

Safety and Community: The Maternity Care Needs of Rural Parturient Women

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Abstract

Objective: To investigate rural parturient women's experiences of obstetric care in the context of the social and economic realities of life in rural, remote, and small urban communities.

Methods: Data collection for this exploratory qualitative study was carried out in 7 rural communities chosen to represent diversity of size, distance to hospital with Caesarean section capability and distance to secondary hospital, usual conditions for transport and access, and cultural and ethnic subpopulations. We interviewed 44 women who had given birth up to 24 months before the study began.

Results: When asked about their experiences of giving birth in rural communities, many participants spoke of unmet needs and their associated anxieties. Self-identified needs were largely congruent with the deficit categories of Maslow's hierarchy of needs, which recognizes the contingency and interdependence of physiological needs, the need for safety and security, the need for community and belonging, self-esteem needs, and the need for self-actualization. For many women, community was critical to meeting psychosocial needs, and women from communities that currently have (or have recently had) access to local maternity care said that being able to give birth in their own community or in a nearby community was necessary if their obstetric needs were to be met.

Conclusion: Removing maternity care from a community creates significant psychosocial consequences that are imperfectly understood but that probably have physiological implications for women, babies, and families. Further research into rural women's maternity care that considers the loss of local maternity care from multiple perspectives is needed.

Résumé

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INTRODUCTION

For many women, childbirth can be a peak experience¹ that contributes to self-esteem and confidence. Beyond the physiological experience of pregnancy and labour, birth can often change a woman's sense of self.²⁻⁵ However, research has shown that when women's parturient needs—for example, the need for continuity of caregiver, involvement in decision making, and presence of partners, family, and social support⁶⁻¹⁰—are not met, women can experience stress, anxiety, and fear, which can lead to a less positive experience of birth.¹¹ Several studies in the past 2 decades have examined the factors that affect women's experience of birth, including the class and ethnicity of the woman,¹²⁻¹⁴ the type of care provider involved,¹⁵⁻¹⁷ and where the woman gives birth.^{8,18,19} However, there has been no research on the effect of geographical location. This gap in the research is significant in Canada, where it is increas-

ingly difficult for rural women to find obstetric care. Because of the restructuring of the health care system, rural services have been reduced, and women are forced to leave their communities to give birth. Using Maslow's theory of human motivation²⁰ as a framework, this paper examines rural women's obstetric needs, the best conditions for meeting them, and the consequences of not attending to these needs.

Resource constraints and policies requiring centralized service delivery are the major reasons for the disappearance of rural maternity care in Canada. The difficulty of recruiting and retaining physicians in rural areas, especially physicians willing to provide obstetric care, is a key contributing factor, as are inadequate nursing skills and experience and diminishing anesthesia and Caesarean section capabilities.^{21–25} Limited investigations suggest that the closing of local rural maternity care services can make optimal birth outcomes less certain for women and infants.^{26–31} Some researchers have hypothesized that low-intervention styles of maternity care offered in small rural settings are optimal for uncomplicated deliveries.^{31–33} Specific small studies have shown that, within a regionalized system of care, small rural hospitals without local Caesarean section capabilities have perinatal mortality rates similar to those of larger centres.^{27,34–36} Researchers have also noted that travel during pregnancy and labour can be detrimental to healthy birth outcomes.³⁷ Specifically, women who are farther away from maternity care services may be less likely to adhere to prenatal care regimens^{25,38} and having to leave their families and home communities may have economic and psychosocial consequences^{21,39} that seem to be correlated with negative birth outcomes.^{31,37}

Canadian rural maternity care providers and researchers are aware that understanding the obstetric needs of rural women is an important part of understanding the interrelatedness of rural maternity care services, birth outcomes, and social and economic costs to women, families, and communities.^{21,22,27,28,40–42}

METHODS

The goal of this exploratory qualitative study was to investigate rural parturient women's experiences of obstetric care in the context of the social and economic realities of life in rural, remote, and small urban communities. We were interested in examining both the intended and unintended consequences for women and their infants of giving birth within and outside their local communities.

