) and Salmon (2000) described partners who did nothing to encourage them to reduce their alcohol intake while pregnant, and who drank at a 'high risk' level themselves.

Feelings and attachment

Women described a range of feelings about becoming pregnant, including shock and disappointment (Cloete and Ramugondo, 2015), not wanting or not accepting the pregnancy (Watt et al., 2014, 2016), and wanting or trying to induce miscarriage (Watt et al., 2014, 2016; Frost-Pineda, 2008). Other women described happiness and feeling positive about having someone to take care of (Badry, 2008). Other women expressed positive feelings about their pregnancies at a later stage of pregnancy (Zabotka, 2012), or later in life (Badry, 2008). It is possible that study design affected the feelings women were likely to share with researchers; for example, retrospective studies in which women are looking back on their pregnancies many years later (such as Zabotka, 2012; and Badry, 2008) may be more likely to elicit positive feelings, as the memory of the pregnancy is now attached to a child, or shame and guilt if their children have been diagnosed with FASD.

Watt et al. argued that the negative feelings women shared equated to a 'lack of attachment to the pregnancy' (Watt et al., 2014, p122). However, this frames a lack of attachment as abnormal and underplays the impact of context and challenging environments on women's feelings about pregnancy. Prenatal attachment is a complex concept with various conflicting theoretical understandings (McNamara et al., 2019; Lupton, 2013b); women's wider circumstances impact on her ability to 'attach' to the foetus – with factors such as stress and partner support appearing to influence attachment (McNamara et al., 2019). Badry (2008) acknowledged this complexity when she noted that for her participants (US women who had given birth to one or more child with FAS), pregnancy was another difficulty in an already difficult life. Thomas and Mukherjee (2019), and Pati et al. (2018) did not report on women's feelings about pregnancy.

This synthesis of studies underlines how women's responses to becoming pregnant, and their experiences of drinking during pregnancy, are social and relational. We contend that women's accounts of pregnancy and of drinking are embedded within culturally normative ideas of what is considered normal and abnormal, acceptable and unacceptable, harmful and not harmful, supported and unsupported, in order for them to conform to culturally specific idealised notions of the 'good mother' (Bell et al., 2009; Salmon, 2004, 2011) and to avoid being pathologised, blamed, and stigmatised (Klee et al., 2002; Salmon, 2004). Women's experiences of drinking during pregnancy cannot therefore be understood in isolation as an individual behaviour divorced from their social circumstances and drinking culture.

Knowledge is not enough

Knowledge of risks of drinking during pregnancy

All the studies explored women's knowledge about the risks involved in drinking during pregnancy, as well as the advice women had received. The studies varied in their assessments of women's knowledge of risk, and some made assumptions about women's accounts of risk and continued drinking, without exploring other perspectives. Other than exploring the advice women had received, there was little mention of treatment or care.

Some women said they had not known about the risks of drinking during pregnancy and that the risks were not well understood by the general public (Salmon, 2000; Salmon, 2008; Badry, 2008; Zabotka, 2012). Women in Zabotka (2012) and Badry (2008) reflected on this, wondering whether they had, whilst pregnant, suspected that drinking could have caused harm to the foetus but convinced themselves otherwise. Watt et al. (2016, p48) called this 'internalisation of misinformation', suggesting that women relied on their intuition that women knew what was best for their babies, and that alcohol was therefore good for the pregnancy. This was similar to Pati et al. (2018), whereby women drank traditional alcohol during pregnancy with the belief that it would be good for the baby and alleviate pregnancy symptoms. Conversely, other women described thinking they should stop or cut down drinking during pregnancy but found this difficult.

Women in Salmon's (2008) study (New Zealand mothers of children with diagnosed FASD) said they did not know that drinking could harm the foetus, whilst some of the women in the other studies acknowledged that they were aware that drinking whilst pregnant carried risks (Zabotka, 2012; Frost-Pineda, 2008; Badry, 2008; Salmon, 2000; Watt et al., 2014, 2016). There are several possible explanations for this refutational finding; Salmon's (2008) study was the only one based in New Zealand, so it is possible that messages about alcohol and pregnancy were different there, particularly as the youngest mother in Salmon's (2008) retrospective study gave birth in 1996, over 20 years ago. In addition, Salmon's (2008) paper was a journal article with a focus on post-pregnancy, so in-depth exploration of this issue may not have been within its scope. A further possibility is that these refutational findings are a reflection of different inclusion criteria in the studies. Salmon's (2008) study did not include any women experiencing poverty or multiple adversities, and it is possible that the women in the various studies drank in these different circumstances for different reasons.

