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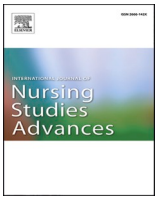

Rural perinatal nursing in Canada: A hermeneutic literature review

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ABSTRACT

Background: Nurses working in rural and remote settings are central to the delivery of perinatal services, often as the initial providers to assess and manage patients. Although policies and guidelines dictate nurses' responsibilities, little research focuses on rural perinatal nursing practice. Articulation of nurses' actual and significant involvement in rural perinatal care is needed as increasingly sustaining rural perinatal services is in jeopardy.
Objective: The study aimed to answer the question, "How are nurses understood to be involved in the delivery of rural perinatal care?"
Design: A hermeneutic literature review
Setting: Rural and remote Canada
Methods: A hermeneutic literature review was conducted through a two-phase, interpretive process of evaluation and deliberation for relevance and meaning carried out through dialogue and questioning with the selected texts and among members of the research team. This process provided deepened understanding of rural perinatal nursing practice and the contexts in which it takes place, highlighting not only what was evident in the texts, but also what was missing regarding nurses' involvement in the provision of perinatal care.
Results: Seven of 38 grey literature documents, and 25 research articles out of 800 were selected as relevant to the research question. Rural nurses' perinatal practice was found to be largely invisible in the literature. Only a few studies focused on nurses, demonstrating their autonomy and agency to benefit patients, other providers, and system functioning, despite many contextual and health system constraints. Rural nurses' experiences and insights were found rarely to be represented in perinatal policy and guidelines.
Conclusions: Rural nurses voices and practices are rarely represented in the research and grey literature relevant to rural perinatal services. Nurses' insights and experiences are essential to ensure that policies and practices in healthcare organizations foster the sustainability of rural perinatal care for rural/remote childbearing families and the retention of nurses in rural practice.
Tweetable abstract: Canadian rural perinatal nurses' practices are largely invisible in research and grey literature. Their voices and recognition of their contributions to care are needed to sustain rural maternity services.

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What is already known

- Maternity services in rural and remote Canada are increasingly at risk of closure.
- Recruiting and retaining nurses to practice in rural and remote settings has become progressively more difficult.

What this paper adds

- Research and grey literature documents relevant to rural perinatal care delivery demonstrate that nurses' contributions are largely overlooked.
- A deeper understanding of rural nurses' involvement in the provision of perinatal care is essential to sustaining rural perinatal services.
- Rural nurses' voices are needed in research and policy development regarding in order to acknowledge and respect their essential involvement and knowledge of the patients and communities they serve.

1. Background

In 2014, Northern Health, a sparsely populated health authority in British Columbia Canada, together with general practitioners, registered nurses (RNs), and the community's obstetrician, established a prenatal clinic in a rural community that improved prenatal and birthing care over the next decade (Hamill et al., 2022). Despite the RNs' critical contributions, their roles and practices were largely taken for granted and largely overlooked. In preparing to articulate the nurses' everyday practices, a preliminary exploration of the literature surprisingly identified little research on rural nurses' involvement in rural maternity care. Without such evidence, there is the potential for nurses' voices to be absent in the shaping of rural perinatal policies and organizational developments.

Although nurses are central to health services, their distinct contribution has long been understated (Ilott et al., 2010) and continues to be largely invisible in policy, planning, and decision-making (Anderson et al., 2023; Perlman et al., 2023). Even though nurses were lauded as unsung heroes during the COVID-19 pandemic, they are not yet sufficiently visible with their voices heard (Anderson et al., 2023; Rasmussen et al., 2022). Recent Canadian reports (Ben-Ahmed and Bourgeault, 2022; Tomblin Murphy et al., 2022) have confirmed that in order to be retained, especially in rural and remote areas with persistent staffing shortages, nurses need to be recognized, accorded meaningful value and respect. It is useful to begin with how the research and grey literature illuminates RNs' perinatal nursing work in rural and remote settings. Identifying the more overt and subtle features of the literature will allow a greater understanding of what might be needed to recognize, value, and respect nurses' everyday practice in rural perinatal care.

This review focuses on Canada because of the structure of the Canadian perinatal workforce and services. Unlike Australia, the United Kingdom, the United States and other countries, Canada has no regulated nurse-midwives. Although there are regulated midwives who serve as primary perinatal care providers, their presence in rural and remote Canada is, at present, minimal. RNs in rural and remote settings, often carry out multiple aspects of care that would be the purview of midwives in other jurisdictions. Additionally, as in Australia, for example, rural and remote practicing RNs are of necessity expected to function as multi-specialist generalists (Australian Government, 2003); MacLeod, 1998; MacLeod et al., 2008). This review focuses on one aspect of this role, that of rural nurse delivery of perinatal care. However, the findings may have relevance for other specialist practice knowledge and skill expected of rural RNs both in Canada and elsewhere.

In Canada, 94 % of births take place in the hospital setting (Canadian Institutes of Health Research [CIHR], 2020). RNs provide prenatal, intrapartum and postpartum care along with primary care providers; general practice physicians (GPs), midwives and obstetricians. Only 13 % of Canadian births overall are midwife-led, and by far the majority of these are in urban centres. Few midwives practice in rural and northern Canada (Canadian Association of Midwives [CAM], 2021). In Canadian rural/remote settings and in collaboration with physicians, RNs provide 24/7 care, including initial assessment, monitoring, and routine, urgent or emergency care of pregnant and labouring women, as well as communication with other health care providers, mobilization of emergency transport systems when necessary, and provision of ongoing reassurance and support to women and their families. Rural nurses often act quite independently as a physician may or may not be available on site at the hospital. At the same time, these nurses must take into consideration everything else that is going on in the hospital at any one time, because they may be only one of two or three nurses on shift (MacKinnon, 2008, 2011a; Medves and Davies, 2005).

