

Is Local Maternity Care an Optional Service in Rural Communities?

Jude Kornelsen, PhD, Stefan Grzybowski, MD, CCFP, MCISc, FCFP

Department of Family Practice, University of British Columbia, Vancouver BC

Abstract

There has been a precipitous decline in the number of rural communities across Canada providing local maternity care. The evidence suggests that the outcome for newborns may be worse as a result. There is also an emerging understanding of the significant physiological and psychosocial consequences for rural parturient women. Because they cannot plan for birth with any certainty, many of them experience labour and delivery in referral communities as a crisis event fraught with anxiety. The literature suggests that, within a regionalized perinatal system, small maternity services can offer safe care provided that an efficient mechanism for intrapartum transfer has been established. This commentary provides recommendations for sustainable maternity care that will meet the needs of women, their families, and maternity caregivers in rural communities. The recommendations stem from a rural maternity care program of research, consultations with communities, and review of relevant epidemiologic and policy literature.

Résumé

Au Canada, le nombre de communautés rurales offrant des soins de maternité locaux a connu un déclin abrupt. Les résultats disponibles laissent croire que, par conséquent, les issues néonatales pourraient en être aggravées. On comprend également de mieux en mieux les conséquences physiologiques et psychosociales notables de cette situation sur les parturientes en milieu rural. Puisque celles-ci ne peuvent planifier leur accouchement avec certitude, bon nombre d'entre elles vivent leur travail et leur accouchement (au sein des communautés où elles ont été orientées) comme un événement de crise marqué par l'anxiété. La littérature semble indiquer que, au sein d'un système périnatal régionalisé, des services de maternité de faible envergure peuvent offrir des soins adéquats, pour autant qu'un mécanisme efficace de transfert intra-partum ait été établi. Le présent commentaire offre des recommandations pour la mise sur pied de soins de maternité durables qui répondront aux besoins des femmes, de leur famille et des fournisseurs de soins de maternité en milieu rural. Ces recommandations sont issues d'un programme de recherche sur les soins de maternité en milieu rural, de consultations auprès des communautés visées, ainsi que d'une analyse de la littérature pertinente des domaines de l'épidémiologie et de la formulation de politiques.

J Obstet Gynaecol Can 2005;27(4):327-329

Key Words: Rural health, maternity care, women's health

Competing interests: None declared.

Received on October 28, 2004

Accepted on January 17, 2005

There has been a precipitous decline in the number of rural communities across Canada providing local maternity care.¹⁻³ In British Columbia alone, 13 communities have closed local services since 2000,⁴ causing residents to seek care in referral communities, many of which are significant distances from their homes. A review of the existing evidence suggests that negative health consequences for the newborn population can occur as a result of these changing patterns of access to services. Nesbitt documented increased neonatal morbidity and newborn days spent in intensive care nurseries in rural Washington State,⁵ and Larimore demonstrated increased perinatal mortality in rural Florida.⁶ We also have an emerging understanding of the significant psychosocial consequences for parturient women, many of whom experience labour and delivery in referral communities as a crisis event fraught with anxiety, because they cannot plan for birth with any certainty.⁷ This effect, not surprisingly, seems most pronounced in women with limited social and economic resources.

There is also evidence that, when adequately supported, small rural maternity services can safely serve rural parturient women.^{8,9} Studies have examined safety at the hospital level in the absence of local Caesarean section capability,¹⁰⁻¹² and alternative modes of delivering obstetric services (rural health care networks and care through health centres) to ensure that rural women have access to maternity care.¹³ On balance, the limited literature available suggests that, within a regionalized perinatal system, small maternity services can offer safe care, provided an efficient mechanism for intrapartum transfer has been established.^{2,7,8,14,15} This has given rise to a joint position paper issued by the Society of Rural Physicians of Canada, the College of Family Physicians of Canada Committee on Maternity Care, and the Society of Obstetricians and Gynaecologists of Canada, which states that, according to available research, rural hospitals should continue to offer maternity care services to low-risk populations within a regionalized risk management (transfer) system.¹⁶

