# What are the influences on women's preferences and decision-making when planning mode of birth in high-income countries? A qualitative systematic review



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**OBJECTIVE:** In antenatal care in the UK NHS, the concept of choice of mode of birth (MOB) has been recommended for some years but is still poorly operationalised. Proactive, routine provision of balanced and relevant information to women in antenatal care can be supported by using decision aids but such an aid does not currently exist. The objective of this qualitative systematic review was to identify the factors shaping women's MOB preference and the barriers and facilitators to supported MOB decision-making.

DATA SOURCES: Seven major electronic databases were searched for articles published in English between 2011 and November 2022. Study eligibility criteria Eligible studies were of any design and provided qualitative data from currently or previously pregnant women in highincome countries, about reasons for MOB preference, and/or barriers or facilitators to women making supported MOB choices. Data were extracted into a pre-designed data extraction form. Identified subthemes were grouped and mapped onto two preestablished global themes. Study quality was assessed using the CASP tool for qualitative research. Confidence in the findings was assessed using GRADECERQual.

**RESULTS:** Women's preferences for MOB were shaped by perceptions of advantages or disadvantages of each MOB and their own or other women's previous birth experiences. Barriers to informed MOB decision-making were mainly relating to healthcare professionals' (HCPs') negative attitudes, which limited women's perceived options, and women's own strong personal beliefs and opinions. Facilitators included having time, support and information on which to make a robust decision.

**CONCLUSIONS:** Barriers to supported decision-making about MOB still exist. HCPs are well placed to guide women through the decisionmaking process. Informed implementation of decision aids has the potential to address barriers in supported decision-making about MOB in routine NHS antenatal care.

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Tweetable statement: Systematic review of influences of mode of birth (MOB) preference shows importance of own/others' previous birth experiences and role of healthcare professionals in shaping women's current MOB decision-making.

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PMH is co-author of Choosing Cesarean, A Natural Birth Plan (Prometheus Books, 2012).

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# AJOG Global Reports at a Glance

## Why was this study conducted?

Choice of mode of birth (MOB) has been recommended for some years but is still poorly operationalised in routine antenatal care in the UK NHS. This review identified factors underlying women's MOB preferences and barriers/facilitators to supported MOB decision/making to inform the content of a decision aid to support these conversations.

### **Key findings**

Previous birth experience (women's own or family/friends' experiences) were important in shaping current MOB preference. Healthcare professionals were key in MOB decision-making and should be mindful of their own preferences when supporting women.

### What does this study add to what is known?

Findings will be incorporated into a suite of research to develop a decision aid to support MOB decision-making in routine antenatal care.

#### Introduction

In the UK, maternity services have been legally obliged to support pregnant women to make informed choices about planning mode of birth (MOB; vaginal or cesarean) since the Supreme Court ruling in the 2015 Montgomery versus Lanarkshire Health Board case. Countries including Australia/New Zealand, Canada and Singapore have followed this approach.<sup>2–4</sup> UK national guidance has advocated support for a woman's right to choose her planned MOB since 2011, with women having the right to choose a cesarean birth if this is their preference. Updated 2021 guidance goes further, recommending that discussions are held to allow women to understand how planning vaginal birth compares to planned caesarean birth to inform birth plans. However, a Birthrights survey in 2020 suggested that only around 1-quarter of hospitals in the UK supported requests for cesarean birth. Discussions about MOB are important as they provide the opportunity to present balanced information about the risks and benefits of both planned cesarean and vaginal birth, to support women in their decision-making. 1,5-7 Each birth plan has benefits, but they may have serious consequences too. Outcomes for women and babies that may be more likely with planned cesarean birth include peripartum hysterectomy, maternal death, length of hospital stay, placenta accreta or uterine rupture in any future pregnancy, neonatal mortality and asthma. Outcomes for women that may be less likely with planned cesarean birth include urinary incontinence or fecal incontinence occurring more than 1 year after birth.<sup>6</sup> The profile of risks varies depending upon women's clinical characteristics and individual women may tolerate 1 risk-benefit profile over the other. It is important for women to have a good understanding of the risks and benefits and consider them alongside their personal values, preferences and circum-