As in other countries, such as Australia (Bradow, et al., 2021; Longman, et al., 2017), birthing services in small rural Canadian hospitals are increasingly being discontinued, precipitating what some consider a crisis in rural perinatal care. Small Canadian rural hospitals may be served by one, two or several physicians (locally-dwelling or locum), and/or nurse practitioners, and a staff of RNs and licensed or registered practical nurses (LPNs or RPNs), most of whom live in the community where the hospital is located (MacLeod et al., 2017). In most cases the unavailability of intrapartum care is attributed to a lack of specialist obstetricians, surgeons and anaesthetists, or general practitioners who can perform caesarean sections (Iglesias, et al., 2015; Kornelsen et al., 2016; Yeates, 2016). In many rural and remote communities, birthing services if available at all, are usually only offered to multiparous women with uneventful past pregnancies and births who are expected to have straight forward vaginal deliveries (Medves and Davies, 2005; Orkin and Newbery, 2014; SOGC 2019). However, even where perinatal services are not offered, labouring and birthing women inevitably seek care in these settings in unexpected or emergency situations (Kornelsen and Koepke, 2022). The ability to access specialist and tertiary care, including caesarean section and/or neonatal intensive care, requires community members to travel, often very long

distances, by car, boat, sled or plane. Such travel is profoundly affected by Canada's vast geography and sometimes harsh weather conditions. At times, travel in order to access needed care is impossible. For the purposes of this review, rural and remote Canadian communities are defined as villages, towns, and communities outside the commuting zone of urban centres (Asad et al., 2021; du Plessis et al., 2002).

While the policies, standards, and requirements for nurses in rural maternity care are readily available (e.g., British Columbia College of Nurses and Midwives [BCCNM], 2023; First Nations and Inuit Health Branch [FNIB], 2011; Perinatal Services BC [PSBC], 2011), the roles and activities are yet to be fully articulated. This hermeneutic literature review explores the involvement of nurses in delivery of rural and remote perinatal services, particularly their role during the intrapartum, as revealed in the Canadian research and grey literatures. The research question guiding the review is, 'How are nurses understood to be involved in the delivery of rural perinatal care?'

2. Method

In order to explore our open research question, we engaged in a hermeneutic literature review (Boell and Cecez-Kecmanovic, 2014). The choice for a hermeneutic review rather than a scoping review was made following a preliminary search of the international literature in English on rural perinatal nursing and finding the dearth of literature that explores the role of nurses in this context. A hermeneutic review provided the opportunity to deepen understanding, gain insight, and critically explore this little studied

Table 1
- Grey literature.

Authors	Organization	Title	Year	Purpose	Provincial / National	Document Type
	British Columbia College of Nurses and Midwives	Registered Nurses – Scope of Practice. Part 4: Restricted activities for Registered Nurses. Section 6: Restricted activities that do not require an order – Managing Labour	2023	To indicate that a registered nurse can manage labour in an institutional setting where the primary care provider is absent within the competencies and decision support tools set out by Perinatal Services BC.	British Columbia	Scope of Practice Document
	Centre for Rural Health Research	Primary Maternity Care in Rural BC – Time for Action	May 2011	To propose the creation of physician-based, midwifery-based, and collaborative team funding initiatives	British Columbia	Policy Brief 1.5 Issues in Rural Maternity Care Series
	First Nations and Inuit Health Branch	First Nations and Inuit Health Branch Clinical Practice Guidelines for Nurses in Primary Care. Chapter 12 – Obstetrics	Revised July 2011	To provide guidelines for the provision of obstetrical care where the nurse is the primary care provider in rural and remote Indigenous communities.	Canada	National Guidelines
	Perinatal Services BC	Guidelines for Registered Nurses. Core Competencies and Decision Support Tools: Management of Labour in an Institutional Setting if the Primary Care Provider is Absent	May 2011, 2nd Edition	To set out the core competencies and decision support tools for RN and Nurse Practitioner management of labour in an institutional setting where the primary care provider is absent, within the restricted activities set by the Health Professions Act (2005) and the College of Registered Nurses of British Columbia [now the British Columbia College of Nurses and Midwives].	British Columbia	Provincial Guidelines
	Public Health Agency of Canada	Family-Centred Maternity and Newborn Care: National Guidelines. Chapter 8 – Organization of Services	August 10, 2022	To present guidelines for the regionalization of maternity care services in Canada regarding the health care system, health human resources, transportation, facilities and equipment, and the evaluation of care.	Canada	National Guidelines
	Society of Obstetricians and Gynecologists of Canada	No-251-Returning Birth to Aboriginal, Rural, and Remote Communities	October 2017	To articulate support for Aboriginal women with low-risk pregnancies to birth in their home communities, and to provide recommendations for accommodating safe birth in rural and remote Aboriginal communities.	Canada	Policy Statement
Zimmer, L. V.		Seeking Common Ground: Experiences of Nurses and Midwives	2006	To explore the interprofessional experiences of interaction between hospital-based perinatal nurses and community-based midwives.	British Columbia	PhD Dissertation

phenomenon (Greenhalgh et al., 2018, 2023). The literature review was conducted to inform a qualitative, hermeneutic study on the nature of nursing practice in a rural hospital prenatal clinic and birthing centre. Conducting the review hermeneutically was consonant with the study's approach (Webber et al., 2023). The hermeneutic review pursued interpretation of both the evidence provided, as well as what is hidden or not revealed in the results of the research and foci of the grey literature (Greenhalgh et al., 2017). Our interpretation contributes to a deepened understanding of the work of rural nurses in caring for childbearing families. It goes beyond a summary or theming of the literature to an exploration of the meaning of what the literature holds (Papoutsi et al., 2021).

