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Regular Article

Responses to alcohol and pregnancy policy pilot: Midwives' views about proposals to manage risks associated with prenatal alcohol exposure

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ABSTRACT

The Responses to Alcohol and Pregnancy Policy (RAPP) Project is a pilot study which seeks to address an evidence gap on midwives' practice and views on mandatory recording of alcohol use during pregnancy, and transfer of this information to the child health record. The study aims to inform development of UK policy on the risks associated with prenatal alcohol exposure (PAE) and foetal alcohol spectrum disorders (FASD).

The study sampled the views of qualified midwives currently working in the UK through an online survey and a small number of stakeholder interviews.

Most respondents (82.79%) view recording information about alcohol use during pregnancy as already part of routine antenatal care. 96.9% were in favour of asking about alcohol consumption at the booking appointment, but 55.81% did not support asking questions about alcohol use at every appointment. A high percentage said that mandatory alcohol screening and transfer could have a negative effect on patients (over 80% in each case for feeling judged, guilt and shame), while just over half said they would have a negative effect on their role as a midwife: 52.88% for mandatory alcohol screening; 51.92% for transfer of information. We identified four interrelated themes in the qualitative data: Midwifery as a public health role; Barriers to Relationships, Practical Issues; and Consent and Rights.

Our results and discussion highlight a lack of clarity about key concepts within current UK policy proposals. This leaves open the possibility that existing ideas about behaviour in pregnancy, risk and maternal responsibility will shape implementation.

1. Introduction

Over the last decade, the UK has seen novel attempts to operationalise a precautionary approach to alcohol consumption during pregnancy, stemming from the UK Chief Medical Officers' 'Low Risk Drinking Guidelines' (Department of Health, 2016), which advises those who were pregnant or could become pregnant not to drink alcohol at all. This guidance aims to prevent 'Fetal Alcohol Spectrum Disorders' (FASD): a range of neurodevelopmental disorders associated with prenatal alcohol exposure (British Medical Association, 2016).

The approach has been embedded across policy, practice and proposed clinical guidance from the Scottish Intercollegiate Guidelines Network (SIGN, 2019), the National Institute for Health and Care Excellence (NICE, 2019–2022), Public Health England (2020) and the UK Department of Health and Social Care (2021). This collated policy framework represents a shift from gathering information on alcohol consumption 'for women and pregnant people' to enable individual decision making, to gathering information 'about them' for the benefit of future children, in particular those who may struggle to access an FASD diagnosis in future (Arkell & Lee, 2022; Bennett & Bowden, 2022; Lee et al., 2022). Some, but not all, of the policies recognise the potential risk of stigma and other adverse consequences for child and parent (DHSC, 2021).

Midwives provide the majority of pre-natal care in the U.K, carrying out an estimated 750 000 "booking appointments" each year (NHS England, 2022; Public Health Intelligence Unit, 2023; Public Health Scotland, 2024; Welsh Government, 2023). The booking appointment is the first antenatal appointment for each pregnancy and is followed by 7–10 further appointments. The collated policy and guidance propose a specific role for midwives to record and share information on types and

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patterns of maternal drinking. Midwives have been underrepresented in policy development processes and there is an evidence gap around midwives' views on these proposals and the impact on their role, which this research aims to address.

The most recently consulted-on guideline, the NICE "Quality Standard on FASD", proposed "pregnant women are asked about their alcohol use throughout pregnancy, and this is recorded" as a means of monitoring "Fetal alcohol exposure". Midwives are to record "the number and types of alcoholic drinks consumed, as well as the pattern and frequency of drinking". This information far exceeds that required for validated screening tools, which focus on identifying 'risky' drinking (Dozet et al., 2023). It strays into the territory of population-level screening. This contrasts with the approach to alcohol-screening of the UK National Screening Committee (UKNSC), which has repeatedly rejected proposals for population-level screening for alcohol misuse, and to date, has not considered alcohol use in pregnancy specifically (UKNSC, 2021).

Like its predecessors, the NICE Quality Standard takes a binary approach, with any drinking at all during pregnancy counting as prenatal alcohol exposure (PAE) for the purposes of potential FASD diagnosis. In draft, the Standard mandated the transfer of this information onto the child's health record. This requirement was removed from the published Quality Standard following public consultation (*NICE, news article,* 2022), but still exists in other guidance, notably the influential SIGN 156 (2019).

Despite the existence of well-developed mechanisms for multi-stakeholder input, midwives and pregnant people – the groups most affected – have been under-represented in policy and guideline development. Neither group were considered at all in the initial Impact Assessment for the draft NICE Quality Standard (NICE, 2019). While maternity care has taken a recent turn towards increased screening in pregnancy, such as routine carbon monoxide tests (Public Health England, 2015), alcohol use in pregnancy is particularly moralised (Armstong, 1998, 2003; Armstrong & Abel, 2000; Golden, 2005). Alcohol use in pregnancy, regardless of amount, is contentious, therefore clarity and accuracy as to proposed measures – particularly those suggested as 'mandatory' or 'routine' - are needed. Without such clarity, subjective ideas and expectations for behaviour in pregnancy may influence interpretation and application of proposals. Indeed, some commentators have argued that the use of precautionary thinking in developing guidelines can be seen as "value-led" as opposed to "evidence-based" (Brown & Trickey, 2018), which in turn can encourage certain ideas and expectations of 'responsible behaviour' and choice (Lee et al., 2022).

This study aimed to fill the evidence gap on midwives' current *practice and views* on a *requirement to routinely ask for and record* information on maternal drinking, and/or on making this information available to future children. These aims reflected the proposals as included in the Draft Quality Standard for FASD; the final iteration of the Quality Standards was published during data collection. In demonstrating the range of views that were absent from recent policy development, it goes beyond existing studies which examined practice with regards to merely *advising* about drinking in pregnancy (Smith et al., 2021), or implementation of alcohol screening and intervention models (Nilson et al., 2011; Schölin & Fitzgerald, 2019).

2. Material and methods

2.1. Research questions

- What are midwives' understanding of current practice regarding alcohol screening in pregnancy?
- What are midwives' views regarding mandatory screening?
- What are midwives' views regarding proposals to transfer alcohol information to a child's health record?
- What is the potential impact on the patient-HCP relationship?
- What is the potential impact on the HCP's view of their own role?

2.2. Study design

Our study used a mixed methods approach. This comprised an anonymous survey for wide dispersal, combined with a small set of focus groups to allow for more in-depth exploration of views.