Data Collection

Data were collected in 7 rural communities chosen to represent diversity of size (including geographic boundaries,

catchment areas for health care services, and population), distance to hospital with Caesarean section capability and distance to secondary hospital, usual conditions of road and air access in winter months, and cultural and ethnic subpopulations within the communities. All communities were designated "high outflow"; that is, more than two-thirds of low-risk births occurred outside the community. One of the research communities stopped providing local maternity care services before we began collecting data.

Unstructured interviews and focus groups were undertaken with women who had given birth up to 24 months before the study began and whose primary residence at this time was in the research community. A total of 44 women were interviewed. Of these, 6 gave birth within their local community and 38 gave birth in a referral community. All data were included in the analysis. We videotaped interviews with 7 women in 3 communities. We sought ethical approval for the study from the University of British Columbia's Behavioural Research Ethics Board (BREB). A certificate of approval was issued to the research team after ethical review and approval of the project.

Analysis

We carried out the analysis in 2 phases, using a modified approach to grounded theory that included the use of traditional procedures such as coding emerging data, making connections between themes and subthemes, and self-reflexive memo writing.⁴³ In grounded theory, data collection, analysis, and interpretation are concurrent rather than sequential. Initial research questions are open but may be refined as the research proceeds and a theory that explains the data is arrived at inductively. Grounded theory has been criticized for its assumptions of an objective external reality, its unbiased data collection, and its technical procedure.^{44–46} We addressed these concerns by using grounded theory in a flexible way rather than as a set of formulaic procedures.⁴³

The first phase of analysis provided a framework for presenting the data that was based on the needs identified by rural women (including safety needs, supportive and positive relationships with care providers, and having the birth experience they desired), combined with the realities of their rural context (degree of isolation and remoteness of their community, psychosocial variables, and health service resources). When the first phase of analysis was complete, the unmet obstetric needs of rural parturient women were clear. Because these needs were congruent with the hierarchy of needs in Maslow's theory of human motivation,²⁰ the latter was used as a framework to interpret the data, to assess the relative importance and interrelatedness of the needs, and to assess the implications of these needs not

being met. This paper focuses on the obstetric needs of rural parturient women; a discussion of participants' recognition of the reality of obstetric care is forthcoming.

The principal investigators were a family physician (who practiced obstetrics in a rural setting for 12 years) and a sociologist. Our different perspectives required an assimilation of research approaches, which we achieved by becoming sufficiently familiar with colleagues' concepts and approaches.⁴⁷ We believe this approach increased the relevance of the findings. We used a qualitative data analysis (QDA) software program to apply codes to the transcripts, to organize the data by themes, and to link data to field notes and analytic memos. This allowed for multiple sorting of data as the analytic framework emerged.

Theoretical Framework

Respondents' self-identified obstetric needs were juxtaposed with the reality of living in a rural community to create an initial analytic framework. Because the study participants' needs closely approximated Maslow's hierarchy of needs,²⁰ we interpreted them within that theoretical context. According to Maslow, we are motivated by the desire to fulfill basic needs. The attainment of higher levels of need satisfaction is determined by our ability to meet lower-level needs. Unmet needs leads to a state of tension or anxiety in direct proportion to the deficit. Although Maslow suggested that the desire to satisfy needs is the primary motivation for human behaviour, he also noted the influence of culture.

RESULTS

The lack of maternity care resources in many rural communities forces women to leave their communities to give birth. The participants who gave birth in their own communities described a more fulfilling experience. These study subjects articulated needs that were largely congruent with the deficit categories in Maslow's hierarchy of needs: (1) physiological needs; (2) the need for safety and security; (3) the need for community and belonging; and (4) self-esteem needs. (The need for self-actualization was underrepresented.)

Physiological Needs

For participants in this study, physiological needs focused on securing appropriate care for the prenatal period, the labour, and the delivery. This included access to prenatal care, care providers, support during labour and delivery, and, sometimes, technological interventions. When these needs conflicted with the realities of maternity services available in their community or with women's obstetric health status, stress and anxiety resulted. Conflict arose when local services were compromised (no local births or

intermittent support for local births). As one participant noted, "I was stressed out about delivering her from the moment that I got pregnant and they told me 'We don't want to deliver here'" (participant 7 in community 3).

Most participants were aware of the level of maternity services available in their community and the implications of a lack of resources. Participants often saw this lack as a rationale used by care providers to resist local deliveries. Participant 8 in community 3 said, "Sometimes we don't have an anesthesiologist here, so if something did happen . . . what do we do then? So that's why they say we can't have any children here."