A key barrier to MOB decision-making is the lack of balanced and relevant information provided to women during antenatal consultations. Decision aids can be a useful way to provide accessible information and a structure on which to base discussions about MOB preferences and choices between pregnant women and healthcare professionals (HCPs).8 At present, decision aids exist for specific situations, such as MOB after a cesarean, but there is no such decision aid available for use in routine UK National Health Service (NHS) antenatal care. A decision aid for general use in MOB discussions requires a broad overview of what underlies women's preferences for cesarean or vaginal birth to shape its development.

## **Objective**

The objective was to identify factors that inform women's preferences in terms of MOB and highlight key barriers and facilitators to supported decision-making. The findings of this review will inform development of the content of a decision aid to support MOB discussions in routine antenatal care, and an implementation guide to support its use in clinical practice.

#### Methods

This qualitative systematic review was conducted in accordance with current methodological standards9 and reported according to the PRISMA 2020 statement.<sup>10</sup> The review methods were prespecified in a research protocol (PROS-PERO registration CRD42022372831). (https://www.crd.york.ac.uk/prospero/dis play record.php?ID=CRD42022372831). This is the second in a series of reviews within a wider mixed methods study to develop a decision aid to support planned MOB discussions in routine antenatal care in the UK NHS and other countries/ healthcare systems (the Plan-A study, researchregistry8238).

### Patient and public involvement

Multistakeholder discussions led to study conception, with 4 patient and public involvement (PPI) partners with lived experience, including women from underserved groups, remaining involved throughout study planning and conduct to ensure that an inclusive and relevant approach was taken. PPI partners participated in regular study meetings, where they not only contributed to discussions but were also offered opportunities to make suggestions or review outputs intermittently.

## Inclusivity

Plan A applies to all who get pregnant. The project's language statement includes more information (https:// www.abdn.ac.uk/acwhr/research/plana-193.php#panel201).

# Eligibility criteria, information sources, search strategy

We reviewed evidence from qualitative or mixed methods studies that included qualitative data published from 2011 onwards, the year NICE recommended support for routine discussion of birth mode options in UK practice. Studies that provided only quantitative data, systematic reviews and commentaries were excluded.

#### **Participants**

Eligible participants were women:

- who were pregnant or had been pregnant or
- who gave birth after 37 weeks gestation.

Studies were excluded if they focused on pregnant women:

- with major placenta praevia/placenta accreta
- with a specific complication (for example, pre-eclampsia, preterm labour or vaginal bleeding).

#### Eligible data

Studies were deemed eligible for inclusion if they reported:

- reasons for women's MOB preference and/or
- barriers/facilitators to informed decision-making in terms of MOB.

#### Setting

Studies were considered suitable for inclusion if they were conducted in high-income countries according to the 2023 World Bank classification. 11 The reason for including high-income countries only was that these countries are likely to have healthcare systems that can support access to cesarean birth that are not paid for by the women themselves. Studies that recruited participants from both high-income and non-high-income countries were eligible for inclusion if at least 80% of particwere from high-income ipants countries.

# Information sources and search strategy

A sensitive literature search strategy was developed by an Information Specialist to identify published, peer-reviewed studies. The search strategy included database index terms and free text to encompass the facets of MOB, decisionmaking or choice, and qualitative studies. The databases searched were ASSIA, CENTRAL, CINAHL, Embase, Medline, MIDIRS, and the Web of Science Social Science Citation Index. There were no restrictions on study type or language at the search stage, but results were limited to high-income settings. The search covered the period from the start of 2011 to 15 November 2022. The reference lists of all articles selected for full text appraisal were screened for additional studies. The searches are presented in the Appendix.

Study selection. A random sample of 20% of citations identified by the search strategies were screened independently by 2 reviewers (CR or MC) to ensure that eligibility criteria were applied consistently. The remaining search results were screened by a single reviewer (CR or MC). All potentially relevant articles were retrieved for full-text assessment. A sample of 10% of full-text articles were double-screened by the same 2 reviewers with the remainder assessed by a single reviewer.

