Shared decision-making during childbirth in maternity units: the VIP mixed-methods study

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Scientific summary

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Background

The Department of Health and Social Care and the NHS are clear that service users benefit from engagement in decision-making about their care. Indeed, the importance of informed consent, control and choice relating to decisions about labour and birth has been recognised for decades and particularly endorsed throughout the last 15 years. Evidence exists concerning the relationship between the labouring person's feelings of control (a key component of which is involvement in decision-making) and greater satisfaction, emotional well-being and decreased anxiety, as well as better perinatal outcomes. However, women's postnatal accounts show considerable variation in involvement in decision-making during labour. Indeed, the most recent Care Quality Commission report shows that 22% of women surveyed in 2019 said they were only sometimes (18%) or never (4%) involved in decisions (Care Quality Commission. *2019 Survey of Women's Experiences of Maternity Care: Statistical Release*. London: Care Quality Commission; 2020). Other studies report highly variable optionality around different types of clinically routine decisions, especially when this concerns personally sensitive/invasive procedures, such as vaginal examinations (VEs) and fetal monitoring.

Good communication is key to creating opportunities for women to participate in decisions about what happens to them. As noted in *Better Births*, women should ideally make decisions 'through an ongoing dialogue with professionals that empowers them' (contains public sector information licensed under the Open Government Licence v3.0) [NHS England. *National Maternity Review: Better Births: Improving Outcomes of Maternity Services in England. A Five Year Forward View for Maternity Care.* 2016. URL: www.england.nhs.uk/wp-content/uploads/2016/02/national-maternity-review-report.pdf (accessed 3 March 2022)]. However, despite an emphasis on dialogue, existing knowledge about communication during labour tends to be captured retrospectively, and little is known about how decisions are actually made through situated talk-in-interaction between labouring persons, their birth partners (BPs) and health-care professionals (HCPs). Therefore, the real-time accomplishment of decision-making in this context is under-researched and this study addresses this significant knowledge gap.

The broad aim of the study was to use conversation analysis (CA), which is the leading method for analysing talk, to identify and describe key situated interactional practices of decision-making that take place during labour in midwife-led units (MLUs). Midwife-led care refers to the autonomous care by midwives of pregnant persons who present to maternity services as low risk for complications. During the intrapartum period, midwife-led care takes place in units staffed and managed by midwives, although referrals to obstetric-led care occur should complications arise. Notions of normality and risk, therefore, underpin the distinction between midwife- and obstetric-led care. Midwife-led care is associated with facilitating, when appropriate, the normality of birth as a spontaneous physiological process and, therefore, minimal intervention. Emphasis is placed on midwives' professional expertise and women's embodied and agentic capacities to manage labour. This does not mean, however, that risk surveillance is absent from midwife-led care, nor that pregnant people and midwives are not engaged in decision-making. Those people with low-risk pregnancies have many options for their care during labour and birth, including (but not limited to) choices around pain relief, VEs and management of the third stage. These are routine – likely not medically urgent – decisions of the kind that might be of relevance for any labouring person in any context. The routine and widespread nature of these decisions during labour and birth makes it particularly important to understand how they are managed in practice. Accordingly, decision-making in MLUs forms the focus of our research.

Objectives

The study had four objectives:

1. To create a rich data set based on recordings of people giving birth in MLUs. We collected data via (i) antenatal questionnaires (ANQs) surveying women's expectations and preferences for birth; (ii) intrapartum video-/audio-recordings of labour and births; and (iii) postnatal questionnaires (PNQs) about women's experiences of, and satisfaction with, decision-making during labour.
2. To contribute to the evidence base for shared decision-making through our fine-grained analysis of the verbal and non-verbal detail of interactions that take place in real time during birth, specifically how decisions are initiated, who initiates them and how different ways of initiating decisions are responded to. Using CA, the analytic focus is on how talk is used (by all parties) to encourage or discourage involvement in decision-making over the course and events of a birth.
3. To assess whether or not women's actual experiences reflect their antenatal expectations and whether or not there is an association between interactional strategies used (by all parties) during labour (particularly the extent to which decisions are shared) and women's later reported level of satisfaction. In this way, we could assess whether or not satisfaction is related to definable aspects of care in MLUs.
4. To disseminate findings to health-care providers and service users to contribute to translating existing Department of Health and Social Care and NHS policy directives on sharing decision-making into clinical practice.