Notably, studies tended to attribute discrepancies between what women said they knew (in terms of risks) and what they did (in terms of drinking) as a phenomenon of individual cognition (for example cognitive dissonance theory) rather than considering women's knowledge and behaviour within a broader context (situational, social, cultural etc). Zabotka (2012), Watt et al. (2014, 2016), and Badry (2008) all described situations in which women avoided thinking about the risks or convinced themselves that their drinking was not risky. Zabotka (2012) attributed this to cognitive dissonance theory, suggesting that women convinced themselves that their drinking behaviour was normal to reduce the psychological discomfort (dissonance) they felt. Other explanations are possible, however; women who suspect they are causing harm may of course use psychological strategies to minimise their behaviour, but it could also reflect a process of informed decision making, or confusion due to conflicting and changing messages and guidance around alcohol and pregnancy. A woman in Zabotka's (2012) study, for example, described 'convincing herself' that she may not cause harm by drinking because she saw a sign saying drinking 'may' (as opposed to 'will') cause harm; a likely accurate reflection of the messaging around the effects of drinking during pregnancy, and not necessarily only a psychological mechanism. Similarly, a woman in Badry's (2008) study said doctors used to advise women to drink during pregnancy, which is also accurate; prescribing stout such as Guinness during pregnancy was commonplace in the US and UK for many years (Royal College of Physicians, 2014). In focusing on women's presumed misunderstandings about alcohol messaging instead of exploring the impact of inconsistent messaging and changes in drinking advice and pregnancy over time, researchers may inadvertently contribute to the individualisation of drinking during pregnancy and an underestimation of the impact of changing advice.

Advice about drinking during pregnancy

Women recalled a range of advice about drinking during pregnancy. Women in Badry (2008), Salmon (2000) and Zabotka (2012) said doctors had not talked to them in enough detail about the risks of drinking alcohol whilst pregnant, and recounted being told by practitioners that drinking in moderation, or at certain times, would not do any harm. The women reflected on this advice to moderate rather than stop drinking, saying that it could be confusing for women who may be dependent on alcohol, although women in Salmon (2000) pointed out that for women in this situation, simply advising abstinence is not helpful either, because it is likely that support will be required to cut down or stop drinking. In contrast, women in Watt et al. (2014, 2016) said they had been advised by the clinic to stop drinking completely. These contrasting accounts of advice may be partly explained by study design, because Badry (2008) and Zabotka (2012) were both retrospective studies comprising women who have adult children, whilst the women in Watt et al. (2014, 2016) were all no more than 12 months postpartum in 2016, and practice is likely to have changed throughout this time. Practice may also vary by country, although guidance in the US (Zabotka), Canada (Badry) and South Africa (Watt et al.) advocates abstinence during pregnancy. This finding could also be explained by differences in individual practitioners' approaches.

Treatment or support for women who drink during pregnancy was not explored in detail in any study, possibly because treatment and support was not the key focus of any of the studies, although it could also suggest that many women had not received support or treatment for their drinking. Alcoholics Anonymous and the 12 steps to recovery was mentioned by women in the US studies, which may reflect the dominant disease model of addiction in the US. There was little mention of family support or targeted or intensive support for women's broader circumstances in any of the studies. Thomas and Mukherjee's (2019) UK paper mentioned that women reported a lack of interventions available to them in pregnancy, although this was not explored in the findings section of the paper, possibly because of the study's primary focus on women's experiences following their child's FASD diagnosis. Women in Salmon (2000) also mentioned a lack of support during pregnancy, saying that without meaningful material support, advice alone may be unhelpful.