Data extraction. Information on the main characteristics of each identified study (e.g., aims, methods and participants, including PROGRESS-Plus<sup>12</sup> characteristics) and all relevant qualitative data were extracted by a single reviewer, with 20% of articles crossed-checked by another reviewer (CR or MC) to ensure accuracy. Any disagreements or uncertainties were resolved by discussion or arbitration within the research team, including independent PPI partners and clinical and methodological experts.

Assessment of risk of bias. The CASP (Critical Appraisal Skills Programme) tool for qualitative research was used to assess the quality of the included studies. One reviewer (CR or MC) assessed all included studies, and a second reviewer (CR or MC) cross-checked a 20% random sample. An

overall score was calculated for each study by summing the "yes" responses for each of the 10 domains. Higher scores indicated greater methodological quality.

Assessment of confidence in the findings. The **GRADE-CERQual** (Grading of Recommendations Assessment, Development and Evaluation-Confidence in the Evidence from Reviews of Qualitative research) approach was used to assess confidence in the thematic findings.<sup>14</sup> The initial assumption was that all findings were high confidence and a reasonable representation of the phenomenon of interest. Findings were downgraded if there were concerns regarding any of the 4 GRADE-CERQual components. Two reviewers (CR and MC) made a joint overall assessment of confidence based on each thematic finding developed by the review.

Data synthesis. A framework analysis was conducted. 15 We extracted data according to 2 pre-established global themes that were developed from the research questions outlined in the Plan-A protocol: reasons for MOB preference, and barriers and facilitators to supported decision making (in terms of MOB). Following a process of familiarization with, and coding of, data, we identified sub-themes from the included studies, and compared and grouped them according to their shared meaning and mapped them to the global themes. On close reading of the included studies, 1 reviewer (CR) identified the recurring sub-themes, and a second reviewer (MC) cross-checked them. The subthemes were subsequently reorganized by 1 reviewer (MC) and cross-checked by 2 reviewers (MBra and MBla). The independent PPI partners then crosschecked the review themes and subthemes to ensure they were relevant and meaningful for women planning their MOB. PPI partners defined meaningful feedback as identifying missing themes, misinterpretations, and sub-themes needing merging. The research team presented tables with assigned quotes for their feedback, resulting in changes

around rephrasing and merging 2 subthemes. Disagreements or areas of uncertainty were resolved by analytical discussions within the research team. Team members considered and discussed their interpretation of the data by reviewing all relevant quotes, codes and sub-themes, note-taking and group discussion.

#### Results

## Study selection

The literature search identified a total of 6330 citations. Following title and abstract screening, 109 articles were retrieved for full-text assessment. We excluded 64 studies that failed to meet our pre-specified inclusion criteria. Two studies (Tully et al. 16 and Ellis et al. 17) were identified from hand-searching reference lists of retrieved studies. Two publications by Eide et al. 18,19 reported data from the same study; we treated the 2019 paper as the primary publication. No evidence of overlap in participants was found between the 2 papers by Munro et al.<sup>20,21</sup>; we treated them as separate studies. A total of 46 studies published in 47 reports were included

in the review. A summary of the study screening process is reported as Figure 1. Details of the included and excluded studies can be found at https://osf.io/ y65mz?view only=975360496a984cc b94944e5014c99af1 and https://osf.io/ ftjr2?view only=975360496a984cc b94944e5014c99af1 respectively.