Design

The study utilised a mixed-method design, including video-/audio-recording of labour and births, ANQs and PNQs, and interviews with midwives and obstetricians. A pilot phase was included to establish feasibility of obtaining high-quality video-/audio-recordings of birth.

The primary data set was the video-/audio-recording of labour and births and the main analytic method was CA, which was used to explore the fine detail of interaction during decision-making. CA is predicated on the understanding that talk is used to perform social actions (i.e. to 'do' things). Relevant actions in the context of decision-making include offering (i.e. 'do you want X'), requesting (i.e. 'can I have X') and pronouncing (i.e. 'I am going to X'). *We examined the precise ways that decisions were initiated, who initiated them and how they were responded to.* Derived from the CA, a coding frame was developed to quantify the interactions that took place in each recording.

Structured ANQs and PNQs surveyed women's antenatal expectations and preferences, and women's experiences of, and postnatal satisfaction with, decision-making. Questionnaire data were combined with the quantitative coding of interactions in recordings, permitting analysis of associations between the interactional formats used (by midwives and by women in labour) and postnatally expressed satisfaction.

Semistructured interviews with HCPs explored perceptions of factors shaping decision-making. These interviews provided background context to the study and were explored to reflect on issues raised by the CA of the recordings.

Setting and participants

The study took place in two MLUs located at two different English NHS trusts. A total of 154 women (aged $\geq$ 16 years with low-risk pregnancies), 158 BPs and 121 HCPs consented to take part in recordings of labour and birth. Of these participants, 37 women, 43 BPs and 74 HCPs were recorded. We aimed to recruit as diverse a sample of women by socioeconomic status (SES) and ethnicity as possible.

SES (measured by deprivation deciles) is widely distributed for the recorded (and non-recorded) sample, although it is somewhat skewed towards residence in relatively least deprived areas. The sample of recorded women fell in all deprivation deciles, indicating some level of diversity, but there was a larger number of participants from least deprived areas. The majority (97%) of women were white, which means that the experiences of ethnic minority women were under-represented. All of the people in labour who participated in our recordings appeared to identify as women (as evidenced by the uncontested gendered pronouns by which others referred to them). Accordingly, when referring to our data set, we use the term 'women' to refer to people in labour.

Key findings

Antenatally, the majority of women intending to labour and birth in the MLUs wanted to be involved in decision-making during labour and birth. However, CA of the recordings reveals that midwives initiate the majority of decisions in formats that do not invite women's participation (i.e. beyond establishing consent). The extent of optionality that midwives provide to women, however, does vary with the decision being made. Women have more involvement in decisions pertaining to VEs in *early* labour (but not in active labour), pain relief and the third stage. Nonetheless, even in these contexts, optionality is contingent on clinical parameters and expertise. For example, where requests for pharmacological pain relief are in tension with normative decisional outcomes (e.g. that opiates should not be given too close to birth), midwives use various strategies to deter or defer their use. BPs are not treated as decision-makers by midwives. The exception to this is the decision about who will cut the cord, which is oriented to by midwives as belonging to BPs.

Postnatally, the majority of women reported having wanted decision-making either to be led by staff or to be advised by staff and to take that advice. High levels of satisfaction were reported. There is no statistically significant relationship between midwives' use of different formats of decision-making and any of the measures of postnatal satisfaction. However, women who initiated decision-making through the decision-implicative format were statistically more likely to have lower satisfaction for being 'listened to', for 'decisions made' and for overall satisfaction. In addition, women's use of requests was associated with lower satisfaction in 'views being taken into account'. The similarity between pain relief-specific findings and all decisions suggests that it is pain relief decisions that are driving these associations, with women who take the lead in pain relief decisions reporting lower satisfaction.

Discussion

In keeping with other CA research concerning decision-making in health care, our study demonstrates the difficulties involved in translating policies of patient involvement and choice into practice. In CA terms, option listing might be considered the most participatory or 'shared' form of decision-making in clinical interaction (although this is not without nuance). However, in our data concerning decision-making in MLUs, women are explicitly presented with option lists during decision-making only in quite specific circumstances. A key challenge is that midwives' interactions are oriented to a particular set of guidelines/clinical norms. When guidelines/clinical knowledge indicates a normative outcome, midwives appear routinely to use interactional formats that constrain women's choice. This finding resonates with previous CA work that suggests that patient choice tends to be reserved for decisions where clinical outcomes may be less contingent on patient preference.