Why, in the face of this evidence and sanctioned policy direction, are these changes in rural maternity health services occurring? In British Columbia, the reasons for site closures vary considerably. In some cases, the closure has been precipitated by the devolution of fiscal responsibility for health services to regional authorities, who must then make resource allocation decisions within a context of markedly limited options. From an economic perspective, these decisions may favour centralized care, especially if such care takes place outside the region. Physician recruitment and retention has been an increasing challenge for rural communities.^{17,18}

Newly graduated generalist physicians with limited maternity skills and experience may choose an urban practice rather than face the uncertainties of providing maternity care in a rural environment. Additional challenges for those who do want to provide maternity care in a rural community include a lack of system support, such as tailored CME opportunities and support from practitioners in referral and tertiary care facilities, and the lack of midwives and nurses trained in obstetrics.

It has been stated by the Society of Rural Physicians of Canada that the concern is not that anyone is actively dismantling rural health services but, rather, that we are not trying hard enough to sustain them. If indeed this is true and the effort needed to rebuild rural maternity services is not forthcoming, how important might this be for the stability of rural communities? We have already alluded to some of the possible effects on newborns and parturient women. In the research that we have carried out in the past 18 months, we have also learned how some women are responding to reduced access, given their financial and social realities.⁷ Women have told us that they have presented at local hospitals in an advanced stage of labour, have had unassisted home births, and have adjusted conception to correspond to birthing when weather may be less of an obstacle to travel. Some of these strategies may further damage the fragile fabric of rural community health services and lead to unintended effects on the community itself.¹⁹

How can we change this picture? What strategies can we employ to support sustainable care in rural communities? The recommendations outlined below arise from the program of research on rural maternity care referenced above and from a review of relevant epidemiologic and policy literature. Between September 2004 and November 2004, the recommendations were presented, in draft form, to care providers, administrators, and rural women in 8 study communities and 2 larger referral centres, within the context of focus groups and individual consultations. A total of 66 providers or administrators and 47 women participated in this process, which clarified what is needed to contribute to

the sustainability of local care in rural British Columbia communities.

The recommendations are based on the principle that maternity care health services should meet the needs of rural women and their families. To achieve this, we must do the following:

1. Establish and sustain maternity care services in rural communities, based on numbers and parity of birthing women and on the evidence for optimal population outcomes. This will need consideration of the degree of isolation, the issues of transport, the social context of the community, and the economic efficiencies.

- Acknowledge and accept the risks associated with birthing in rural communities and establish partnerships with care providers, administrators, women, families, and other community members to generate solutions.
- Support general practitioner (GP) surgeons and GP anaesthetists with policy initiatives that recognize their value and contribution to rural communities. The initiatives could include a system of training and skill maintenance.
- Provide continuous professional development for local caregivers (on-site) including interdisciplinary workshops (e.g., Advanced Life Support in Obstetrics [ALSO], Advanced Labour and Risk Management [ALARM]).
- Support new models of collaborative practice (e.g., physician–midwife).
- Ensure accessibility of prenatal care for rural women by removing barriers to collaborative, interdisciplinary prenatal care (e.g., restrictions on shared care between midwives and GPs) and by exploring innovative models of prenatal care and education (e.g., group visits), support for certification and regulation, and development of infrastructure.
- Determine the optimal use of available technology in rural settings.
- Recognize the importance of community support for parturient women during the childbearing year through *doula* training programs and by acknowledging the contribution of informal labour support. This may include funding *doula* support for all women attempting their first vaginal birth.
- Develop support for women who must leave their communities to give birth by (a) providing appropriate accommodation for women and their support people in referral communities; (b) recognizing the importance of social support for women leaving their communities (funding for multiple escorts based on needs criteria, e.g.,

nulliparity); (c) providing sustained adequate funding to Aboriginal women who must leave their communities to give birth because of pregnancy complications or lack of social services; (d) providing funding support for non-Aboriginal women who must leave their communities to give birth because of pregnancy complications or lack of local services; and (e) supporting Aboriginal liaison workers at referral hospitals.