The survey asked closed questions about (A) length of time participants have worked as a midwife in the UK, level of seniority, which areas of the UK they have worked; (B) understanding of current practice regarding alcohol screening in pregnancy; (C) views on mandatory alcohol screening as part of "routine antenatal care"(D) the effect this could have on their relationships with patients; and (E) potential impact on their understanding of their role as a midwife. Survey development was informed by key policy documents [3–6] and previous research on midwives' alcohol-related practices [11]. The survey included two free text response questions, (1) asking participants for their views on "how (if at all) mandatory alcohol screening and subsequent transferral of information to a child's health record would impact how [they] view their role as a midwife, and why", and (2) asking for any additional comments. Participants were eligible if they were fully qualified and working as a midwife in the UK.

The focus group schedule was designed to supplement the survey. The facilitator asked 4 overarching questions concerning: (A) policy proposals around mandatory alcohol screening as part of routine antenatal care; (B) the transfer of alcohol information from maternity records to children's health records; (C) the potential impact these measures could have on relationships between midwives and patients; and (D) the potential impact they may have on the professional identify of midwives. As detailed below, owing to difficulties in facilitating the initial focus group, this schedule was subsequently used to hold individual interviews.

2.3. Data collection

2.3.1. Survey

The survey was developed using Qualtrics and was initially active between February 21, 2022 and March 31, 2022, extended to May 3, 2022.

Survey participants were recruited via a project webpage, Twitter and Facebook, including by tagging relevant organisations (such as midwifery departments and societies) and individuals and asking them to retweet. The Royal College of Midwives also posted the project details and survey link on their website. Two prize draws, each offering ten token gift vouchers, were held during the survey period to incentivise participation.

After providing informed consent, the survey took approximately 15–25 min. At the end, participants were given the opportunity, through an additional survey, to be entered into the prize draw and/or be contacted about taking part in a focus group.

Ethical approval

Some survey respondents agreed to be contacted to take part in a focus group. Additional focus group participants were recruited using the project website, and through Twitter and Facebook using the same methods as for survey participants.

We held one focus group with four participants via Microsoft Teams, taking 1 h 20 min. Unfortunately, some participants had internet connection problems and we therefore supplemented with two individual interviews, also on Microsoft Teams, of approximately 30 min and 50 min. For readability, in our discussion of results, we use 'interviewees' to refer to both focus group and individual interview participants.

All focus group and interviews were audio and video recorded using Microsoft Teams' in-built recording facility. Teams' automatic transcription facility was used to produce a transcript. This was then

corrected using the recording and identifying data removed.

Ethical approval

This study was approved by the Faculty Research Ethics Committee (FREC) at the University of Southampton.

3. Results

Quantitative survey data was analysed using Qualtrics. For each question, the total number of responses was noted and frequencies and percentages were calculated. Responses 'agree' and 'strongly agree' were combined to represent agreement; responses 'disagree' and 'strongly disagree' were combined to represent disagreement. The Qualtrics Relate function was used to check for statistically significant relations between demographic and practice characteristics and other responses. After initial analysis suggested some tension in the responses, the Qualtrics CrossTabb function was used to cross tabulate responses to pairs of indicative questions. Qualtrics StatIQ were used to run Chi-squared tests for linear association for selected variables, with manual checks.

A total of 100 free text responses were submitted: 69 in response to the question about potential impacts of mandatory screening and subsequent transferral of information to children's health records on how participants view their role as a midwife; with 31 'additional comments'. 11 comments were removed before analysis due to lack of relevant content, leaving 89 for analysis.

In coding the qualitative data, the research team read the free text comments alongside the focus group and interview transcripts. After thorough familiarisation and coding of the data, four high level themes were inductively generated, following Braun and Clarke's approach to reflexive analysis (Braun & Clarke, 2006, 2019, 2022). All codes were subsequently checked and confirmed by the research team, and any discrepancies resolved. Themes were generated based on the level of significance participants attributed to the topic and/or subject matter under discussion and relevance to research questions.

Owing to the small sample size, coding was completed on Microsoft Excel. Qualitative results presented below reflect both free text survey responses and data from focus group/interview transcripts.

3.1. Demographics

171 participants confirmed informed consent for the online survey. To continue with the survey, participants were then required to confirm that they were currently working as a midwife and state whether they worked in England, Wales, Scotland, or Northern Ireland. Of these, 164 confirmed that they met the eligibility conditions and were able to continue with the survey. The remaining 7 participants did not respond to these questions and were not able to continue with the survey. The distribution of participants across nations roughly reflected the current distribution of midwives able to practise in March 2022 according to the Nursing and Midwifery Council ((n.d.) *Registration data reports*), with a slight over-representation of midwives from Scotland and slight under-representation of midwives from Wales and Northern Ireland.

For demographic and practice characteristics of respondents, see Table 1.

Two participants in the focus group were Senior Midwives; one, was a midwifery consultant; one did not disclose their job description. One of the individual interviewees was a Senior Midwife; the other did not disclose their job description.

3.2. Understanding of current practice

Respondents were asked about their understanding of current practices of recording alcohol during routine antenatal care. The data suggests that the most common current practice is for midwives to record, and to be required by their Trust to record, current and previous alcohol intake, but to do so at only one appointment. There is more variation in practice with respect to recording binge drinking.[1] See Tables 2 and 3.

Table 1
Demographic and practice characteristics of respondents.

	Answer	%	Count
Location of work	England	84.15%	138
	Wales	1.83%	3
	Scotland	12.20%	20
	Northern Ireland	1.83%	3
Years since qualified	5 years or less	25.79%	41
	6–10 years	30.19%	48
	11–15 years	16.98%	27
	16–20 years	8.81%	14
	More than 20 years	18.24%	29
Role	Junior Midwife	18.87%	30
	Senior Midwife	65.41%	104
	Midwifery Consultant	3.77%	6
	Prefer not to say	1.89%	3
	Other	10.06%	16
Last booking appointment	Within the last week	29.11%	46
	Within the last month	15.82%	25
	Within the last year	12.03%	19
	More than 1 year ago	42.41%	67
	Prefer not to say	0.63%	1

3.3. Views on asking questions about alcohol use as part of routine antenatal care

Participants were asked about their views on proposals for mandatory alcohol screening as part of routine antenatal care.

Participants were asked whether they think questions about alcohol use should be asked at the booking appointment/every appointment (respectively): options, 'yes', 'no', 'I don't know' and 'prefer not to say'. While almost all respondents (97%) were in favour of asking these questions at the booking appointment, over half of respondents (55.81%) said that questions about alcohol use should not be asked at every appointment. When asked what information should be recorded, most respondents (82.17%) were in favour of recording information about alcohol for all patients in antenatal care.