A hermeneutic review is based on the hermeneutic circle (Gadamer, 1975/2004) as a framework for understanding a body of literature. Each piece of literature illuminates an aspect or facet of the phenomenon of interest at the centre of the inquiry, resulting in ever increasing understanding. Likewise, each piece of literature stimulates a deeper reading and questioning of the body of literature as a whole. This can be understood as an iterative process of question-and-answer or dialogue with and between the various texts (Gadamer, 1975/2004). Dialogue and mutual understanding amongst the four researchers were also essential to the hermeneutic approach where each person's reading of the text was discussed. We entered the hermeneutic circle of this investigation with pre-understandings derived from the experiences of research team members (Smith-Battle et al., 2024) as nurses with rural/remote perinatal practice experience in Canada (A. DS., L. Z.) and Iceland (S. J.), and as researchers of rural nursing practice in Canada (M. M., L. Z., S. J.). These preunderstandings, or 'prejudices' in Gadamerian terms, assisted us in our dialogue with the texts and with one another to challenge and question our standpoints and what we know from experience alongside the perspectives of the texts' authors (Gadamer 2024/1975; Smith-Battle et al., 2024).

Boell and Cecez-Kecmanovic's (2014) framework for the process of hermeneutic review is two, interconnected circles, one representing the process of searching and acquisition of the relevant literature, and the other representing the process of analysis and interpretation of the selected texts. We drew from this framework and associated guideline to undertake a two-phase process of review and deliberation with five rounds of focused evaluation for relevance in the second phase. In the first phase, we searched for, gathered, and compared relevant grey literature, including policy documents, and evidence reviews in English. The goal in this first phase was to understand what counts as good quality, accessible perinatal care in rural and remote communities and how nurses are visible in this care.

With guidance and suggestions from rural perinatal healthcare leaders we selected and screened web pages of relevant organizations, service providers and government bodies. Initial selection and acquisition of grey literature was based on 1) visibility of nurses as team members and the nursing role in the text, 2) the aim of the document related to rural/remote perinatal care, 3) the authors/consultants included on the document, and overall quality. A total of 38 documents were collected and uploaded to DistillerSR (2023). Working in pairs, the four researchers evaluated the relevance of the literature and its value for inclusion. The criteria for relevance were: a) visibility of nurses in the text and in what ways, b) representation of a team-based approach to care, c) identification of the practitioners providing care, with d) additional comments from the reviewer (see supplementary material File 1). All responses were saved in Distiller SR. To resolve differences of opinion, the pairs of researchers discussed their reasoning and came to consensus on inclusion or exclusion. Each pair reported how they worked through these decisions. Through this process of grey literature assessment, 7 documents were included for further consideration and 31 documents were excluded. See Supplementary File 1 Grey Literature Assessment Questions and Table 1.

The second round of the first phase consisted of acquisition of research literature. In consultation with a health sciences librarian, we identified main categories of search terms and keywords from the grey literature search and a hand search of articles:

a) Key topic (pregnancy, maternity, birth, perinatal, infant, mother, obstetrics etc.)
b) Health (health service, nursing care, etc.)
c) Place and population (rural, remote, rural community, etc.)
d) Profession (nurs, nurse, nurses, nursing)

During the initial search it became clear that using terms under "Profession" as a key category would only yield a handful of articles, all of which were captured within the "Health" category. Therefore, the category "Profession" was discontinued. See Supplementary Material File 2.

In phase two, we undertook five rounds of research literature evaluation, analysis and interpretive consideration (Boell and Cecez-Kecmanovic, 2014). Researchers worked in pairs, recording their evaluations in DistillerSR, and sharing their findings with the group. Supplementary Material File 3 details the assessment questions used in the five rounds.

In round one, we assessed the 800 articles that remained after duplicates were removed. Titles and abstracts were considered for relevance: a) informs perinatal health services, b) relevant to rural or remote settings, and c) contextualized in Canada. After excluding 570, the remaining 230 articles were reviewed in round 2 and excluded if: a) the role of nurses was not sufficiently present to provide insight, b) nurses or the nursing role was absent, or c) irrelevant for some other reason. This process yielded 68 articles. In round 3, the pairs considered the following in more depth: a) research aims and approach, b) study context (e.g. time and place), and c) how the article informed (or did not) understanding of rural perinatal nursing practices. Following this round, 30 articles remained. In round 4, all four research team members appraised the 30 articles and recorded their thoughts in response to three questions: What is most meaningful? What can be learned from the article about what constitutes nursing practice? What does the article prompt us to think about? In Round 5, following team discussion about which documents meaningfully contributed to addressing the research question, the lead researchers, LZ and MM, met to consider the whole, including an additional four research articles and excluding a further nine articles. See Supplementary Material File 3 – Research Literature Assessment Questions, and Table 2. A total of 25 research articles and 7 grey literature documents form the basis of the findings for this review. Table 3 provides an overview of our process for

Table 2
- Research literature.