#### Study characteristics

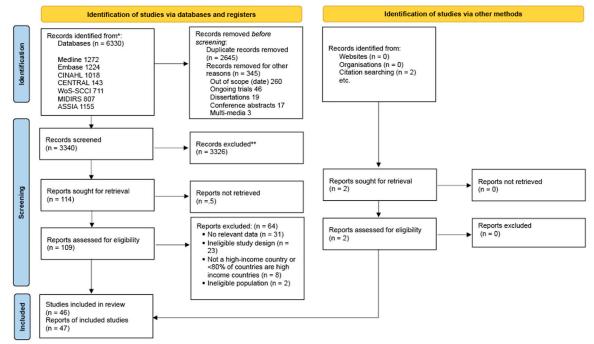
The key characteristics of the included studies and participant demographic data are reported in Table S1. The included studies were published between 2011 (when NICE recommended support for women with a preference for caesarean birth in the UK) and 2022 and were conducted in Europe (16 studies, including 4 from the UK); North America (10 USA and 5 Canada); Australia (9) and Japan (1). One further study by Hull et al.22 was conducted across 16 countries. Only data from high income countries were extracted for this study. Most studies (34/46 [73.9%]) collected data via individual interviews. One study collected data through 4 focus groups, 20 3 studies collected data using focus groups and

semi-structured interviews, 23-25 and 8 studies collected qualitative through open-ended questions obtained from surveys. 22,26-32

The included studies reported data for at least 4663 participants. The study by Monis et al. 33 did not report the number of participants included in their analysis. Eighteen studies (39.1%) reported participants' race or ethnicity, and 25 studies (54.3%) reported participants' educational attainment level. Across studies, most participants were White and educated to high school level or above. Mean age was reported by 12 studies (26.1%);<sup>17,25,28,31,34-40</sup> youngest and oldest reported mean ages were 28.9 years (SD 3.9)<sup>25</sup> and 37.5 years (SD not reported),35 respectively. Data were collected between 2 weeks<sup>41</sup> and 12 years<sup>42</sup> after the women last gave birth. PROGRESS-Plus characteristics were rarely reported.

Twenty-four studies reported data for the intended or planned MOB for 4022 women; 18,21,22,24-30,32,34,35,38-41,43-49 vaginal birth or vaginal birth after cesarean (VBAC) for 2840 (70.6%) women, primary or repeat cesarean birth for

FIGURE 1 PRISMA flow diagram of identification of studies for inclusion in the review.



Cruickshank, What are the influences on women's preferences, Am I Obstet Gynecol 2025.

1120 (27.8%) women, and 62 (1.5%) women were undecided.

Twenty-nine of the 46 included studies (63.0%) recruited only women who had at least 1 previous cesarean birth. 16,20,21,23,24,26,28,30,31,33,34,36,38-44,46 -48,50-56 In 2 further studies, all participants expressed an intention or plan for a cesarean birth, but the actual MOB was not reported. 35,49

## Risk of bias of included studies

Most studies were of acceptable quality. Eight studies were assessed as having an overall CASP score of less than 6/ 10.<sup>16,32,34,37,40,45,47,57</sup> The main reasons for lower scores were partial, poor or lack of relevant information. Full details of the study-level CASP assessments are reported in Table S2.

### Synthesis of results

Ten sub-themes were identified through analysis of the studies' findings. Global themes and related sub-themes are presented below and illustrated by selected participant quotations. The complete table of participant quotations is available at https://osf.io/2pk6b?view on ly=975360496a984ccb94944e5014 c99af1. The contribution of included studies to themes and subthemes is reported in Table S3.

# Global theme 1: reason for mode of birth preference

Sub-theme 1: perceived advantages/ benefits. Women who preferred vaginal birth believed this to have advantages compared with cesarean birth in terms of less long-term pain, better outcomes for the baby, better opportunity for skin-to-skin contact and bonding with the baby, and for breastfeeding. They also reported faster recovery following vaginal birth and welcomed the opportunity this offered to care for any other children, especially women who could not rely on local family support.

"[...] Comparing the 2 methods, I think the recovery was faster for the vaginal birth."

(Chen 2018)<sup>43</sup>

Other women rationalised their preference for a planned cesarean birth as the option with fewer risks and longterm complications.

"If something goes wrong during natural birth, there could be horrible effects on the baby and myself. [...]." (Hull 2011)<sup>22</sup>

"I wanted desperately to birth vaginally, but I opted for the planned cesarean, [...] the risk to the baby was much less."

(Puia 2018)<sup>56</sup>

Some women also indicated that they valued the opportunity to schedule a cesarean birth and have time to organize childcare and maternity leave, thus reducing their anxiety around these practical issues.