Participants were asked to what extent they agreed with a series of statements, with standard options: 'strongly agree', 'agree', 'neither agree nor disagree', strongly disagree, 'I don't know' and 'prefer not to say.

In line with responses about current practice, 82.79% of respondents agreed or strongly agreed with the statement "Recording alcohol information is already part of "routine antenatal care". Most respondents agreed or strongly agreed with statements that routine alcohol screening is justified by: the 2016 Chief Medical Officer's Guideline that there is no safe level of alcohol use during pregnancy (67.2%), by providing information for a diagnosis of FASD (61.2%) and by potential benefits to adopted children (56.2%), or earlier diagnoses and better outcomes for affected children (67.5%). In each case a number of participants disagreed or strongly disagreed (19.7%; 19.8%; 20.7%; 15% respectively).

Participants were asked to rate how comfortable they would feel routinely recording alcohol consumption first, at booking appointments and, second, at every contact with patients: options, 'very comfortable', 'comfortable', 'neither comfortable nor uncomfortable', 'uncomfortable', 'very uncomfortable' or 'I don't know'. Almost all (92.7%) respondents would feel comfortable or very comfortable with recording at booking appointment. Responses were much more varied when it comes to routinely recording alcohol consumption at every appointment: 42.3% would feel comfortable or very comfortable; 39.8% would feel

[1] Footnote definition: drinking >6 units on a single drinking occasion [https://www.drinkaware.co.uk/facts/drinking-habits-and-behaviours/binge-drinking - as endorsed by the Government's Alcohol Strategy].

Table 2
"What kind of information do you usually record during routine antenatal care?"

#	Question	do not record (%)		record at one appointment (%)		record at more than one appointment (%)		prefer not say (%)		Total
1	Previous alcohol intake	11.36%	15	75.00%	99	13.64%	18	0.00%	0	132
2	Current alcohol intake	9.85%	13	65.15%	86	25.00%	33	0.00%	0	132
3	'Binge' drinking (drinking >6 units on a single drinking occasion)	32.31%	42	46.92%	61	20.77%	27	0.00%	0	130

Table 3
"Does your Trust currently require you to record the following information during routine antenatal care?"

#	Question	No		Yes- at one appointment		Yes - at more than one appointment		I do not know		I prefer not to say		Total
1	Previous alcohol intake	12.03%	16	72.93%	97	13.53%	18	1.50%	2	0.00%	0	133
2	Current alcohol intake	5.26%	7	65.41%	87	27.07%	36	2.26%	3	0.00%	0	133
3	'Binge' drinking (drinking >6 units on a single drinking occasion)	31.58%	42	42.86%	57	21.05%	28	4.51%	6	0.00%	0	133

uncomfortable or very uncomfortable; while 17.9% did not know or would feel neither comfortable nor uncomfortable.

3.4. Views on mandatory transfer of alcohol data as part of routine antenatal care

Participants were asked about their views on proposals for mandatory alcohol screening as part of routine antenatal care.

Again, participants were asked to what extent they agreed with a series of statements, with the same standard options. Around 60% of respondents agreed or strongly agreed with statements that mandatory transferral of alcohol information from maternal records to children's health records is justified on grounds of benefits to adopted children (58.41%) or earlier diagnosis for affected children (62.50%). Slightly under 30% (28.32%; 26.79%) disagreed or strongly disagreed with these statements.

Participants were asked to rate how comfortable they would feel knowing that information that they recorded on antenatal alcohol consumption during maternity care would be transferred to the child's health records post-birth. 57.5% of respondents would feel comfortable or very comfortable; 27.5% would be feel uncomfortable or very uncomfortable; while 15.1% did not know or would feel neither comfortable nor uncomfortable.

3.5. Views on likely effects of screening and transfer on patients and on midwife role

Participants were asked what effects they thought mandatory alcohol screening could have on patients, selecting 'agree', 'disagree' or 'prefer not to say' to a number of statements. Most respondents considered that mandatory alcohol screening could have negative effects on patients. 83.49% agreed it could cause patients to feel judged; 87.04% agreed that it could cause patients to feel guilt and/or shame; 64.22% that it could undermine trust between a patient and their midwife; 69.72% that it could lead to patients disengaging with maternity services. 93.58% agreed it could lead to patients underreporting their alcohol consumption.

Similarly, 88.07% agreed transfer of information to a child's health record could cause patients to feel judged; 89.91% that it could cause patients to feel guilt and/or shame; 78.70% that it could undermine trust between a patient and their midwife; 77.06% that it could lead to patients disengaging with maternity services. 93.58% agreed it could lead to patients underreporting their alcohol consumption.

Participants were asked what mandatory alcohol screening would have on their role as a midwife, choosing from; 'overall positive', 'overall negative', 'overall neutral', 'no impact', 'prefer not to say'. Just over half of respondents (52.88%) reported that mandatory alcohol screening would have an overall negative effect; 23.08% expected a positive effect, while 17.31% predicted an overall neutral effect and 6.73% predicted no impact. Similarly, when asked about the effect of the transfer of information on their role: just over half of respondents (51.92%) reported that they think this would have an overall negative effect; 20.19% expected a positive effect, while 20.19% predicted an overall neutral effect and 7.69% predicted no impact.

3.6. Tension between findings

The survey results appeared to indicate that some respondents may have agreed that routine screening and mandatory transfer of data are justified, and, in apparent conflict, that these could have negative effects on patients and on the midwife's role.

Cross tabulation showed that for both screening and transfer around 75% of participants that initially agreed or strongly agreed that the policy was justified in indicative questions, later raised concerns about its effect on patients. It may be fruitful to explore these tensions and their implications for practice in future work.

3.7. Length of time since last booking appointment

Chi-squared tests for linear association were performed to determine whether there was a statistically significant relationship between having completed last booking appointment more than one year ago and responses to other questions. It was found that there was a statistically significant relationship between this and understanding of current practice: with those who have completed their last booking appointment more than 1 year ago more likely to state that they do not record current or previous alcohol intake and more likely to say that their trust does not require them to record current, previous alcohol intake or binge drinking. As the Chi-Squared tests indicated a statistically significant relationship, a strength test was required to test the effect size. Cramer's V was used for this purpose, as a standard measurement for effect size between categorical variables for tables greater than 2×2 (McHugh, 2013). The effect size was small or medium in all cases (See Tables 4 and 5.). Three other statistically significant relationships were detected: those whose last booking appointment was more than a year ago were also more likely to agree that mandatory alcohol screening could undermine trust between a patient and their midwife or lead to patients disengaging with maternity services, less likely to say that the transferral of information to a child's health record would have an overall positive impact on their role as a midwife, and less likely to disagree or strongly disagree that "Mandatory transferral of alcohol information from maternal records to children's health records on an opt-out basis does

Table 4
Chi squared test of correlation between answer 'More than 1 year ago" to "When did you last carry out a booking appointment?" and answers to "What kind of information do you usually record during routine antenatal care?"