Authors & Authors' Designations (where indicated)	Date of Publication	Title	Purpose/Aims	Method	Participants
Banks, J. W.,	2003	Ka'nisténhsera Teiakotíhsnie's: A native community rekindles the tradition of breastfeeding	Report on a study of interventions to promote breastfeeding in the Indigenous community of Kanesatake, QU.	Narrative report of a health promotion program and observed outcomes	-An elder who educated women on the benefits and techniques of breastfeeding and supported them in successfully breastfeeding their babies Childbearing women of Kanesatake Elders, grandmothers, mothers, aunties of Kanesatake
Bassett, K.,	1996	Anthropology, clinical pathology and the electronic fetal monitor: Lessons from the heart	A cultural anthropological study of clinical pathology involving EFM use in a rural Canadian hospital	Anthropological description and analysis	Physicians and nurses in a rural Canadian village hospital
Bassett, K. L., Iyer, N., Lawyer Kazanjian, A.,	2000	Defensive medicine during hospital obstetrical care: A by-product of the technological age	Presentation of examples from obstetrical care to develop and alternative perspective to defensive medicine	Anthropological discourse analysis	Obstetrician, General Practice Physician RNs from two rural hospitals in B.C.
Burrow, S. Goldberg, L., Searle, J. Aston, M.	2018	Vulnerability, harm, and compromised ethics revealed by the experiences of queer birthing women in rural healthcare	To assess queer women's birthing experiences in rural settings through feminist analysis	Feminist Phenomenology	13 queer childbearing persons
Dooley, J., Kelly, L., St. Pierre-Hansen, N., Antone, I., Guilfoyle, J., O'Driscoll, T.,	2009	Rural and remote obstetric care close to home: Program description, evaluation and discussion of Sioux Lookout Meno Y Win Health Centre obstetrics	Description of a program to deliver a full range of obstetric care to 28 remote Aboriginal communities	Narrative description and evaluation	N/A
Grzybowski, S., Kornelsen, J., , Cooper, E.,	2007	Rural maternity care services under stress: The experiences of providers	To explore the experiences of care providers in 4 rural B.C. communities that have lost or are at risk of losing their local maternity services	Exploratory qualitative study	27 health care providers (MDs and RNs) 3 Health care administrators
Higginbottom, G. M., Academic Safipour, J., Yohani, S., O'Brien, B. Mumtaz, Z., Paton, P., Chiu, Y., Barolia, R.,	2016	An ethnographic investigation of the maternity healthcare experience of immigrants in rural and urban Alberta, Canada.	1) To generate understanding of the processes that perpetuate immigrant disadvantages in maternity care 2) To provide theoretical and practical suggestions of how health systems can promote better outcomes for immigrants	Qualitative, ethnographic	34 Immigrant Women 16 Nurses 2 Midwives 1 Social Worker 1 Dental Assistant 7 Family Physicians 2 Obstetricians
Kornelsen, J., , Grzybowski, S.	2012	Cultures of risk and their influence on birth in rural British Columbia	To answer the question, "What are the maternity care experiences of rural care providers and parturient women including their perspectives on risk?"	Qualitative exploratory	27 Healthcare Providers (MDs and RNs) 43 Women from rural communities in B.C.
Kornelsen, J., Koepke, K.,	2022	Building blocks to sustainable rural maternity care: Toward a systems approach to service planning	1) To understand barriers local care providers and administrators face in providing sustainable maternity services to total communities 2) To determine the system supports needed to allow for the provision of sustainable maternity services to childbearing families on northern Vancouver Island	Qualitative	58 Healthcare Providers (RNs, MDs, and Midwives)

(*continued on next page*)

Table 2 (*continued*)

Authors & Authors' Designations (where indicated)	Date of Publication	Title	Purpose/Aims	Method	Participants
Kornelsen, J., Webster, G., Lin, S., Rep. Cairncross, N. Lindstrom, E., . Grzybowski, S.,	2023	Feasibility issues impacting optimal levels of maternity care in rural communities: Implementing the Rural Birth Index in British Columbia	To explore the feasibility of applying recommended maternity service delivery levels to rural communities in BC from the perspectives of Health care providers working in communities with a different level of service from that suggested by the Rural Birth Index	Qualitative portion of a mixed-methods study	14 Healthcare Providers (MDs, Obstetricians, RNs, and Midwives)
Lawford, K. M., Bourgeault, I. L., Giles, A. R.,	2019	"This policy sucks and it's stupid": Mapping maternity care for First Nations women on reserves in Manitoba, Canada	To provide a descriptive map of the evacuation policy for First Nations women in Manitoba Questions: How does the evacuation policy work? When and how are women evacuated from their communities? Where do women stay after they are evacuated? Who provides maternity care services to women before, during and after evacuation? When and How do women and their babies return to their communities after giving birth?	Institutional Ethnography	18 First Nations Women 18 Politicians, Policy Makers, and/or Government Officials (federal, provincial, municipal) 12 Healthcare Providers on reserve and in urban referral centres (unidentified by profession)
MacKinnon, K.,	2008	Labouring to nurse: The work of rural nurses who provide maternity care	To explore rural nurses' experiences in provision of maternity care in their communities To identify possibilities for change in health policy, nursing education and practice to support nurses' work	Institutional Ethnography	48 RNs working in 6 rural communities
MacKinnon, K.,	2010	Learning maternity: The experiences of rural nurses	To explore how rural nurses learn to provide maternity care and the social organization of their learning experiences	Institutional Ethnography	58 Rural Hospital RNs 30 Rural Public Health Nurses 10 Healthcare Providers (Physicians, Midwives, LPNs, and a Physiotherapist) 10 Frontline Services Managers
MacKinnon, K.,	2011a	Rural nurses' safeguarding work: Reembodying patient safety	To further explore the work of rural RNs with the focus on their experiences of providing maternity care	Institutional Ethnography	30 RNs working in 4 rural acute care hospitals
MacKinnon, K.,	2011b	We cannot staff for 'what ifs': The social organization of rural nurses' safeguarding work	To explore how nurses' work is organized for them to accomplish the goal of keeping their patients safe in light of safety standards and staffing	Institutional Ethnography	RNs working in five acute care hospitals in rural British Columbia
MacLeod, M., Place, J.,	2015	Rural-focused nursing education: A summative evaluation of rural nurses' experiences of the Rural Nursing Certificate Program	To present the findings of an evaluation of the UNBC Rural Nursing Certificate Program (RNCP)	Qualitative	9 RN RNCP Graduates 5 Nurse Managers 10 RNs enrolled in single RNCP courses
Martens, P. J.,	2000	Does breastfeeding education affect nursing staff beliefs, exclusive breastfeeding rates, and Baby-Friendly Hospital Initiative compliance: The	To evaluate the effectiveness of a small rural Canadian hospital's breastfeeding education intervention strategy	Comparison Study between Pine Falls Hospital, MB (intervention site) and Arborg Hospital, MB (control site)	Pine Falls: 20 RNs 41 charts audited Arborg: 18 RNs 34 charts audited

(*continued on next page*)

Table 2 (*continued*)