Sub-theme 2: perceived disadvantages/ risks. Women also described reasons for thinking that 1 MOB was riskier than the other. Women who preferred vaginal birth expressed concern about cesarean birth, including the risks of surgery and/or anaesthesia, internal adhesions, scarring and subsequent problems with menstruation.

"For me, anesthesia is the main concern that I worry about with cesarean delivery, I heard that it may cause paraplegia, or I may not wake up forever."

(Huang 2013)<sup>58</sup>

"My menstruation was not regular after CS. It was killing me when I have period. It did not happen before. [...]."

(Chen 2017)<sup>50</sup>

Some women expressed an aversion to vaginal birth with the belief that it would be a traumatic experience or that it would change their body shape or the tightness of their vagina.

Sub-theme 3: personal viewpoint and experience. In general, women who previously had a positive birth experience expressed a preference for the same

MOB for their current or next pregnancy,

"[...] The experience of vaginal birth was excellent [...]. I prefer to have a vaginal birth."

(Chen 2018)<sup>43</sup>

While those with a difficult or unsatisfactory experience were determined to avoid repeating the experience and preferred the other MOB.

"I do not want to experience the natural birth again."

(Coates 2021)<sup>27</sup>

"I got really sick from my cesarean, and I'd rather not do that again."

(Attanasio 2019)<sup>26</sup>

Women who had previously preferred a vaginal birth but ended up having an emergency cesarean birth expressed the intention of choosing a planned cesarean birth to prevent a similar scenario.

"[...] the labour course was prolonged and I couldn't give birth for a long time... So in the end, I still had a cesarean section. I am afraid to experience the same situation as before [...]"

(Chen 2018)<sup>43</sup>

Some women described a vaginal delivery as natural and desirable but recognized that the process could be arduous, albeit associated with a feeling of achievement of being a woman. Some women who preferred cesarean birth felt this was their only choice, due to their obstetrical and/or medical history. For other women, the fear or anxiety associated with 1 MOB was the reason for choosing the alternative option. Some women preferred cesarean birth because of negative beliefs relating to vaginal birth. For example, some women felt scared of vaginal birth and others described it as "disgusting,"22 not "civilized"<sup>22</sup> or were

"worried about the humiliation that goes with natural birth"

(Hull 2011)<sup>22</sup>

Sub-theme 4: other women's experiences or other external influences. Women described how previous negative birth experiences of their female relatives or friends had influenced their choice of MOB.

"My sister tried NSD [normal spontaneous delivery] first, and then she had dystocia, [...] finally she had a cesarean delivery. [...] she suffered double pain, [...] I just choose ELCD [elective cesarean delivery] directly."

(Huang 2013)<sup>58</sup>

Recommendations from HCPs, especially those based on existing maternal medical conditions or pregnancy complications, also played an important role in shaping women's preferences.

"The doctor recommended for having a cesarean as both twins are sitting the wrong way [...]"

(Coates 2021)<sup>27</sup>

Some women reported being influenced by societal expectations or social media when considering their preference for MOB.

"I want a cesarean delivery because Dee Hsu [a well-known female star in Taiwan] said that childbirth affects the tightness of vagina..."

(Huang 2013)<sup>58</sup>

Women from countries without a publicly funded healthcare system pointed out that they would have to self-fund for a planned cesarean or rely on their health insurance. Two women from the USA explained they would prefer a vaginal birth as a cesarean would be more expensive, even with health insurance.

# Global theme 2: barriers to supported decision-making

Sub-theme 5: women's attitudes and behaviour. Some women explained they were genuinely happy to delegate their MOB decision to HCPs because of the stress and anxiety associated with the decision-making process, or because they felt that HCPs were better placed

to make a decision due to their clinical training and expertise.

"It doesn't matter how much I read, [...] I want someone who really knows what they are doing when they make the decision"

(Nilsson 2017)<sup>23</sup>

"The doctors and midwives are very careful not to force the decision on anyone [...] But sometimes it's nice to have someone trained in the area tell you "this is what I think is the best based on ..." [...]"