Some candidates for a local delivery went to considerable lengths to ensure they were able to stay in the community if it offered maternity service. One participant who went into labour while she was on her way home from visiting family travelled for almost 8 hours while in labour to give birth in her home community.

Many participants who gave birth outside their communities described the financial costs they incurred ensuring their physiological needs were met. These included the travel expenses, long-distance telephone calls, and intrapartum transfer by ambulance, as well as partner's lost income. Several participants also noted the sometimes insurmountable challenge of receiving care outside their communities when they had no immediate access to transportation or no driver's license: "I don't drive . . . so it's hard to get there, and that's the one thing that frustrated me" (participant 7 in community 1). For many participants, the choice of location for birth was contingent on financial considerations, including family support (e.g., if a woman did not have family or friends to stay with in an urban centre, she might not have the option of having a vaginal birth after a Caesarean section). The financial consequences of giving birth outside the community were felt most acutely by women with the fewest financial and social resources. As one participant noted, "We didn't have a place to stay, so you have to rent a place or stay in a hotel. And so that was a lot of our decision to stay here. We didn't have options" (participant 8 in community 1).

Many study participants developed strategies to meet their physiological needs for a safe birth. A common strategy was the seasonal timing of birth to reduce the need for winter travel: "If you're planning a baby, don't plan it from October to March 'cause you never know—so that was the scary part" (participant 1 in community 2). Another strategy was to undergo labour at home and arrive at the local hospital with the cervix fully dilated to eliminate the possibility of transportation to a referral community: "If I show up here, you will do the delivery!" (participant 6 in community 2). Some women even considered an unassisted home birth.

Safety Needs

The participants wanted a sense of stability, security, and predictability when they gave birth. This was manifest most directly through the need for a care provider whom they knew well and felt comfortable with. Participant 8 in community 3 said, “I didn’t want to have to go somewhere else and not know my doctor. I wanted to be familiar with what was going on, [with] who was doing it.” This need was unmet for many participants because of the prominent role of locums in rural locations or the rotating call schedules in many referral communities. Participants believed the lack in continuity of care was inherent in the service delivery model for rural maternity care. One respondent described the protocol in her referral community: “I believe it’s 6 doctors who deliver babies in the hospital, and they’re on call for certain times, so they try to schedule your appointments so that each time you go you meet someone new, so when you go into labour, whoever’s on call is delivering your baby” (participant 6 in community 2).

Many women felt that this lack of continuity and the consequent difficulty in forming relationships with care providers undermined the consistency of their maternity care: “Each doctor has a totally different opinion of everything so you have different questions each time, and depending on who you get [it’s a] different answer” (participant 6 in community 2). When discontinuity in care results in inconsistencies in diagnoses, women’s sense of security in the delivery process and in the care procedures is further eroded. **It also leads** to increased levels of uncertainty prior to labour and delivery. For the women in this study, this uncertainty was aggravated by the concerns inherent in other rural realities, such as geographic isolation and unpredictable travel conditions, which lead to high levels of stress and anxiety. One participant quelled her anxiety by leaving the community before the onset of labour. Another participant noted that “there’s always the stress of the ‘what if’. What if [at] the last minute we have to go out? What if it’s wintertime and you can’t fly a helicopter across the pass?” (participant 4 in community 1).

Most participants who experienced a lack of continuity in their care developed strategies that would mitigate the negative effects should they require obstetric care again: “I would probably go to [a referral community] and get all my care there, right from the very beginning” (participant 1 in community 2).

Home birth was seen as another way to avoid interactions with multiple care providers.

The Need for Community and Belonging

Participants described their need to share the birth experience with family members, to feel a sense of connectedness

to care givers and others in the wider community, and to continue a family tradition of giving birth locally. For many women in this study, the motivation for living in a rural environment included the desire for community. One participant said that what she liked most about living in a small town was “the closeness you develop with everybody because you know everybody; it’s just comfortable” (participant 1 in community 2). This sense of closeness was akin to family relationships for some participants, especially for those who were able to have a local birth, and was held in high regard. Participants who had family members’ support postpartum noted its advantages. The sense of community extended to the local hospital for many of the women who gave birth in their community: “As for the birth, it’s never pleasant, but it’s a great place to give birth in the local hospital. My doctor, who attended my other children, was there; [and] the nurses, I know them, and I’m very comfortable with them” (participant 9 in community 1). Having to leave the local community to give birth seemed ironic to women for whom a sense of security was intimately associated with the network of support their local community provided. Most participants wanted their husbands or partners to participate in the antenatal experience, but their ability to do so was often compromised if care was received outside the local community. Many participants expressed disappointment that their children would not be born in the same hospital or town as they or their partners had been: “I really wanted to have a baby that was born where his dad was born. But I got shipped out” (participants 10 and 11 in community 1).