Authors & Authors' Designations (where indicated)	Date of Publication	Title	Purpose/Aims	Method	Participants
		experience of a small, rural Canadian hospital			
Medves, J. M., Davies, B. L.,	2005	Sustaining rural maternity care – Don't forget the RNs	1) To conduct a systematic review of the rural maternal-child nursing literature 2) To conduct an institutional ethnography in a rural Ontario hospital providing low-risk maternity care and identify enablers and barriers in provision of this care	Systematic Literature Review Institutional Ethnography	25 rural Ontario hospitals surveyed. Focus group at one hospital with 5 RNs 2 Physicians 2 Administrators
Miewald, C., Klein, M. C., Ulrich, C., Butcher, D., Eftekhary, S., Rosinski, J., Procyk, A.,	2011	"You don't know what you've got till it's gone": The role of maternity care in community sustainability	To explore the relation between maternity care services and rural community sustainability	Qualitative Ethnographic	MDs, RNs, Midwives Other providers of maternity support services (e.g., Doulas, Childbirth Educators, Breastfeeding Counsellors, Outreach Workers) Hospital Administrators Health Officers Local Business Leaders Economic Development Officials Local Elected Officials (e.g., mayor, city and band councillors) Social Workers Pregnant Women Women who had given birth within the past 12 months
Miller, K. J., Couchie, D., Ehman, W., Graves, L., Grzybowski, S., Medves, J.,	2012	SOGC Joint Position Paper No.282 Rural Maternity Care	To provide an overview of current information on issues in maternity care for rural populations	Literature Review	Medline was searched for articles published in English from 1995 to 2012 about rural maternity care. Relevant publications and position papers from appropriate organizations were also reviewed.
Munro, S., Kornelsen, J., Grzybowski, S.,	2013	Models of maternity care in rural environments: Barriers and attributes of interprofessional collaboration with midwives	To explore the barriers and facilitators of interprofessional models of maternity care between physicians, nurses, and midwives in rural British Columbia, Canada, and the changes that need to occur to facilitate such models	Qualitative Exploratory	7 Midwives 27 MDs 11 RNs 7 PHNs 5 Birthing Women 5 Community-based Providers (Paramedics, Lactation Consultants, Prenatal Educators, Doulas) 5 Administrators 6 Decision Makers (regional health authority officials, representative of professional colleges)
O'Mahony, J., Clark, N.,	2018	Immigrant women and mental health care: Findings from an environmental scan	To increase understanding of immigrant women's perinatal mental health care services within the interior of a western Canadian province	Environmental Scan	10 Key Informants 110 Providers surveyed (including PHNs and mental health professionals)
Orkin, A., Newbery, S.,	2014	Marathon maternity oral history project: Exploring rural birthing through narrative methods	To explore how birthing and maternity care are understood and valued in a rural community	Narrative - Oral History Interviews	11 Participants (RNs, MDs, mothers, grandmothers, community leaders)

Table 3
- Process Of Hermeneutically Reviewing The Literature Drawn From Boell & Cecez-Kecmanovic (2014).

Phase One	**Rounds**	**Yield**
Search, acquisition and selection of grey literature	1. Acquisition and selection of grey literature based on potential relevance	38
	2. Grey literature reviewed by team member pairs for:	7
Search and acquisition of research literature	a) visibility of nurses in the text and in what ways	
	a) representation of a team-based approach to care	
	a) identification of the practitioners providing care	
	3. Acquisition of research literature based on key search terms (after duplicates removed)	800
Phase Two	**Rounds**	**Number Reviewed**
Evaluation, analysis and interpretation	1. Consideration by team member pairs of research article titles and abstracts:	800
	a) informs perinatal health services	
	a) relevant to rural or remote settings	
	a) contextualized in Canada	
	2. Reviewed by team member pairs for presence of nurses and nursing role – research articles excluded if:	230
	a) the role of nurses was not sufficiently present to provide insight	
	a) nurses or the nursing role was absent	
	a) irrelevant for some other reason	
	3. Consideration by team member pairs of research article contents in more depth:	68
	a) research aims and approach	
	a) study context (e.g. time and place)	
	a) how the article informed (or did not) understanding of rural perinatal nursing practices	
	4. Appraisal of remaining research articles by all team members	30
	a) What is most meaningful?	
	a) What can be learned from the article about what constitutes nursing practice?	
	a) What does the article prompt us to think about?	
	5. Consideration of the whole (grey literature and research articles) by the two lead researchers	7 + 25

hermeneutically reviewing the literature.

3. Findings

Three recurring lines of sight illuminated facets of the involvement of nurses in rural perinatal care in Canada. One line of sight revealed who it is that nurses care for; another provided an understanding of the crisis in rural birthing services; and a third elucidated the ways in which rural nurses, along with other healthcare providers, balance risk, stress, and woman-centred birthing care.

3.1. Who rural nurses care for, where and how

Most nurses working in rural settings, with the exception of agency nurses, both live and work in their small communities. This means that they know of or have relationships with the community members for whom they care (MacKinnon, 2008, 2011a; MacLeod et al., 2017). Orkin and Newbery (2014) interviewed mothers, grandmothers, nurses, physicians, and community leaders in a small northern Ontario town regarding their birth experiences. Nurses noted that knowledge of the patient as a community member made care both better for the patient and sometimes more emotionally difficult for the nurse. In one-on-one care during labour, trust is essential. Knowing the patient assisted the nurse to be attuned to the individual and tailor care to their needs, even to 'think outside the box'. Patients' narratives described nurses as always there, calming and good labour coaches; "There's this personal aspect beyond being a patient" and "Someone knows your life story" (Orkin and Newbery, 2014, p. e89).

Having a relationship with the patient that extends beyond hospital walls can heighten nurses' sense of responsibility and create increased anxiety. Deliveries may be few and far between in small rural hospitals. This means that nurses' knowledge and skills for perinatal and birthing care may be unpracticed for long periods of time (MacLeod, 1998; Orkin and Newbery, 2014). In such situations, communicating knowledge of the patient and seeking support from other nurses and physicians who are willing to share their knowledge of obstetrical care contributes to nurses' confidence, ongoing learning, and improved quality of care for patients (Orkin and Newbery, 2014).