(Thirukumar 2021)<sup>41</sup>

In some cases, women were ambivalent towards MOB, either still weighing up the pros and cons or expressing that the only important thing was the safe arrival of the baby.

"Does not matter, the main thing is that the child is safely born"

(Karlstrom 2011)<sup>29</sup>

Sub-theme 6: interaction with healthcare professionals. Some women described a lack of empowerment and supported decision-making from HCPs regarding the planning of their MOB. Some first-time mothers explained that they were unaware of their role in the decision-making process and a lack of HCP guidance limited their active involvement. Some women felt that their HCPs were not supportive of their decision to have a cesarean birth and maintained that they either had to convince them or find another obstetrician who would support their choice.

"[...] I kept going back to the same consultant who kept trying to talk me out of it. In the end we had to be firm in our decision"

(Kenyon 2016)<sup>59</sup>

"My first obstetrician [...] always avoided questions about ELCD, [...]. Afterwards we found another obstetrician. His price was higher [...], but we had more freedom to choose ELCD."

 $(Huang 2013)^{58}$ 

Other women explained they did not receive information about avoiding a cesarean birth.

"I mean, it [a VBAC] wasn't even an option. [...] we didn't even have a conversation about it. She [the doctor] just was like we're going to have a C-section...I just wasn't okay with that, [...] so I just felt like, you know, maybe she just knows best, so I'll just deal with it."

 $(Miller 2022)^{42}$ 

Several women complained about the way they were monitored and examined throughout previous labours that ended in cesarean birth and planned a vaginal birth in their current pregnancy to avoid involvement of the same medical staff. Women also noted that, while HCPs were keen to provide positive information on the MOB they advocated themselves, only negative consequences of the alternative MOB were presented.

"I was presented with all the inconvenience of VBAC and all the positives of CS."

(Nilsson 2017)<sup>24</sup>

Other women who tried to exercise their choice felt they were not being listened to. Some women were offended by negative language and coercive behaviour adopted by health professionals.

"I was told "you are stubborn and ignorant, and I can say that because I'm the doctor" [...]"

 $(Keedle 2022)^{60}$ 

"During my second pregnancy, my OB [obstetrician] was extremely unsupportive regarding my choice to try for a VBAC [vaginal birth after cesarean]. She told me my pelvis was too small [and] if I tried for a VBAC, my baby would get stuck & die."

(Ibrahim 2021)<sup>28</sup>

Sub-theme 7: external influence(s) . Some women felt they had to defend their decisions in front of family members.

"[...] When I said that I wanted a natural birth at home, they thought I was crazy. My mother said that it wasn't possible, my husband feared for my health and that of the child [...]"

(Simeone 2019)<sup>38</sup>

For some women, MOB options were limited due to health system policies, and some felt they had to fight for their MOB choice in the face of such limitations.

"Hospital has a policy once you have a cesarean, your subsequent birth must be cesarean."

(Attanasio 2019)<sup>26</sup>

Sub-theme 8: access information. Some women felt they had not been given sufficient information on specific aspects of their planned MOB (e.g., anaesthesia, psychological consequences), and that HCPs were not interested in providing information or engaging in discussion.

". . . just come in, do the exam, and if I don't ask questions, they're out the door"

(Regan 2013)25

Some women pointed out that they were unable to access information mentioned during childbirth classes, mainly due to costs; 1 woman described how she struggled to decide on MOB because her midwife denied access to classes recommended by her obstetrician. There were also reports of HCPs discrediting sources of information that were in line with women's preferred MOB and failing to provide adequate information on all available options.

# Global theme 3: facilitators to supported decision-making

Sub-theme 9: having time, support and relevant information to make a MOB decision. Women felt empowered when they were listened to and included in the decision-making process. They appreciated the provision of information in a format they could easily understand and, in particular, information that was relevant to their own personal circumstances. Their confidence increased when their HCPs attitude was positive and supportive.

"I found it really encouraging that [...] she agrees with me and she's confident [...] that I can get a relatively medicine free VBAC [...] you don't often get that from many other places [...]"