Esteem Needs

Women in this study wanted a birth experience that was congruent with their desires and expectations, ranging from specific preferences being honoured (such as foregoing the application of antibiotic eye ointment immediately postpartum) to having their philosophy of birth respected. Many participants described their philosophy of birth as “low tech” and involving minimal interventions. From their perspective, the lack of access to technological resources in their local hospital was an advantage of giving birth locally. One participant said, “I really didn’t want to have an epidural. They don’t have epidurals [here] so it takes that option away” (participant 3 in community 1).

Participants who had to leave their communities to give birth often found it difficult to meet their esteem needs: often, they were preoccupied with finding transportation and accommodation for themselves and for their family members. Also, most were worried because they had no information about the way the delivery would proceed in the referral community. This often precluded participants’ meaningful involvement in decision making and

precipitated feelings of lost control. Involvement in decision making was considered necessary for a satisfactory experience,⁸ and lost control led to self-reported unsatisfactory experiences.^{14,48} However, several participants who were leaving their communities actively asserted their needs in a way that contributed to their having a sense of mastery during the birth. For example, participant 7 in community 3 was resolute in her desire to avoid induction of labour: “Most people will get a scheduled labour induced, and I really did not want to do that. Why should I schedule my delivery around everyone else?”

When esteem needs were met, respondents’ descriptions of their experiences giving birth were underscored by the emotion that often accompanies peak experiences. One participant who had a home birth noted, “It was such a profound day ... I just felt like everything occurred the way that I wanted it to and better than I wanted, and it was such a dream.” The same participant, however, noted the contrast between her positive experience and the experiences of women for whom the reality of giving birth did not match their vision: “I’ve had situations where women asked me about my birth and I tell them how good it was, and they’re so frustrated and their birthing experience was so painful they couldn’t listen to me, or they just get really angry with me” (participant 4 in community 1).

DISCUSSION

According to Maslow’s “dynamic-holistic” theory, physiological, psychosocial, and spiritual or emotional needs are equally implicated in definitions of health.^{49,50} Sociological studies of childbirth have long recognized this,^{51–54} and medical research now also acknowledges it.⁵⁵ The implications are significant for obstetric practice because they demand that we attend to the full range of women’s needs in pregnancy, birth, and the postpartum period, to ensure optimal maternal and fetal outcomes. Before we can attend to women’s needs, however, we must recognize and understand them.

For study participants from communities that currently provide maternity care or have recently done so, fulfilling obstetric needs depended on being able to give birth locally or in a nearby community and on knowing their care provider. Diminished access to maternity care for rural women and a smaller number of practitioners providing that care make this increasingly difficult and precipitate significant social disruption. For many participants, meeting the need for adequate care for labour and delivery outside the community created financial challenges, the implications of which echo the observation of cultural theorist Anthony Giddens: “Social divisions and other fundamental lines of inequality, such as those connected with gender and

ethnicity, can be partly defined in terms of differential access to forms of self-actualization and empowerment.”⁵⁶ In this study, expressions of self-actualization through giving birth were notably absent, which is congruent with Maslow’s assertion that lower-level needs must be met before higher-level needs, such as the need for self-actualization.

Many participants described anxiety arising from uncertainty or from lacking the predictability that is necessary to our sense of safety. These feelings motivated some women to plan the day of birth through induction of labour, an act that underscores our cultural imperative for predictability. Recognition of this imperative is particularly relevant in discussions about birth location for rural women because it converges with underlying assumptions about risk being reduced with the help of technology. The need for love and belonging—encapsulated in the idea of community—was as strong as their physiological and safety needs. This is consistent with other literature on women’s needs in labour and delivery.⁵⁷ For many women, community was critical to meeting psychosocial needs; therefore, leaving the acceptance and support of their community—and losing their sense of belonging—provoked disappointment.