	P (Statistical significance)	Cramer's V (effect size)
Recording of previous alcohol intake	0.0373 Clearly significant	0.22 Small
Recording of current alcohol intake	0.0098 Very clearly significant	0.26 Medium
Recording of 'Binge' drinking (drinking >6 units on a single drinking occasion)	0.1870 Not significant	0.16 Small

Table 5
Chi squared test of correlation between answer 'More than 1 year ago" to "When did you last carry out a booking appointment?" and answers to ""Does your Trust currently require you to record the following information during routine antenatal care?"

	P (Statistical significance)	Cramer's V (effect size)
Recording of previous alcohol intake	0.0015 Very clearly significant	0.34 Medium
Recording of current alcohol intake	0.0359 Clearly significant	0.25 Small
Recording of 'Binge' drinking (drinking >6 units on a single drinking occasion)	0.0008 Very clearly significant	0.35 Medium

not respect patients' privacy rights". Again, the effect size was small or medium (See Table 6.). These results suggest that those who haven't completed booking appointments in the last year may have somewhat different views than those who completed them more recently. These correlations could be explored in further work. Such differences would support the need for policy development to engage with midwives in a range of different positions, in a way that is sensitive to their different experiences.

3.8. Themes

We identified four interrelated themes: Theme 1: Midwifery as a Public Health Role; Theme 2: Barriers to Relationships, Theme 3: Practical Issues; Theme 4: Consent and Rights.

3.8.1. Theme 1: midwifery as a public health role

The broad public health role of midwifery was recognised by both survey respondents and interviewees, but there were mixed, and sometimes conflicting, views on the content of this role and what it means in practice. A number of respondents reflected that midwives' role in supporting, educating and advocating for pregnant people included a professional "duty" or "responsibility" to share up-to-date information and guidance:

It is my job to give them up to date guidance and research and respect their choices.

I can give advice, it is for them to decide what to do with it.

Some respondents specified their role as extending to the future child, describing it as one that has an equal responsibility to "car[e] for the unborn baby, or "support[s] the mother to prioritise her own child's health".

All interviewees, and many survey participants, recognised the potential negative impacts of excessive alcohol intake on the fetus. The rationale for recording alcohol intake where it is directly clinically relevant to the future child's needs was recognised by all interviewees, who indicated that such recording was already happening in practice.

A number of survey participants explicitly talked about the public health rationale of preventing FASD or other adverse impacts on the future child:

It is a public health screen, to try to protect unborns from FASD and/or other adverse outcomes.

FASD is so disruptive and early diagnosis [is] so helpful that I think this is part of the public health promotion role of the midwife.

Midwives should endeavour to screen pregnant women on alcohol so the child's health won't be in danger.

At the same time, some noted that alcohol consumption was only one of multiple factors which may impact a future child's health or diagnoses. One interviewee challenged a broad-brush approach, saying there was "no rationale or indication to ask repeatedly" those who had reported not drinking during pregnancy. The same interviewee picked up on the distinct needs of different pregnant people, commenting that policies on recording alcohol consumption may be "trying to meet the need of one group" but could have an "unhelpful impact" on another. They spoke about the need to have "two different streams for two different groups" rather than a "blanket approach" to alcohol in pregnancy, noting that there is a "big absence" of guidance around the specialist care needs of pregnant people who do drink excessively.

A survey participant described the proposals as being counterproductive for all involved, drawing on their experience working with people who report "drinking/illegal substances and tobacco use" during pregnancy:

Most of these women do not 'want' to continue their behaviour but do so because of their circumstances or other pressures in their life. It is already a fine line to tread in building trusting relationships and adding alcohol into the mix is another pressure point for women to feel judged. For those who do not require alcohol in their daily lives the health advice is already overwhelming and many women I see report some level of health anxiety based on their wish to safeguard their unborn's health. I've had women ring me in tears that there was sherry in a trifle at a family event, concerned their child will have countless problems.

3.8.2. Theme 2: barriers to relationships

The primacy of the midwife-woman/pregnant person relationship cut across all themes but was significant enough to also stand as a distinct theme of its own. Within the free text comments, survey participants described the importance of trust as a core element of this relationship and concerns that alcohol screening and subsequent transferral of information could threaten this:

Table 6
Chi squared test of correlation between answer 'More than 1 year ago" to "When did you last carry out a booking appointment?" and answers to Q40.3, Q40.5, Q44 and Q36.2

	P (Statistical significance)	Cramer's V (effect size)
Q40.3: What effects do you think mandatory alcohol screening could have on patients? _ It could undermine trust between a patient and their midwife	0.0378 Clearly significant	0.21 Small
Q40.5: What effects do you think mandatory alcohol screening could have on patients? _ It could lead to patients disengaging with maternity services	0.0283 Very clearly significant	0.26 Small
Q44 - How do you think transferral of information to a child's health record would impact your role as a midwife?	0.0476 Significant	0.28 Small
Q.36.2 "Mandatory transferral of alcohol information from maternal records to children's health records on an opt-out basis does not respect patients' privacy rights"	0.0131 Very clearly significant	0.36 Medium

A closer and trusting relationship is essential, and women must be able to come to appointments feeling safe and cared for, not like a vessel for a foetus where their every action is judged.

I think there's a real possibility that the relationship between a midwife and a woman will deteriorate if the woman perceives the relationship to be one of surveillance rather than support.

A number of interviewees spoke specifically about the risk that pregnant people could feel policed or judged. One said this ran directly counter to a good midwife-person relationship as being "like a partnership of care where the person that is caring for the … person who's being cared for are coming together".

The delicate balance between asking about alcohol consumption when midwives have concerns, versus "not wanting to put the person off coming to those appointments because they're gonna feel monitored" were described by interviewees, who highlighted the risk of conversations being handled badly unless guidance is provided. However, a number of survey participants maintained that mandatory screening would have little to no impact on their role or their relationships with patients. One explained that many sensitive questions are asked during appointments, so midwives are "already experts in building trust with women who are exhibiting unhealthy behaviours."

All interviewees spoke of the primacy of trust to good relationships tailored to the individual. Those in favour of alcohol screening talked about "mak[ing] it something neutral … I won't make them feel like they're doing something wrong". Some felt a good rapport would suffice to engender both honest conversations and a positive attitude amongst pregnant people towards it. One suggested that pregnant people may welcome the chance to "prove" to their midwives that they were not drinking alcohol or engaging in "Stints of carelessness and recklessness".