(Keedle 2019)46

One woman who had struggled to assimilate the information she gathered from the internet was reassured by the support she received from her obstetrician.

"I did look quite a lot on the Internet...but [...] there's so many different statistics [...] when I did go and see the consultant [obstetrician] it really was like, well there's really no reason why not. And I was quite reassured, [...] "

 $(Kennedy 2013)^{37}$ 

Women valued support and encouragement from partners and other close family members, and appreciated the involvement of their partners in the MOB decision-making process.

"My mother is great, she had us naturally. [...] She said, "your body knows what to do, it is a natural thing, it is not easy, but you must trust in your body"."

(Monis 2022)<sup>33</sup>

Sub-theme 10: feeling able to change provider. Some women who knew they were able to change healthcare provider (if, for example, the HCP did not support their MOB choice) felt reassured by this and some women valued the opportunity to change their mind about their MOB choice.

# Assessment of confidence in the findings

The GRADE-CERQual ratings are presented as Table S3. Nine of the ten subthemes (90%) were graded as low

confidence overall and 1 (10%) was graded as moderate confidence. Findings were downgraded in all sub-themes for "relevance" because participant demographic data, including sociodemographic status and ethnicity were poorly reported across studies. Therefore, we are uncertain of whether our findings have relevance for women from minority groups. Findings for 9 sub-themes were also downgraded for "methodological limitations" because 1 or more of the studies that contributed data to these subthemes were assessed having CASP score <6. 16,32,34,37,40,45,47,57

#### Comment

This systematic review of qualitative studies synthesises the preferences of women in high-income countries for planned vaginal or cesarean birth. Methodological quality of most of the included studies was good but confidence in our findings (as assessed by GRADE-CERQual) was generally low. Overall, our findings offer a reasonable representation of the phenomenon of interest.

Principal findings. Women's preferred MOB was often expressed in positive terms towards their MOB choice and/or in negative terms towards the alternative option. Positive previous personal birth experiences, including those of family or friends, were often associated with a preference for that same MOB in their current pregnancy. In contrast, negative recalled experiences were more likely to guide women towards an alternative MOB. In terms of barriers and facilitators for making an informed birth choice, our findings confirmed the importance of the HCP role in the decision-making process.

Some women had a strong and wellformed MOB preference from the start of the pregnancy, before any interaction with HCPs. Some of these women may still seek supported decision-making and others may choose not to enter further discussion about the decision. Whilst the latter may be seen as a barrier to supported decision-making, it should be noted that all women's decisions are important, regardless how and when they were formed.

Some HCPs had a strong opinion about MOB, which can manifest in patronizing, discouraging or negative attitudes towards women. Any directive guidance from such HCPs may be welcomed by women who are uncomfortable or unwilling to make a decision, or who would prefer their HCP to make the MOB decision, but, for others, it is potentially another obstacle to supported decision-making.

In some cases, women felt their HCPs used scare tactics or provided biased or persuasive information to manipulate their decision. In order to offer women the opportunity to make decisions relevant to their own values, preferences and circumstances, HCPs should be mindful of their own MOB preferences and how these could introduce communication bias during the decision-making process.

In general, women found it useful and encouraging to receive clear, balanced and relevant MOB information. Some women were keen to actively search for information about MOB themselves while others explained they did not receive enough information to make a decision. This was sometimes due to antenatal appointments being too short with limited time to ask questions. Some women struggled to make sense of all the information they received or sourced themselves, and welcomed support from HCPs who could help them navigate and understand information to make a decision. Overall, the importance of presenting women with high quality, evidence-based information covering both MOB options in a suitable format is clear.6 In addition, creating the appropriate antenatal environment where women have the opportunity to ask questions, and time to communicate their preferences and concerns is vital.

Women may have different reasons for choosing a particular MOB and none should be disregarded. Rather, exploring these reasons offers a unique opportunity for HCPs to support women through the decision-making process by not only providing evidence-

based information on the risks and benefits of different MOB options, and incorporating each women's personal values into discussions with support and respect. By actively seeking out women's priorities and concerns at the outset, these can be acknowledged, relevant data provided on respective risks and reference can be made to these issues when weighing up the option of planning vaginal or cesarean birth, respectively. While formal consent processes do not acknowledge that partners may influence medical decision-making, it is evident that partners may play a key role, in part because they may discuss and support the understanding of risks and benefits, but also because they will be part of the family system who live with the consequences of any decisions made, and thus are likely to share opinions on the options with women.