This synthesis highlights a focus on women's knowledge of risks which may have unintended consequences. The requirement for self-regulation is particularly stringent during pregnancy, with women expected to exert control over their bodies throughout pregnancy by following government guidelines (Bell et al., 2009; Lee et al., 2014; Lupton, 2012; Lupton, 2013a; Salmon, 2011). Those who do not do so may be shamed and stigmatized, and labelled bad mothers. In focusing on women's understandings of the risks of drinking, and on the advice they have received, the body of studies in this meta-ethnography could unintentionally reflect and reinforce dominant narratives around FASD being caused by women's individual behaviour. It also implies there is a direct link between awareness-raising and behaviour, with education about the risks being conflated with women choosing not to drink. This assumption has previously been contradicted by a wide range of alcohol and substance use research (Chandler et al., 2013; Moon, 2016; Staddon, 2012; Willenbring, 2010; Young, 1994). This suggests that women take a more nuanced approach to weighing up the risks and benefits of drinking during pregnancy and do not always respond to messaging as intended. This review suggests that this might also be the case for women drinking at high risk levels, although further research is required to fully understand the impact. Further research is also required to explore women's perspectives on the treatment and support they have received, or would like to receive.

Multiple adversities matter

All studies mentioned adversity, although few explored it in detail, and most did not categorise it as a theme or concept. Some adversities were engaged with more than others; Adverse Childhood Experiences (ACEs) and trauma were often discussed, while the impact of poverty was given scant attention. The studies did not usually emphasise the multiplicity and connectedness of adversities experienced by participants or relate these to structural inequalities or oppression. Two aspects of multiple adversities were particularly pertinent to this review: traumatic experiences and repeat victimisation, and poverty and marginalisation.

Traumatic experiences and repeat victimisation

In the seven studies that explored traumatic experiences, women described repeated, often ongoing violence, abuse and trauma from multiple sources throughout childhood and adulthood, and sometimes described drinking to overcome or forget about problems or stress, or to escape or feel better for a while (Badry, 2008; Cloete and Ramugondo, 2015; Frost-Pineda, 2008; Salmon, 2000; Thomas and Mukherjee, 2019; Watt et al., 2014, 2016; Zabotka, 2012). The impact of traumatic experiences was not explored in Salmon (2008) or Pati et al. (2018).

Women across the studies described a range of adverse childhood experiences (ACEs), including emotional, physical and sexual abuse (Badry, 2008; Cloete and Ramugondo, 2015; Frost-Pineda, 2008; Zabotka, 2012), domestic abuse, parental alcohol and drug dependence or mental health problems (Badry, 2008; Cloete and Ramugondo, 2015; Frost-Pineda, 2008; Zabotka, 2012; Salmon, 2008; Thomas and Mukherjee, 2019), and loss through bereavement or separation, often repeatedly (Badry, 2008; Frost-Pineda, 2008; Salmon, 2000; Zabotka, 2012). Although all the studies except Pati et al. (2018) and Watt et al. (2014, 2016) mentioned childhood trauma, Salmon (2008) and Thomas and Mukherjee (2019) did not explore it in depth. This may reflect the studies' aims, which were about the post-diagnosis experiences of birth mothers of children with FASD, with less focus on pre-pregnancy and pregnancy experience.

Domestic abuse was common among the women (Badry, 2008; Zabotka, 2012; Frost-Pineda, 2008; Cloete and Ramugondo, 2015; Salmon, 2000; Thomas and Mukherjee, 2019). Women described extreme, repeated physical and mental abuse, often perpetuated by many men over many years, including during pregnancy. Zabotka (2012) argued that the childhood abuse experienced by women in her study may have 'set the stage for being victimized as adults' (p57), which appears to individualise domestic violence rather than exploring the structural factors that enabled its perpetuation. Similarly, Badry (2008) feminist study largely framed domestic violence in terms of its impact on individual women, rather than as a form of structural, gender-based violence. Cloete and Ramugondo (2015) highlighted the role of gender more than other studies, with women considering the difference between being a man or a woman in their community. This broader approach to gender may have been possible for women in Cloete and Ramugondo's study because the design and scope of the study was broader (Cloete and Ramugondo was the only study that included observation), but it is also possible that women in this study experienced gender differently to women in the other studies, given the studies' heterogeneity.

Many women across the studies had experienced the removal of children by the state or had been removed from their birth families as children themselves, although only two studies, Salmon (2000) and Badry (2008), explored the context surrounding the removal of children, highlighting the trauma, lack of support, and complex power relations surrounding child removals, and their impact on women's drinking.