Other interviewees were more sceptical that screening and/or transfer would support good relationships; suggesting that it would "undermine the rapport" with patients, who may find questions "repetitive and frustrating". One noted the possible conflict between mandatory screening and culturally safe care, in particular that patients who had never drunk alcohol might conclude that "you're not paying attention". The policy might lead to reduced "trust in the system" and the profession as a whole. Similar concerns were expressed by survey participants.

Some participants further worried that proposals could reduce overall engagement with maternity services, with particular detriment to those who may benefit from additional support during pregnancy:

I worry that we will marginalise women who are likely to already be on the peripheries of society. These women are likely to be known to social services, to suffer from poor mental health, be from poor socio-economic backgrounds and thus already be at high risk. If we then introduce mandatory screening these women could disengage and then place themselves and their baby at even greater risk.

The women we intend to support when we are discussing alcohol consumption are the women we would be isolating if this pathway becomes reality. Women will under report and not seek help.

3.8.3. Theme 3: practical aspects

Many participants expressed views relating to the practicalities, implementation or impact of proposals, both for maternity practice and future children. The majority of these comments were critical but some were supportive.

One interviewee specifically commented that current policy "doesn't feel like it's been considered from a, whether that actually makes sense" for the midwives charged with implementing the policy. These were real, not theoretical concerns – the same interviewee, who had already been aware of the proposed policies, had been having practical conversations about "how on Earth" they would implement it.

They spoke about pressures of time: "midwives already don't have enough time in appointments to do all the things they already need to do". Survey participants raised similar concerns.

I think to ask at every antenatal contact will be seen as too much for women who don't drink alcohol by midwives who already have a lot to record.

There is so much we have to do at booking, and staffing is already stretched, this needs to be considered before any introduction. Training will also be required.

Participants highlighted the value of "high quality … meaningful" or "in depth honest conversations" over mandatory screening as "a blunt tool":

Midwifery is about relationships, not tick boxes. Midwives having time for in depth honest conversations will have a much more positive impact than mandatory reporting at all appointments.

A number of free text responses highlighted the lack of detail regarding how alcohol screening would be actioned, and what information would be recorded:

I would only feel comfortable with this if I had good knowledge on where the information goes and why, in order to explain to service users and answer their questions.

Others worried about the risk of errors or inaccuracies in recording alcohol information.: "What if you documented on the wrong person. Or someone assumed they drank. So many risks for errors." Another suggested that if parents provided "wrong information" they could "see fingers pointing at midwives for yet another thing."

A few comments made supportive suggestions for practical implementation. Some suggested that, existing screening tools might be utilised, with results "easily transferred with no judgement or opinion on this transfer". Another said that it would useful to have a "physical test", similar to the existing carbon monoxide smoking screen. Others made suggestions for guidance and information to support implementation, suggesting that screening might provide an impetus which allowed patients to share their concerns about alcohol with their midwife, and avoid midwives having to "impute" or "read from other signs" whether an individual had been drinking during pregnancy. It could also ensure standardisation:

Without screening or formalised recording many midwives would unfortunately also fail to give information in a meaningful way.

Some respondents specifically referred to the proposals' benefits for the future child. One implied that transfer of alcohol information is not a significant extension of current practice, whereby "all health information that is significant is often transferred to a child's medical record, as standard". Others appeared to support selected transfer of information for the benefit of the future child, but only in cases of "excessive", "risky" or "concerning" consumption, such as "regular binge drinking/addiction to alcohol".

I do not believe that information about maternal alcohol use should be automatically transferred to child health records for those not drinking at risky levels. I believe that this could help children of risky drinkers get better diagnosis and care, but this would not be necessary for the great majority of women.

One unexpected practical issue which arose was the scope and definition of the child's health record. A few participants drew a distinction between the maternally-held "child health record" and the "child health information systems which is accessed by GP [General Practitioner], HV [Health Visitor] etc". One interviewee, for example, noted that "professional facing records" would likely already have information about alcohol of clinical relevance on them, and queried in that context what transfer of information to the child's health record would mean in practice. However, the majority of participants who used

the term 'child's health record' did so without any further definition or clarification as to what "record" this could or should be.

Concerns were further raised in the survey responses that proposals could signal the start of allowing further information to be transferred between maternal and children's records, and the notion that information could be transferred elsewhere, raising questions about maternal privacy.

3.8.4. Theme 4: consent and rights

The survey contained distinct questions on consent, privacy and confidentiality rights. Many participants also expressed their views on these issues within the free text boxes and in interviews.

The majority of comments that raised concerns relating to consent, privacy and confidentiality focused on the transfer of alcohol information to the child's health record. This reflected the results of the fixed response section of the survey, which showed most disquiet about consent and rights with respect to transfer of alcohol information. Although 86.05% of respondents to the survey said that alcohol screening should require consent, most respondents did not see routine alcohol screening as in conflict with patients' privacy rights or confidentiality: 51.2% disagreed or strongly disagreed that it fails to respect patients' privacy; 58.7% disagreed or strongly disagreed that it fails to respect medical confidentiality. In contrast, most respondents saw the automatic transfer of alcohol information to child health records as in conflict with patients' privacy rights or confidentiality: 60.2% agreed or strongly agreed that it fails to respect patients' privacy.

Many survey comments spoke to the importance of autonomy in medical decision making, maintaining that pregnancy should not impact on a patient's right to make decisions or receive care. As one survey participant commented:

> *The autonomy of a woman does not change when she is pregnant!*

Indeed, one comment, while recognising the benefit of transferral of information, still affirmed their belief that it is "the mother's information [and] therefore consent should be sought." For another respondent, the notion of an "opt-out" consent process could relieve some of the "strain coming from an automatic addition to the child's health record", enabling women/pregnant people to maintain a level of control of their information. Some felt that the level of mandate over transfer of information might vary depending on whether the information was viewed as clinically necessary or not, with more choice offered in latter cases. It was not always clear what participants who generally supported transfer thought should happen when a patient reported drinking "excess alcohol" but "wouldn't want that to be recorded for them". For some survey participants, the perceived benefit of the information appeared to gloss over the process of "gaining information", stating:

> *Normalise that all information gained during pregnancy may be shared to the child health record in order to sensitively avoid debate around alcohol or substance misuse. Any relevant info will be shared unless you state it is not to be and then the fact the mother has declined to share this, probably would raise alarm bells anyways to the reader.*

One interviewee described a permeable boundary between 'mandatory' and 'normal procedure', saying that "*There are so many mandatory things that we do that patients don't know, that it's mandatory. They think it's just normal procedure*".