For some participants, esteem needs, or the need for mastery and a sense of efficacy, were evident in the desire to give birth without intervention. Many participants saw the lack of resources within the local hospital as facilitating their desired mode of birth. However, although few participants who were able to give birth in their own communities saw the lack of epidural analgesia or lack of capacity for an operative delivery as deleterious to their experience of birth, many expressed anxiety about the lack of local emergency contingencies. A woman who gave birth in her community usually did so with the support of her care provider; decision making was shared, which gave her confidence to express her needs and desires for her course of care.

Despite the challenges they faced in securing care, most study participants described positive or adequate experiences. They anticipated their birth conditions in a remote location, created a sense of community away from home, and felt mastery over their experiences. This was not the case, however, for women from communities where giving birth locally had not been possible: most of these women believed that local obstetric care was not available because it was inherently unsafe.

When describing their unmet obstetric needs, all study participants spontaneously said they had felt anxiety at every level of Maslow’s hierarchy. At a physiological level, anxiety was connected to the absence of local services and the consequent uncertainty about contingencies. The inability to predict the circumstances of their delivery (both for women

referred to other communities and for those who were planning to give birth locally but were uncertain whether it would be possible) led to further stress that was aggravated by participants' inability to establish meaningful relationships with care providers in referral locations. Stress arising from unmet needs for community, love, and belonging focused primarily on the possibility of partners and significant others not participating in the experience because of logistical challenges presented by work and family.

Critical theorists have noted that expressed or perceived needs, those needs that people seek satisfaction for, are shaped by dominant political ideologies and social practices.⁵⁸ Rural women's obstetric experiences are embedded within larger social practices, including our cultural inclination toward the centralization of care in tertiary facilities (because of the availability of technological resources, innovation, and specialization). This imperative is both underscored and perpetuated by our contemporary reliance on technology, epitomized by increasing rates of intervention in birth and the cultural trend toward elective Caesarean section and induction of labour.^{53,59,60} The equation of centralized, technologically mediated care as the gold standard diminishes the importance of the psychosocial and spiritual dimensions of childbirth.

Limitations

Women who participated in this study had no risk factors for complications during labour and delivery or for neonatal complications (such as multiple pregnancy, breech presentation, diabetes, or hypertension). The needs and experiences of women with high-risk pregnancies may be significantly different from those of the women selected for study inclusion.

The relation between geographic realities and access to specialists in referral centres dominates the debate on the safety of rural maternity care. Although community study sites were chosen because they represented a range of distance from (and conditions of access to) the nearest referral centre, we recognize that the geographic diversity of rural communities cannot be represented by 7 study sites. Thus caution must be exercised in transferring these findings to other communities.

Although Aboriginal women were included in this study, they were not specifically recruited nor was the research undertaken within any Aboriginal communities. Early in the data-gathering process, we recognized differences in experiences between Aboriginal and non-Aboriginal participants. These emanated from the strength of kinship ties in many Aboriginal communities and the consequent importance of extended family during labour, delivery, and the postpartum period. Additional differences included socially

complex factors such as the lower childbearing age⁶¹ and the higher rates of hepatitis C, HIV/AIDS, and substance use in pregnancy among Canadian Aboriginal women.^{62–64} Thus the findings of this study may not be transferable to rural Aboriginal women's birth experiences. A participatory research project on rural women's birth experiences is currently underway in 4 Aboriginal communities.⁶⁵

CONCLUSION

Removing birth from a community creates significant psychosocial consequences that are imperfectly understood but that are likely to have physiological implications for low-risk women, their babies, and their families. Further research on rural women's maternity care needs in disparate geographic environments with diverse cultural, religious, and social configurations will enhance our understanding of such needs. Additional contributions will come from investigations into specific aspects of care, such as the relation between the stress precipitated by uncertainty about the location and circumstances of birth for rural women and adverse outcomes, such as preterm labour. This research must take a comprehensive approach and must consider the loss of local maternity care from multiple disciplinary and professional perspectives. In this way, we will develop the evidence base necessary from which to make decisions regarding the best allocation of resources to support the physical and mental health of rural parturient women.

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