Although the majority of women intending to labour in MLUs antenatally described wanting to be involved in decision-making during labour, postnatally many described wanting decision-making to be led by staff and reported that this is broadly what happened (which also corresponds to the interactions observed in the recordings). It is possible that the 'routine' nature of many of the decisions that take place in MLUs mean that their midwife-led nature, and the lack of optionality afforded to women,

is uncontroversial. It is notable that, when surveyed antenatally, women generally either wanted or did not mind the interventions that midwives sought to pursue in HCP-led ways as part of routine care, such as fetal monitoring at intervals and VEs. In this sense, there may have been no tension between many outcomes sought by midwives and those desired by women, perhaps reflected in the high levels of satisfaction reported postnatally.

However, one area in which the goals of midwives and women in labour did sometimes observably diverge in the interactional data was during decision-making about pain relief. CA demonstrates that women-initiated decision-making occurs in the context of midwives' clinical preference to avoid the use of pharmacological methods of pain relief at particular stages of labour. In other words, pain relief decision-making is sometimes *necessarily* women initiated because of midwives deterring or deferring of pain relief decisions, particularly relating to the use of opiates. Therefore, although interactions appear to be 'led' by women, the interactional responses being employed by midwives are still shaping decision-making in this context. The negative association between this form of decision-making and women's satisfaction implies that it can, in some cases, leave women feeling unheard by staff and this demonstrates the consequential nature of the decision-making that takes place during even low-risk birth.

Conclusions

The tensions between adherence to clinical guidelines concerning risk management and the promotion of woman-centred care during labour are well documented in the existing research literature concerning midwifery practice. This study makes a significant contribution to this literature by providing, to our knowledge, the first UK and only CA study of interactional practices of decision-making in midwife-led care. Our analysis suggests that to require midwives to share decision-making with people in labour by giving optionality in decision-making in all circumstances may be interactionally difficult. This is because the provision of optionality can be in conflict with clinical imperatives concerning the management of risk, as well as midwifery expertise concerning the management of pain and progress during labour. In other words, offering choice to people in labour risks failing to achieve normative decisional outcomes. It is for this reason, we suggest, that the majority of decision-making observed was initiated by midwives in formats that did not invite women's participation. We argue that the significance of this interactional challenge for midwives needs to be at the centre of any policy initiatives regarding decision-making during labour.

Future work

On the basis of this study, we suggest the following six directions of research (note that recommendation 1 should underpin all new research and recommendations 3, 4 and 5 could be conducted with our existing data set):

1. Research is needed to explore more effective ways of including ethnic minority people at all stages (i.e. from initial approach to recording) and what barriers exist to this inclusion (e.g. whether or not this population of women is more likely than white women to enter obstetric units rather than MLUs).
2. An extension of our methodology should be used to study decision-making in obstetric-led care. We have demonstrated the willingness of participants to consent to recording and the practicalities of collecting data of this nature. Given that, by definition, obstetric care involves high-risk labours and our finding that optionality is contingent on clinical factors, it is important to systematically analyse decision-making in this context. The very different and, potentially, more consequential (in terms of women's experiences) nature of decision-making in obstetric care was strongly emphasised by our service user group.

3. Further analytic understanding of how pain relief is pursued/resolved is required, given that this is the area in which we found some significant associations between decision-making practice and satisfaction.
4. Research should consider broadening the study of interactional practices of participatory decision-making to include practices that occur outside the (necessarily) narrow confines of initiation, pursuit and response adopted in this study. These practices might include, for example, information provision and the opportunity to ask questions. Other factors, such as continuity of midwife and the number of midwives involved in the intrapartum period, might also be consequential for decision-making.
5. Relatedly, there is a need to understand the interactional markers of the emotional labour enacted by both midwives and BPs. Further analysis of the role played by both midwives and BPs, for example by 'coaching' women through contractions, words of encouragement and use of touch, might provide broader context for understanding the ways in which decision-making occurs in practice.
6. Although ambitious, it would be helpful to be able to follow pregnant persons across their antenatal encounters into the intrapartum period. This would allow us to examine not just women's perceptions of their antenatal wants and expectations, but their actual decision-relevant interactions with HCPs throughout pregnancy (including childbirth), thereby facilitating further empirically grounded analyses of the relationship between future-oriented decision-making and the decisions that are made during labour.

Trial registration

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