Some survey responses argued explicitly that alcohol information either "belongs to the child" or "the child has a right for this information to be available." These comments made specific reference to FASD and the need for information to enable an accurate diagnosis in childhood.

One comment disagreed with the notion that consent should be sought, maintaining that singling out questions about alcohol for specific consent would create stigma:

> *We seek general consent to take a full booking history and if women decline to answer any questions that is their right. By suggesting midwives specifically gain consent for certain questions – this in itself would create the stigma.*

This may be drawing a distinction between questions that are part of routine prenatal care (which are not seen as requiring consent) and specific screening tools (which do require consent) – and putting questions about alcohol in the former category.

Issues of consent and rights to information linked directly to questions about how we think about the relationship between the maternal and the child's health records, however conceptualised. One interviewee commented that *"it's something that we just make assumptions that it's OK to… just any information about the mother for that to be shared"*. They noted that alcohol was one of *"lots of things … that can harm fetuses in utero"*, saying that if information were to be transferred, patients should be offered explicit information outlining what would be put on the child's health record from their antenatal care as a whole. They distinguished this from the separate procedures which are already in use to provide information for looked after and adopted children on maternal alcohol use during pregnancy.

4. Discussion

Our results clearly demonstrated that there is no single clear 'voice of the midwifery community' with regards to alcohol screening and transfer of information and raise both conceptual and practical questions about the proposed policies. Whilst there is a near-consensus that some discussion and recording of alcohol intake, particularly at booking appointments, sits within the purview of antenatal care, views on proposals for further monitoring or recording varied widely, from broad support to outright rejection. Differences in viewpoints appear to reflect different conceptions of the interactions between risk and maternal responsibility in pregnancy and of the role and responsibility of the midwife. The results also bring out a lack of clarity about what the proposals require from midwives. The proposals allow space for subjective interpretation, leaving open the possibility that these different conceptions may impact how policy is implemented and enforced.

These findings point to an urgent need for wide ranging and in-depth consultation with midwives in policy and guideline development.

Any policy development needs to take seriously the concerns of midwives about potential impact on their role. Within our quantitative sample, the proportion of midwives who felt that mandatory screening or transfer would have a negative effect on their role was more than double the proportion who felt the effect would be positive. The quantitative data suggests small/medium but statistically significant correlations between time since booking appointment and some responses. This may reflect that different specific midwifery roles bring differing, but equally valuable, perspectives, emphasising the need for policy development to engage with midwives across the range of midwifery roles.

There is a significant literature exploring how cultural images and ideals of motherhood shape the care, practices and understanding of those seen as mothers in Western (North American, Australian and Western European) culture (Hays, 1996; Kukla, 2005, 2008; O'Reilly, 2013). Those who are pregnant are often seen as already counting as mothers (Waggoner, 2017) even if they never intend to mother the future child (Baron, 2023). Thus these images and ideals of motherhood influence how pregnant patients and risk in pregnancy are conceived. Comments from participants reflect both implicit acceptance of, and active resistance to, cultural images and ideals of motherhood. A few respondents, even when talking about building positive relationships, used morally-laden language with regards to maternal drinking, seeming to invoke conceptions of appropriate or good motherhood, and the midwife's duty to ensure as far as possible that the people in their care live up to these standards and manage or eliminate risk to the fetus. Other comments show midwives' alluding to, and pushing back against, ideals of maternal self-sacrifice: midwives expressed concerns that

pregnant patients will feel as if they are seen as "vessels", referred to the pressures and judgement faced by pregnant people, and explicitly affirmed that a person does not lose their autonomy when they become pregnant.

These differences in conceptions of maternal responsibility in pregnancy were related to different conceptions of the role and responsibility of the midwife. A number who suggested the midwife's role is limited to education and information appealed to ideas of pregnant people's autonomy to make informed choices. Some participants implied a role for midwives in assessing whether individuals had been drinking regardless of what they were told.

Our data also showed that the idea of public health is a key area of contention when it comes to how the midwife's role is conceived. There seemed to be general agreement that midwives have a public health role, but very different conceptions of the duties encompassed within this role, and how monitoring or recording alcohol intake fitted within it.

At the practical level, respondents were split between those who viewed alcohol screening beyond the booking appointment as a distinct element of midwifery's public health role, navigable via positive relationships of trust, and those who appeared to take a more holistic view of 'public health', focused on the particular needs of individual pregnant people which may or may not include discussions of alcohol intake beyond the booking appointment. Most people either stop or drastically reduce alcohol consumption during pregnancy (Coathup et al., 2017; Hammer & Rapp, 2022; Mårdby et al., 2017). If an individual pregnant person is attempting to change their drinking habits, it may make sense for discussion of alcohol during antenatal care to focus on any specific challenges they are experiencing (Gouilhers et al., 2019; Pehlke-Milde et al., 2022). For other pregnant individuals, alcohol may not be of primary concern. Midwives emphasising a holistic view raised concerns that persistent focus on alcohol intake may end up displacing other facets of care.

These differing practical views may reflect a broader divide between respondents who perceived their public health role as being one of educating or informing pregnant people, versus others who invoked alternative concepts of midwifery as promoting what is "good for mother and child" or even "protect[ing] unborns". Implicit in this is a question about to whom the midwife owes a public health duty: the pregnant person or the future child. This links directly to questions about for whom midwives record alcohol information, what information is shared to the child health record, and for what purposes, and what this means for future ownership and access to that information. Some of these questions were raised by our participants, who flagged concerns about how midwives' duties interact with pregnant people's rights, especially when proposed measures are framed as 'mandatory'.

Indeed, our findings suggest that some individual midwives may feel that different aspects of their role are in tension with one another. For example, some viewed mandatory screening and transfer as justified from a public health perspective whilst simultaneously having concerns that the screening/transfer may make pregnant people feel judged, and lead to mistrust in the relationship and with the whole maternity system. Some of this tension may reflect the difficulty reconciling the core ethos of midwifery as being 'with the woman/birthing person' and a policy framework which seems to assume a view of pregnant patients as mothers-from-conception who should be prepared to make any sacrifice to eliminate a risk to their future child, however small (Jørgensen, 2015; Lyerly et al., 2009; Ruhl, 1999; Woollard, 2020) or even as potential risks to the future child that midwives must manage (Arkell & Lee, 2022). It may also reflect that in pregnancy care, when the pregnant person is the only legal patient, both patient and midwife are ever-conscious of the fetus, whose interests cannot be sharply separated from the interests of the pregnant person. It is unsurprising if midwives, who engage with this complexity on a daily basis, have views which cannot be easily captured by simple binaries.