Strengths and limitations. This review was conducted according to current methodological standards by an interdisciplinary team of methodological and clinical experts, and independent PPI partners. Overall, our findings are relevant for women making antenatal decisions in high-income countries. The qualitative interpretive approaches were documented and confirmed through notetaking and group discussions. The studies included in the review involved both nulliparous and multiparous women and women with previous experience of vaginal birth and/or cesarean birth. Eight studies included in the review were assessed as being of low quality, mainly due to lack of reporting of pertinent information. Demographic information was frequently poorly reported so it could not be ascertained how representative participants were of women's experiences in particular settings. As there are documented inequalities in maternal care for minority ethnic populations, future studies would benefit from proper reporting of sociodemographic data as they relate to ethnicity. This review was performed according to current methodological standards. However, it was not possible for 2 reviewers to independently take part in all stages of the review. Notably, the approach of cross-checking is commonly used and is deemed as acceptable in the systematic review field. Our findings will be taken forward to inform the content of a decision aid being developed to support antenatal discussions in the UK NHS.

# Comparison with existing literature

Existing evidence and guidelines have highlighted the importance of supported decision-making in antenatal care, 5,61-68 but our findings have revealed several barriers, suggesting that this is not routinely facilitated. Women are not routinely offered a choice to plan either vaginal or cesarean birth. Healthcare professionals have a crucial role in women's decision making, and their attitude and approach can either help or hamper the process. It is recognized that use of a decision aid may facilitate discussions between women and HCPs about the risks and benefits of different MOBs. However, a decision aid to enable women to make MOB decisions in routine NHS antenatal care does not currently exist, and our findings highlight the need for such a tool to be developed.

Our findings are broadly in line with those from a scoping review published in 2020 which assessed the MOB preferences of over 150,000 women living in high, middle and low-income countries. The nature of a scoping review is that it provides an overview of the existing literature and, therefore, lacks the depth of our systematic analysis.

## **Conclusion and implications**

Despite the recommendations regarding facilitating informed decisions for women during antenatal care in high-income countries, several barriers still exist. Our findings will feed into the qualitative interviews stage of the development and implementation of a decision aid to support MOB planning discussions in routine NHS antenatal care.

# CRediT authorship contribution statement

**Moira D. Cruickshank:** Writing – original draft, Validation, Project

administration, Investigation, Formal analysis, Data curation. Clare Robertson: Writing - review & editing, Validation. Project administration, Investigation, Formal analysis, Data curation. Miriam G. Brazzelli: Writing - review & editing, Validation, Methodology, Formal analysis, Conceptualization. Aniebiet I. Ekong: Writing review & editing, Validation. Mo Ade: Writing - review & editing, Conceptualization. Pauline Mcdonagh Hull: Writing - review & editing, Conceptualization. Paul D. Manson: Writing review & editing, Investigation, Data curation. Debra E. Bick: Writing review & editing, Conceptualization. **Denitza O. Williams:** Writing — review & editing, Conceptualization. Gillian Taylor: Writing - review & editing, Conceptualization. Lilla A. Ward: Writing - review & editing, Conceptualization. Mary M. Kilonzo: Writing review & editing, Conceptualization. Tara E. Fairley: Writing - review & editing, Conceptualization. Siladitya **Bhattacharya:** Writing – review & editing, Conceptualization. Louise Locock: Writing - review & editing, Conceptualization. Magdalena Rzewuska Diaz: Writing – review & editing. **Mairead E.** Black: Writing - review & editing, Val-Supervision, Methodology, Funding acquisition, Formal analysis, Conceptualization.

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## Supplementary materials

Supplementary material associated with this article can be found in the online version at doi:10.1016/j.xagr.2025. 100556.

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