Nurses working in Indigenous communities can provide responsive, respectful care when they come to know the community and approach healthcare with openness and humility regarding the strengths and traditions of community members. An example is presented by Banks (2003) in describing a program to help women of the community of Kanesatake, Quebec to return to the tradition of breastfeeding. In this case, the nurses listened to the mothers, grandmothers and aunties of the community regarding the history of this lost tradition, what was desired, and the best means of facilitating the program. Drawing on this strong matriarchal thread, nurses supported the energy and passion of a respected community champion to engage with and assist new mothers in breastfeeding. Instead of offering the program themselves, the nurses recognized that a person who was at one with the language, culture and community could do work that they could not do successfully as outsiders. Nurses can sometimes provide the best care by stepping aside to allow the strengths and capacity of community members to carry out health promoting endeavours.

Pregnancy and postpartum care to families in remote Indigenous communities may be delivered by nurses with periodic visits from physicians or the use of telehealth (Dooley et al., 2009; Lawford et al., 2019). Expectant women are almost always required to evacuate to larger centres, where they may wait in a hotel or rooming house for two to four weeks, without family support, to give birth in the hospital. This presents an obvious and often socially harmful inequity in terms of healthcare for Indigenous women and families (Lawford et al., 2019). Childbirth evacuation policies create a very real tension for Indigenous women, their families, and the nurses providing care (FNIHB, 2011). As employees of Health Canada, outpost nurses are responsible for ensuring that pregnant women are transferred out of their home communities to larger centres at around 38 weeks gestation. Although responsible for the health of the community, these nurses must enforce a policy rooted in a colonial, medically defined and risk averse understanding of birth that clearly creates an unhealthy context for welcoming new life into the community (Lawford et al., 2019).

In cases where perinatal care may be offered closer to home, a regional healthcare facility may make it possible for women to travel shorter distances for birth. An example is presented by Dooley et al. (2009) where a rural hospital in Sioux Lookout, Ontario is able to serve 28 fly-in communities. This nurse-coordinated program relies on a collaborative team of general practitioners and nurses with obstetrical training at the hospital in Sioux Lookout, physicians, an ultrasonographer who travel to remote communities periodically, and advanced practice nurses within the communities. Nevertheless, women from these remote communities still must travel away from the embrace of family and community traditions to give birth in unfamiliar and medicalized spaces (PSBC, 2011).

Nurses working in rural settings care for diverse populations including queer women (Burrow et al., 2018) and immigrant women from many ethnic backgrounds (Higginbottom et al., 2016; O'Mahony and Clark, 2018). Not all reports by childbearing women regarding nurses and their care are positive; however, most are. Nurses are sometimes inhibited from establishing trusting relationships and providing optimum care by habituation to a community ethos unaccepting of gender diverse individuals (Burrow et al., 2018) and/or the systemic contexts, including sociopolitical circumstances, of their employment (FNIHB, 2011; Higginbottom et al., 2016; O'Mahony and Clark, 2018).

Higginbottom et al. (2016) drew data in both urban and rural settings from 34 immigrant women, 23 social service providers, and 29 healthcare providers of whom nurses were the largest group. Immigrant women spoke of communication and language barriers with nurses, lack of interest in or respect for cultural expectations and practices related to bathing, food and assistance with care for the newborn. What seems evident as a subtext in this article is that nurses deliver care within a system that does not allow them to provide individualized care, take the needed time with clients, and seek solutions to communication problems that many immigrant women desired and expected. The authors portray a situation in which nurses have little voice or free agency in order to influence the structural constraints that inhibit optimal and equitable care to immigrant childbearing women.

In O'Mahoney and Clark's (2018) survey, rural public health nurses identified language barriers and their own inabilities as challenges in delivering culturally sensitive care to immigrant women experiencing postnatal depression and isolation. The nurses recognized where immigrant women were 'falling through the cracks' and used their ingenuity to remediate this, drawing on their knowledge of each community's services and strengths to facilitate peer support programs, virtual clinics and translation services. They engaged in intersectoral collaboration with frontline service agencies and community groups. Although constrained by gaps in care in rural settings, including limited resources, these nurses mobilized diverse means to meet the needs of a marginalized rural population.

The authors of the literature cited here are from various professional and academic backgrounds. Orkin and Newberry (2014) are both physicians; however, their narrative approach allowed for the voices and experiences of nurses in a rural community, and patients describing their experiences of nursing care, to be heard. Banks (2003), a nurse, demonstrates cultural humility in the account of the breastfeeding program of Kanesatake. Lawford, Bourgeault and Giles (2019) provide a sociological view of nurses as actors in a government-imposed system of care in remote Indigenous communities. This is underpinned by the FNIB guidelines for nurses working in such communities, which draw primarily on medical evidence. Burrow et al. (2018), Higgenbottom et al. (2016), and O'Mahoney and Clark (2018), all researched and wrote from the discipline of Nursing. These authors, along with Banks (2003), address the context in which nurses practice and elucidate ways in which social and systemic influences shape the delivery of rural perinatal nursing care.

3.2. *Rural maternity care crisis*

Much of the literature reviewed describes a crisis which has resulted in the closure or potential closure of birthing services for women in rural communities. These articles were authored almost exclusively by physicians and health service researchers with an obstetrical focus on the intrapartum. With two exceptions (Miewald et al., 2011; Miller et al., 2012), nurses, as authors, are absent, and in the case of these two publications, nurses are not first authors. This author bias is also reflected in the grey literature regarding the status of and recommendations for improvement in rural perinatal care in Canada where physicians and non-nurse researchers dominate, midwives are occasional contributors, and nurses rarely cited as authors.