Poverty and marginalisation

Most studies did not explicitly explore poverty, SES and marginalisation, instead tending to focus on women's individual behaviour, understandings of advice or social norms. However, some studies did purposefully engage with poverty and marginalisation as systematic problems. Salmon (2000) set out to undertake a feminist, anti-colonialist and anti-ableist study, which explicitly emphasised that the Aboriginal women participants belonged to a marginalised group which had been harmed by colonialization, and continued to experience multiple adversities including racism, sexism, and ableism, which made life challenging and harder to seek support. Similarly, Cloete and Ramugondo's (2015) study took a critical occupational therapy approach, and explicitly set out to understand how cultural, economic and political conditions related to pregnant women's drinking in South Africa. Some other studies highlighted the impact of poverty and marginalisation but nevertheless foregrounded women's behaviour, for example Watt et al. framed drinking as a 'maladaptive coping strategy' to cope with poverty (2014, p123).

Despite the diverse geographies and therefore social contexts of the studies, this meta-ethnography found poverty, homelessness and marginalisation were key concerns for many of the participants. Pamela, the participant in Frost-Pineda (2008), described not being fed as a child, having sex for money and periods of homelessness as an adult; women in Cloete and Ramugondo (2015) had strategies to make food last longer; women in Watt et al. (2014, 2016) described worries about insecure housing; women in Badry (2008) were homeless; and seven of the participants in Pati et al. (2018) reported living below the poverty line. Many of the 'stressors' described in Watt et al. (2014, 2016), Cloete and Ramugondo (2015), Badry (2008), Salmon (2000), and Frost-Pineda (2008) were related to housing and money. Women described chronic stress and precarity relating to money, housing, relationships, and the removal of children (Badry, 2008; Frost-Pineda, 2008; Watt et al., 2014, 2016). Cloete and Ramugondo (2015) described drinking in the context of a lack of other realistic or meaningful options as an 'imposed occupation' (p34), and this resonated with the accounts of many women across the studies, who did not appear to have other 'lifestyles' available to them. Many women described a lack of support from parents, partners, and friends, saying they had nobody to talk to about their problems (Badry, 2008; Cloete and Ramugondo, 2015; Frost-Pineda, 2008; Salmon, 2000; Watt et al., 2014, 2016; Zabotka, 2012), and a lack of support from the state and services (Badry, 2008; Frost-Pineda, 2008; Salmon, 2000).

Conversely, all the women in Salmon (2008) had medium-high SES. Their SES and their continued custody of their children may make them atypical as mothers of children with FASD (Astley et al., 2000; Sood et al., 2001). The SES of participants may be due to Salmon's (2008) study design, which used an FAS organisation to find participants; this means that only women who had sought support could be included. Salmon's (2008) findings contrasted with the other studies, with multiple adversities not being highlighted as an issue. It is not possible to determine what impact this difference in SES had on women's drinking because it was not explored in Salmon's (2008) study.

Previous research suggests that drinking can be a response to living within systems of oppression, and that women whose drinking becomes defined as problematic have often experienced multiple adversities including domestic abuse, poverty, and powerlessness (Galvani & Toft, 2015; Staddon, 2012; Williams, 2005). This synthesis highlights that although structural determinants of health such as poverty, homelessness and chronic stress are likely to be relevant to women who drink at a 'high risk' level during pregnancy, the links between these structural aspects of women's lives and their experiences of drinking do not yet appear to have been adequately explored. Instead, individual experiences of trauma were often foregrounded. Studies often emphasised traumatic experiences such as ACEs or sexual abuse but harmful social policy (for example, poverty and inequality, lack of housing, repeated child removals) did not receive as much attention, possibly reflecting current dominant understandings of trauma and distress as individual, rather than social (Callaghan, 2018; Davies, 2015, 2017; Tyler & Slater, 2018).

Framing drinking during pregnancy as a potential response to trauma diverts attention from structural problems such as inequality. These relate to women's experiences of drinking during pregnancy, and a focus on individual trauma may make it harder for women, particularly marginalised women, to talk about how social issues and structural inequalities affect their drinking (Ettorre, 2004, 2018; Staddon, 2012, 2016), because they do not want to appear to be seeking an 'excuse' for drinking.