These tensions, how they are navigated by midwives, and how they may play out under specific future policy or practice changes require more detailed research and discussion. More immediately, they and the highly varied participant responses to these proposals, speak to the need to include midwives in development of policy or practice changes that are implemented through midwifery care. It also points to the need for proposed changes to be specific enough for this engagement to be meaningful.

Our qualitative data highlights a lack of clarity among participants regarding certain terminology associated with alcohol screening and transfer of information; in particular the difference between the use of validated, alcohol screening tools (such as T-ACE, TWEAK or AUDIT-C) and mere "asking about alcohol". It also highlights uncertainty as to what exactly is the child's health record to which information would be transferred: both important technical details which earlier engagement with midwives would likely have identified.

5. Strengths and limitations

Our pilot study is the first to explicitly seek midwives' views on recent UK proposals concerning alcohol screening and transferral of patient information. It builds on an existing literature base which speaks to midwives' views on alcohol screening, but unlike previous studies sought views both on making such measures mandatory and on patient consent. It is the first study to examine the practical implications of such proposed policy, which have already provoked critical reactions. Our study highlights the needs to engage with stakeholders which were omitted from the policy development process and the equality impact assessment. This is crucial given the international influence NICE guidance has on policy and practice (Dillon, 2020).

Turning to study limitations, owing to the pilot nature of the study, the sample size is small and this must be borne in mind when interpreting results. Further, both survey and interview questions were written with reference to the language and concepts used in the draft NICE Quality Standard available at the time. Views on the efficacy of brief interventions or specific validated screening tools were not solicited. As such, the results can only speak to general views about 'screening' - as interpreted by the respondents. Lastly it is important to recognise that our study respondents were self-selecting, meaning our results may reflect the views of those midwives more motivated to share their views.

6. Conclusion

The Responses to Alcohol and Pregnancy Policy (RAPP) project exposes significant areas of uncertainty and disagreement in understandings of policy proposals relating to recording and sharing of alcohol information and the impact on midwives. While these proposals have received some attention within other academic disciplines (Arkell & Lee, 2022; Bennett & Bowden, 2022), our pilot study is the first to examine the practical implications of proposals that represent a persistent trend in the policy framework, from the perspective of those tasked with implementing them.

Our findings show that there is little common understanding of even some of the most basic tenets of these proposals, such as what it is to ask about versus screen for alcohol intake, and what it means to transfer information to the 'child's health record'. They show substantial concerns about the impact of proposals on midwives' relationships of trust with pregnant people, and the scope of midwives' public health role.

As a pilot study, this project has a small sample size and captures only one side of the midwife-person dynamic. This emphasises the need for further work in this area ahead of any future policy and standard development, and for midwives, women and pregnant people, and their input on practical implications, costs and benefits, to be included in this process. Our findings indicate that ambiguity in terminology within policy and practice proposals necessitates subjective interpretation in practice. This allows for individual midwives to bring their own moral judgments and risk-attitudes to bear, impacting on quality and

consistency of care. In the context of an emerging policy framework on alcohol and pregnancy being enacted through 'routine' maternity care, further engagement with patient and professional populations is not only warranted but required.

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CRediT authorship contribution statement

Fiona Woollard: Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Resources, Project administration, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Rebecca Brione:** Writing – review & editing, Writing – original draft, Visualization, Validation, Investigation, Formal analysis. **Rachel Arkell:** Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization.

Declaration of competing interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: The RAPP project is a collaboration between the Centre for Reproductive Research and Communication at BPAS and the University of Southampton. Prior to devising the RAPP project, all authors contributed to the NICE Quality Standards Consultation on Fetal Alcohol Spectrum Disorders (FASD). Contributions were made on behalf of the University of Southampton, BPAS, Birthrights, and a coalition of academics spanning the U.K. A policy brief based on early analysis of the RAPP project was sent to the Scottish Intercollegiate Guidelines Network as part of the review process for Guideline 156. If there are other authors, they declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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References

Arkell, R., & Lee, E. (2022). Using meconium to establish prenatal alcohol exposure in the UK: Ethical, legal and social considerations. *Journal of Medical Ethics*. https://doi.org/10.1136/jme-2022-108170

Armstrong, E. M. (1998). Diagnosing moral disorder: The discovery and evolution of Fetal Alcohol Syndrome. *Social Science & Medicine, 47*(12), 2025–2042. https://doi.org/10.1016/S0277-9536(98)00308-6

Armstrong, E. M. (2003). *Conceiving risk, bearing responsibility, Fetal Alcohol Syndrome and the diagnosis of moral disorder*. Baltimore and London: John Hopkins University Press.

Armstrong, E. M., & Abel, E. L. (2000). Fetal Alcohol Syndrome: The origins of a moral panic. *Alcohol and Alcoholism, 35*(3), 276–282. https://doi.org/10.1093/alcalc/35.3.276

Baron, T. (2023). *The philosopher's guide to parenthood: Storks, surrogates, and stereotypes*. Cambridge University Press.

Bennett, R., & Bowden, C. (2022). Can routine screening for alcohol consumption in pregnancy be ethically and legally justified? *Journal of Medical Ethics, 48*(8), 512–516. https://doi.org/10.1136/medethics-2021-107996

Braun, V. C. V. (2022). *Thematic analysis: A practical guide*. SAGE.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101.

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative research in sport, exercise and health, 11*(4), 589–597.

British Medical Association. (2016). Alcohol and pregnancy: Preventing and managing fetal alcohol spectrum disorders. https://www.bma.org.uk/media/2082/fetal-alcohol-spectrum-disorders-report-feb2016.pdf.

Brown, R., & Trickey, H. (2018). *Devising and communicating public health alcohol guidance for expectant and new mothers: A scoping report. London: alcohol concern cymru*.

Coathup, V., Smith, L., & Boulton, M. (2017). Exploration of dietary patterns and alcohol consumption in pregnant women in the UK: A mixed methods study. *Midwifery, 51*, 24–32. https://doi.org/10.1016/j.midw.2017.04.011. ISSN 0266-6138.

Department of Health. (2016). UK Chief medical Officers' low risk drinking guidelines. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/545937/UK_CMOs_report.pdf.

Department of Health and Social Care. (2021). Fetal alcohol spectrum disorder: Health needs assessment. https://www.gov.uk/government/publications/fetal-alcohol-spectrum-disorder-health-needs-assessment/fetal-alcohol-spectrum-disorder-health-needs-assessment.

Dillon, A. (2020). The international impact of NICE. https://www.carnallfarrar.com/nice-international-impact/.