Increasingly, closure of birthing services means that all rural/remote-dwelling childbearing women must travel to larger centres to give birth. Highlighted factors contributing to this crisis include the following: lack of caesarean section capability due to absence of surgical and anesthetic specialists; lack of nursing staff educated to provide intrapartum and/or surgical care and support; geographical and meteorological barriers contributing to lengthy, dangerous and even impossible emergency transport; infrequent practice, leading to decreased confidence and quality of care from those healthcare providers who do have the skills and knowledge to provide intrapartum care; and inability to recruit and retain physicians and nurses, particularly those with labour and delivery experience, in rural/remote sites (Grzybowski et al., 2007; Kornelsen et al., 2023; Miller et al., 2012). Nurses in this literature figure primarily as adjuncts to obstetrical management and mitigation of risk, rather than those who provide woman- and family-centred birthing care.

This crisis inhibiting families from giving birth in their home communities potentially has far reaching consequences for the sustainability of those communities. Miewald et al. (2011) interviewed healthcare providers, healthcare administrators, maternity support providers, municipal business leaders and elected officials in four rural communities regarding the relationship between maternity care services and community sustainability. The consequences of birthing service closure were seen to impact the work satisfaction and retention of healthcare providers, particularly physicians, and the well-being of community members. Community members wanted healthcare that addressed the full life continuum. Being born in the community was symbolic of truly belonging to the community. This was echoed by Lawford, Bourgeault, and Giles (2019) in that Indigenous ceremonies surrounding birth were being lost as a consequence of women being evacuated for birth. Some participants posited that community populations would become transient and families would not choose to put down roots when the birth of their children took place away from home. Details of rural nursing practice were largely absent and nurses' roles were tacitly assumed to be part of healthcare delivery; however, one nurse participant made a telling observation. Where women were sent elsewhere to birth and then returned to their home communities in the early postpartum, sometimes within hours of giving birth, nurses were left to "pick up the pieces … we weren't sure what they were told there and what we needed to tell [them]" (Miewald et al., 2011, p. 9). For these women, the childbirth experience was fraught with "disjointed and disconnected" care (Miewald et al., 2011, p. 9). Nurses were tasked with re-establishing a sense of home and personalized care.

Throughout the literature related to the rural maternity care crisis, the importance of nurses' contribution to services is largely invisible or taken for granted with the focus on primary care providers (physicians and midwives). This bias in focus, perhaps due to a bias in authorship, reflects the needs of primary care providers and along with this, an assumption that ill-prepared nurses may contribute to a lack of required support for medical care. What we do see reported is that few nurses in rural settings are comfortable with and/or confident in their skills and knowledge to provide birthing care (Grzybowski et al., 2007; Kornelsen et al., 2023; MacKinnon, 2008, 2011a, 2011b). Those who are knowledgeable, may be out of practice due to low birth volumes and are therefore lacking in confidence. In addition, some rural nurses do not have an interest or desire to provide perinatal care and therefore are not motivated to increase their knowledge and skill in this area (Kornelsen et al., 2023). Nevertheless, MacKinnon (2008) and Medves and Davies (2005) reported that many rural nurses do see birthing services as an important aspect of their practice and were desirous of education to develop knowledge and skill in this area. Nurses who received even short, condensed mentorship or educational opportunites found a benefit to their practice and were confident that they provided better quality patient care (MacLeod and Place, 2015; Martens, 2000). However, where nurses are interested and seek continuing education for perinatal care, they may not be supported financially or with time off for practica in high volume settings due to staffing shortages (Grzybowski et al., 2007; MacKinnon, 2008, 2010).

An exception to this elision of the contribution of nurses is evident in Miller et al. (2012), the SOGC position paper on rural maternity care, where it is stated that, "Registered nurses are essential to the provision of high-quality rural maternity care throughout pregnancy, birth, and the postpartum period. Maternity nursing skills should be recognized as a fundamental part of generalist rural nursing skills" (p. 984). The authors point out that, "In low-volume units, a nurse may be the only person in the hospital with a labouring woman who has the expertise to evaluate normal progression with physicians and other nurses on call" (p. 986).

3.3. *Balancing risk, stress and tension*

A philosophy of birth which sees it as dangerous and risk-prone exacerbates the perception of a rural maternity care crisis. Although the challenges are very real, the fear of the 'what if' has a profound impact on healthcare providers, particularly in the form of clinical risks where women deliver in their home communities. For this reason, where lack of surgical services or extreme isolation of the community are aspects of the context, primary care providers advise women to travel to give birth, despite the social risks inherent in giving birth away from family and support systems. In reaction to this, there is a persistent demand on the part of communities for local perinatal services (Kornelsen and Grzybowski, 2012). Childbirth as close to home as possible is a principle supported throughout the literature (e.g. Lawford et al., 2019; Miller et al., 2012; Public Health Agency of Canada [PHAC], 2022; Society of Obstetricians and Gynecologists of Canada [SOGC], 2017). The Public Health Agency of Canada (2022) identifies it as a fundamental part of family-centred care that is "…organized in such a way that it responds to the physical, emotional, psychosocial, and spiritual needs of the woman, the newborn, and the family" (p. 8–1).

Providers who must choose whether or not to offer birthing services are caught in a stress-inducing dilemma predicated on the potential and unpredictable dangers of childbirth without surgical services. A study by Grzybowski, et al. (2007) illustrates this dilemma. Participants observed that by not offering intrapartum care, skills diminish through lack of use. Nevertheless, births will still happen requiring safe and competent attendance. Should maternal or newborn morbidity or mortality occur, physicians feared litigation, loss of reputation and licensing, along with loss of the trust and respect of the community. Twenty-seven physicians and nurses from four rural British Columbia communities were interviewed for this study. Unfortunately, the voices of nurses were not distinguished from those of physicians, perpetuating an assumption that nurses, as part of the medical system, share the view of childbirth as risk-prone. Evidence from another study highlights the anxiety provoked for nurses in small local hospitals that lack of preparedness for birth: "…it is scarier than trauma (cases)…" (Kornelsen and Koepke, 2022, p. 65). MacKinnon (2011a, 2012) focused on nurses' safeguarding work in assessment, vigilance, preparation, and anticipation of problems when providing maternity care. At times this work involved prompting a primary care provider's awareness and timely action for patient safety.