Discussion

This meta-ethnography elicited three main themes: drinking during pregnancy is social and relational; knowledge is not enough; and multiple adversities matter. The first theme highlighted that drinking during pregnancy cannot be seen in isolation, as an individual behaviour divorced from women's social circumstances and culture. Many of the studies in this meta-ethnography did not acknowledge the complexity of drinking during pregnancy, instead tending to take an individual behaviour change or psychological approach. The impact of social norms and relationships was often acknowledged, but broader structural factors including alcohol policy, narratives of mother blaming, and child protection policy, were usually not. Social approaches to public health have highlighted the importance of acknowledging complexity when researching and responding to public health issues (Rutter et al., 2017). Staddon argues for a social model of drinking to understand the connections between women's drinking and the rest of their lives (Staddon, 2016), and complex systems approaches to health and social care research advocate understanding complexity rather than simply collecting evidence about the aspects that are easiest to measure (Rutter et al., 2017; Salway & Green, 2017). These approaches do not, however, appear to have yet been applied to research around drinking during pregnancy.

The second theme underlined the studies' focus on women's knowledge of risk, and the advice and treatment they received during pregnancy. Many of the studies emphasised women's knowledge – or lack thereof - of risk, and their experiences of receiving advice about drinking during pregnancy, but studies did not usually include in-depth analysis of women's experiences of treatment or support. There was little mention of family support or targeted or intensive support for women's broader circumstances. This could be because women did not mention it or had not experienced it, or because it was not the focus of the studies. Focussing on women's perceived lack of knowledge and individual behaviour, rather than their wider contexts, as relevant to FASD policy, reflects and reinforces dominant narratives around FASD being caused by women. It also implies there is a direct link between awareness-raising and behaviour, with education about the risks being conflated with women choosing not to drink. A wide range of alcohol and substance use research contradicts this, however, suggesting that simply advising people who are alcohol dependent to stop drinking does not work (Willenbring, 2010; Young, 1994); that women's problematic drinking is often entwined with structural harms they experience (Moon, 2016; Staddon, 2012); and that social policy that idealises abstinence can lead drug users to hide their behaviour (Chandler et al., 2013). FASD prevention efforts which raise awareness about the potential harmful effects of drinking during pregnancy may prevent women from disclosing their alcohol use, and pregnancies, or from seeking care, if they do not also offer the 'comprehensive supports' that some women may need (Bell et al., 2009). Further research is required to understand drinking women's experiences of care and support during pregnancy, and to critically explore any unintended consequences of the current public health approach.

The third theme related to multiple adversities. A wide body of research suggests that problematic drinking can be a response to living within systems of oppression, and that women whose drinking becomes defined as problematic have often experienced multiple adversities including domestic abuse, poverty, and powerlessness (Galvani & Toft, 2015; Staddon, 2012; Williams, 2005). This meta-ethnography found that although most of the included studies acknowledged adversities, the multiplicity and connectedness of these adversities, and particularly the impact of oppression and marginalisation, was generally not explored. It is important that FASD does not become conceptualised as something which only happens to marginalised women, as this could lead to stigma and further entrench disproportionate state intervention, replicating the stigmatisation and over-surveillance of indigenous women in some countries such as Canada (Tait, 2008). The need to avoid further stigmatising women therefore necessitates careful, nuanced analysis when drawing links between poverty, inequalities and FASD, but this does not mean that these links should be ignored altogether; this review suggests that multiple adversities including poverty may be key in understanding women's experiences of drinking during pregnancy. Further research is therefore required which takes the complexities of women's lives, including structural factors such as poverty and the political landscape into account.

This review points to the need for approaches to study of drinking during pregnancy that are better able to deal with complexity and non-linearity, perhaps by drawing on critical drug studies scholarship, social models of drinking, and complex systems theory. Critical drug studies scholarship has advanced different ways of approaching causality (as not simple, linear or uniform), the agency of drugs (including alcohol) and other things (as distributed, emergent, situated, and entangled), and different units of analysis (e.g., assemblages, networks, practices, events) that closely attend to the entanglement of drugs in diverse bundles of socio-material elements (including, but also beyond, individuals). Chandler et al., for example, have highlighted the social aspects and uncertainty involved in diagnosing Neonatal Abstinence Syndrome (Chandler et al., 2020). Similarly, Staddon's social model of drinking focuses on the complex connections between drinking and other aspects of life (Staddon, 2016), and complex systems approaches to public health aim to acknowledge and understand nuance and complexity (Rutter et al., 2017; Salway & Green, 2017). These approaches could provide helpful lenses for future studies to explore the nuance and complexity involved in drinking during pregnancy.