- Develop new models of remuneration for care providers that recognize the increased responsibilities of rural practice. Models should create parity between GPs and midwives and provide differential payment (increased financial support for nulliparous and vaginal birth after Caesarean sections) or funding based on the length of attendance during active labour to supplement a basic delivery fee.
- Establish and maintain an open process of feedback regarding obstetric and neonatal outcomes at hospital, catchment, regional, and provincial levels.

We believe that the thoughtful implementation of pilot projects and programs to explore the feasibility of these recommendations will move us toward providing better care for women and families of rural Canada.

ACKNOWLEDGEMENTS

We gratefully acknowledge the time and expertise offered by rural care providers and administrators and by parturient women, their partners, and their families. We extend appreciation to project coordinators Lana Sullivan and Liz Cooper for their continued contributions to this program of research.

REFERENCES

1. Hutton-Czapski P. The state of rural healthcare. Presentation to the Standing Senate Committee on Social Affairs, Science and Technology; May 31, 2001.
2. Rourke JTB. Trends in small hospital obstetrical services in Ontario. *Can Fam Physician* 1998;44:2117–24.
3. Hutton-Czapski P. Decline of obstetrical services in northern Ontario. *Can J Rural Med* 1999;4:72–6.
4. British Columbia Reproductive Care Program 1999 Report: Biannual Hospital Perinatal Surveys and Nursing Skills & Competency Survey. Vancouver: British Columbia Reproductive Care Program; 2000.
5. Nesbitt TS, Connell FA, Hart GL, Rosenblatt RA. Access to obstetric care in rural areas: effect on birth outcomes. *Amer J Public Health* 1990;80:814–8.
6. Larimore WL, Davis A. Relationship of infant mortality to availability of care in rural Florida. *J Am Board Fam Pract* 1995;8:392–9.
7. Kornelsen JA, Grzybowski S. Safety and community: the maternity care needs of rural parturient women. Forthcoming.
8. Rosenblatt RA, Reinken J, Shoemack P. Is obstetrics safe in small hospitals? Evidence from New Zealand's regionalized perinatal system. *Lancet* 1985;2(8452):429–32.
9. Viisainen K, Gissler M, Hemminki E. Birth outcomes by level of obstetric care in Finland: a catchment area based analysis. *J Epidemiol Community Health* 1994;48:400–5.
10. Leeman I, Leeman R. Do all hospitals need cesarean delivery capability? An outcomes study of maternity care in a rural hospital without on-site cesarean capability. *J Fam Pract* 2002;51(2):129–35.
11. Grzybowski S, Cadesky A, Hogg I. Rural obstetrics: a 5-year prospective study of the outcomes of all pregnancies in a remote northern community. *CMAJ* 1991;144:987–94.
12. Cameron B, Cameron S. Outcomes in rural obstetrics, Atherton Hospital 1991–2000. *Aust J Rural Health* 2001;9(Suppl)1:S39–S42.
13. Nesbitt TS. Rural maternity care: new models of access. *Birth* 1996;23(3):161–5.
14. Peddle IJ, Brown H, Buckley J, Dixon W, Kaye J, Muise M, et al. Voluntary regionalization and associated trends in perinatal care: the Nova Scotia reproductive care program. *Am J Obstet Gynecol* 1983;145:170–6.
15. Chaska BW et al. Influence of site of obstetric care and delivery on pregnancy management and outcome. *J Am Bd Fam Pract* 1988;1(3):152–63.
16. Iglesia S, Grzybowski S, Klein MC, Gagne GP, Lalonde A. Rural obstetrics: joint position paper on rural maternity care. *Can Fam Physician* 1998;44:831–7.
17. Society of Obstetricians and Gynaecologists of Canada, Canadian College of Physicians and Surgeons, College of Family Physicians of Canada. Joint position paper: statement of maternity and newborn care in Canada. **Place pub: publisher; 2000.**
18. Chance G. Family practice obstetrics: time of opportunity. *Can Fam Pract* 1995;41:548–9.
19. Klein MC, Christilaw J, Johnston SMB. Loss of maternity care: the cascade of unforeseen dangers. *CJR* 2002;7(2):120–1.