Dozet, D., Burd, L., & Popova, S. (2023). Screening for alcohol use in pregnancy: A review of current practices and perspectives. *International Journal of Mental Health and Addiction, 21*(2), 1220–1239.

Golden, J. (2005). *Message in a bottle: The making of fetal alcohol syndrome*. Cambridge, MA and London: Harvard University Press.

Gouilhers, S., Meyer, Y., Inglin, S., Boulenaz, S. P., Schnegg, C., & Hammer, R. (2019). Pregnancy as a transition: First time expectant couples' experience with alcohol consumption. *Drug and Alcohol Review, 38*, 758–765. https://doi.org/10.1111/dar.12973

Hammer, R., & Rapp, E. (2022). Women's views and experiences of occasional alcohol consumption during pregnancy: A systematic review of qualitative studies and their recommendations. *Midwifery, 111*, Article 103357. https://doi.org/10.1016/j.midw.2022.103357

Hays, S. (1996). *The cultural contradictions of motherhood*. Yale University Press.

Jørgensen, K. J. (2015). Women should not go to the movies during pregnancy. *A Rapid Response to: Should women abstain from alcohol throughout pregnancy? BMJ, 351*, h5232, 2015 https://www.bmj.com/content/351/bmj.h5232/rr-5.

Kukla, R. (2005). *Mass hysteria: Medicine, culture, and mothers' bodies*. Rowman & Littlefield Publishers.

Kukla, R. (2008). Measuring mothering. *IJFAB: International Journal of Feminist Approaches to Bioethics, 1*(1), 67–90.

Lee, E., Bristow, J., Arkell, R., & Murphy, C. (2022). Beyond 'the choice to drink'in a UK guideline on FASD: The precautionary principle, pregnancy surveillance, and the managed woman. *Health, Risk & Society, 24*(1–2), 17–35.

Lyerly, A. D., Mitchell, L. M., Armstrong, E. M., Harris, L. H., Kukla, R., Kuppermann, M., & Little, M. O. (2009). Risk and the pregnant body. *Hastings Center Report, 39*(6), 34–42.

Mårdby, A., Lupattelli, A., Hensing, G., & Nordeng, H. (2017). Consumption of alcohol during pregnancy—a multinational European study. *Women and Birth, 30*(4), e207–e213. https://doi.org/10.1016/j.wombi.2017.01.003. ISSN 1871-5192.

McHugh, M. (2013). The Chi-square test of independence. *Biochemia Medica, 23*, 143–149. https://doi.org/10.11613/BM.2013.018

National Institute for Health and Care Excellence. (2019). Fetal alcohol spectrum disorder. *Quality standard* [QS204] https://www.nice.org.uk/guidance/qs204.

National Institute for Health and Care Excellence. (2022b). Nice publishes comprehensive quality standard designed to improve the diagnosis and assessment of fetal alcohol spectrum disorder. News Article https://www.nice.org.uk/news/article/nice-publishes-comprehensive-quality-standard-designed-to-improve-the-diagnosis-and-assessment-of-fetal-alcohol-spectrum-disorder.

NHS England. (2022). Maternity services monthly statistics. https://digital.nhs.uk/data-and-information/publications/statistical/maternity-services-monthly-statistics.

Nilsen, P., Wåhlin, S., & Heather, N. (2011). Implementing brief interventions in health care: Lessons learned from the Swedish risk drinking project. *International Journal of Environmental Research and Public Health, 8*(9), 3609–3627.

Nursing and Midwifery Council. (n.d.) Registration data reports. https://www.nmc.org.uk/about-us/reports-and-accounts/registration-statistics/.

O'Reilly, A. (2013). "It saved my life": The national association of mothers' centres, matricentric pedagogy and maternal empowerment. *Journal of the Motherhood Initiative for Research and Community Involvement*.

Pehlke-Milde, J., Radu, I., Gouilhers, S., Hammer, R., & Meyer, Y. (2022). Women's views on moderate and low alcohol consumption: Stages of the subjective transition from pregnancy to postpartum. *BMC Pregnancy and Childbirth, 22*(1), 902. https://doi.org/10.1186/s12884-022-05247-0

Public Health England. (2015). *Antenatal checks: Carbon monoxide*. https://assets.publishing.service.gov.uk/media/5a80a87840f0b62302694c5f/CO_antenatal_checks_algorithm_2015.pdf.

Public Health England. (2020). Maternity high impact area: Reducing the incidence of harms caused by alcohol in pregnancy. *Maternity high impact area 4: Reducing the incidence of harms caused by alcohol in pregnancy*. publishing.service.gov.uk.

Public Health Intelligence Unit. (2023). *Children's health in northern Ireland 2021/22: A statistical profile of births using data drawn from the northern Ireland child health system, northern Ireland maternity system and northern Ireland statistics and research agency*.

Public Health Scotland. (2024). Antenatal booking in Scotland: Calendar year ending 31 december 2023. https://publichealthscotland.scot/publications/antenatal-booking-in-scotland/antenatal-booking-in-scotland-calendar-year-ending-31-december-2023.

Ruhl, L. (1999). Liberal governance and prenatal care: Risk and regulation in pregnancy. *Economy and Society, 28*(1), 95–117.

Schölin, L., & Fitzgerald, N. (2019). The conversation matters: A qualitative study exploring the implementation of alcohol screening and brief interventions in antenatal care in Scotland. *BMC Pregnancy and Childbirth, 19*, 1–11. https://doi.org/10.1186/s12884-019-2431-3

Scottish Intercollegiate Guidelines Network. (2019). SIGN 156 children and young people exposed prenatally to alcohol: A national clinical guideline. https://www.sign.ac.uk/media/1092/sign156.pdf.

Smith, L. A., Dyson, J., Watson, J., & Schölin, L. (2021). Barriers and enablers of implementation of alcohol guidelines with pregnant women: A cross-sectional survey among UK midwives. *BMC Pregnancy and Childbirth, 21*, 1–9.

UK National Screening Committee. (2021). Adult screening programme: Alcohol misuse. https://view-health-screening-recommendations.service.gov.uk/alcohol-misuse/.

Waggoner, M. R. (2017). *The zero trimester: Pre-pregnancy care and the politics of reproductive risk*. Univ of California Press.

Welsh Government. (2023). Statistics from antenatal, birth, and child health records including smoking during pregnancy, breastfeeding and birthweights for children born in Wales in 2022. https://www.gov.wales/maternity-and-birth-statistics-2022-html#128126.

Woollard. (2020). *Should alcohol consumption during pregnancy be recorded on the child's health record?* Public Ethics blog. https://www.publicethics.org/post/should-alcohol-consumption-during-pregnancy-be-recorded-on-the-child-s-health-record.