This review demonstrates the need for further research including the perspectives of women, especially those who drink at 'high risk' levels during pregnancy. Despite evidence suggesting that FAS and FASD is more likely with higher levels of alcohol consumption during pregnancy (Bay & Kesmodel, 2011; Henderson et al., 2007; Patra et al., 2011), there is little qualitative research which focuses on the perspectives of this population of women. This is concerning because women drinking at 'high risk' levels are likely to be a more marginalised population, so it is crucial to understand how the precautionary approach affects these women, and whether existing services are helpful for them. Current guidance in the UK states that women should abstain from drinking alcohol during pregnancy, yet this meta-ethnography did not locate any UK studies exploring the impact of this guidance on the lives of women who drink at 'high-risk' levels during pregnancy, except for Thomas and Mukherjee (2019) which explored the post-diagnosis experiences of five women whose children had been diagnosed with FASD, and therefore included little exploration of pregnancy or pre-pregnancy, or the wider contexts in which drinking during pregnancy occurred. It is therefore not possible to transfer the findings of this meta-ethnography to a UK context without further research.

However, it is possible to make some policy recommendations based on this review. The structural inequalities that are often intertwined with problematic drinking and its disproportionate impact on people who experience multiple intersecting social inequalities are already well documented (Staddon, 2013). The importance of acknowledging and responding to FASD by addressing the structural inequalities that disproportionately impact marginalised groups is also already evidenced (Salmon, 2000, 2004; Badry, 2008). In our view, this evidence can inform policy change. Firstly, we recommend that any policy development involving drinking during pregnancy should include women, especially mothers and pregnant women with alcohol related problems, at a strate-

gic level. Although it would be challenging to ensure that the voices of those with lived experience are heard and represented, it is crucial to make meaningful plans to do so, as has been done in other policy areas which may be considered 'sensitive', for example suicide prevention (NICE, 2019). Secondly, policy and practice approaches should minimise stigma by avoiding a sole focus on women's drinking behaviour, instead acknowledging the many complex factors that intertwine with women's drinking including, crucially, the impact of structural or state-perpetuated factors such as poverty and child removals. Policy could then be designed which supports the health and wellbeing of families, prioritising the meeting of families' needs by providing practical and financial family support, focusing on keeping families together and ameliorating the impact of decades of policy decisions which have led to budget cuts which have harmed families. Taking this social approach to drinking during pregnancy would avoid the perpetuation of mother-blaming and the resulting additional marginalisation.

Strengths and limitations

This review took a comprehensive approach to literature searching and therefore should include all relevant qualitative studies. The inconsistent measurement and definition of alcohol consumption made it impossible to apply strict inclusion criteria regarding the amount of alcohol consumed. Several papers were excluded because it was not possible to tell how much alcohol participants drank during pregnancy. It is therefore possible that some studies that included women who met the inclusion criteria but did not state this explicitly were excluded. Conversely, the FASD studies (Badry, 2008; Salmon, 2008; Thomas and Mukherjee, 2019; Zabotka, 2012) were included based on the assumption that participants likely drank at a 'high risk' level during pregnancy as their babies were 'diagnosed' with FAS/ FASD; this assumes that FASD is a diagnosable condition, that it is caused by drinking, and that accurate diagnosis has taken place, which is a problematic assumption (Armstrong, 2008; Gert et al., 2018). This problem could have been solved by excluding studies which did not clearly state how much alcohol women reported drinking during pregnancy, but this would have led to no studies being included and a synthesis being impossible.

The use of a meta-ethnographic approach is a controversial approach which some argue can undermine the meaning of individual studies (Sandelowski, 2006; Sandelowski & Barroso, 2002). To ensure credibility the reviewers used the original quotes from women as the key information when formulating the themes, with the intention that this would keep the analysis as close as possible to women's original stories, while also being mindful of the authors' original interpretations. A meta-ethnographic approach was used here because of the practical benefits of identifying areas which require further research: meta-ethnography allows for new interpretations to be drawn when looking at the studies as a body rather than separately. This meant that the studies included in the review, which at first appeared disparate, could be synthesised and themes identified.

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Ethics approval

The authors declare that the work reported herein did not require ethics approval because it did not involve animal or human participation.

Declarations of Interest

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Supplementary materials

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