The Rural Birth Index (RBI), a mathematical model for recommending an appropriate level of maternity care in any given rural community was created to assess the feasibility of locally offered intrapartum services (Grzybowski et al., 2009; Kornelsen et al., 2023). In keeping with a risk-based understanding of childbirth, this model draws on socioeconomic vulnerabilities and contextual

deficits (proximity to the nearest caesarean section services) rather than population and contextual strengths. The factors contributing to inability to provide the RBI-recommended level of care in 10 rural British Columbia communities were explored by Kornelsen et al. (2023) through qualitative interviews and focus groups with a sample of community healthcare providers and administrators ($n = 14$). Inhibiting factors were the previously stated elements precipitating the maternity care crisis in rural communities. The primary solution suggested by the authors of this study was a model of compensation for physicians that accounts for 24/7 on-call and the challenging stresses of rural perinatal care. Significantly, specialty perinatal education for nurses, or other means of strengthening nurses' birthing care, were not identified as a part of the solution.

In considering the context of birthing care within small rural hospitals, two articles by Bassett (1996) and Bassett, et al. (2000) explored what constitutes risk based on statistically determined parameters for length of labour and the use of technology to monitor fetal well-being. These medical anthropological studies offer insight into the ways in which these means of determining risk shape both nursing and physician practice.

Basset, et al. (2000) reveal how temporality is a factor in determining risk. A nurse is at the bedside throughout a labour and comes to know something of the individual woman and how her body is moving through the process of parturition. For the nurse, then, the temporality of labour is driven by the woman. The physician is present only periodically and therefore does not have the same ways of knowing the patient as the nurse. Physicians may be much more inclined to make judgments based on statistically determined guidelines indicating parameters for the length of labour and thus when intervention should be undertaken. This creates tension for the nurse who is bound to carry out physician orders, perhaps even in situations where interventions are thought by the nurse to be unnecessary. Basset (1996) described a labour where the physician is concerned about the perceived risk due to a patient's lengthy second (pushing) stage and considered intervening. While the physician was in the corridor discussing his concerns with a colleague, the nurse, trusting in the patient's process, assisted her to the crowning stage. The physician was then called for the immanent, spontaneous, vaginal birth and a healthy newborn was the result.

Likewise, the reliance on use of electronic fetal monitoring (EFM) ascribes an authority to the technology and may be used by care providers as the basis for determining fetal risk. Although judicious use of EFM is prudent, it can result in a privileging of the fetus over the well-being of the mother, such as the perceived need for caesarean section or other obstetrical intervention whether or not the need is actual (Basset, et al., 2000). In rural settings without surgical and specialist services, an unfavourable EFM strip, despite its potential for inaccuracy, can be a cause for great stress to care providers and families. For rural nurses who are usually the first to assess a pregnant or labouring patient and who may not be comfortable with their level of knowledge and experience in EFM interpretation, determination of risk and action on this basis presents an enormous responsibility and potential source of stress.

As is evident, the crisis in rural perinatal care creates a number of tensions and conflicts in care delivery. In addition, among rural care providers, different philosophies of childbirth, overlapping scopes of practice, struggles for authority, and professional territoriality represent areas of tension that can exist among nurses, physicians and midwives who provide the perinatal care (Centre for Rural Health Research [CRHR], 2011; Munro et al., 2013; Zimmer, 2006). Solutions to these tensions are offered in the literature through various professional practice configurations and interprofessional relational practices. Where local intrapartum services for Canadian rural/remote families are not universally available, a solution of rural regional care networks which mitigates this lack of availability is proposed (Iglesias et al., 2015; Kornelsen et al., 2016; Kornelsen and Koepke, 2022; PHAC, 2022). These networks could provide obstetrical consultation and support via video links between primary care providers and specialists (PHAC, 2022) as well as the transport of women and families to regional facilities with caesarean section capability closer to their home communities, eliminating the need to travel to care in distant urban centres unless necessary (Iglesias et al., 2015; Kornelsen et al., 2016, 2023; Kornelsen and Koepke, 2022; PHAC, 2022). Such networks have been established in a number of Canadian provinces. Nevertheless, travel to services closer to home is still contingent on geography, weather, and available transportation. Once again, the necessity for nurses able to provide birthing care and surgical support is assumed but not elaborated in this literature with one exception (Kornelsen and Koepke, 2022). As noted by nurses in the study by Kornelsen and Koepke (2022), even travelling for shorter distances provided by these networks may disadvantage vulnerable families with little social support – e.g. for childcare. Assessment of psychosocial as well a clinical risk is always in the balance when making decisions for local birth. As community members, rural nurses are often most aware of the psychosocial consequences to families in their care.

Collaboration is an important aspect of regional care networks and perhaps even more so for the care providers within any given facility. The literature reviewed presents many hints and examples of the importance of teamwork among healthcare providers and a few authors present accounts of trust and shared decision-making between nurses and physicians (Bassett, 1996; Medves & Davies, 2015; Orkin and Newbery, 2014). Also shown is the support between nurses where some, more knowledgeable and experienced, are able to mentor others in care of perinatal patients (Medves & Davies, 2015; Orkin and Newberry, 2014). However, in many articles, the emphasis is on physicians, specialists, and midwives with the presence and contributions of nurses not described and taken-for-granted. When providing care during labour and childbirth, practice standards require one-to-one nursing care. The rural nurse admits the labouring patient, conducts a thorough assessment and makes immediate and ongoing judgments for the health and safety of the woman and her fetus. Based on ongoing assessment (fetal auscultation, cervical dilation, abdominal palpation, contraction intensity and effectiveness, the women's behaviour and psychological state) the nurse takes on an "embodied authority" for the labouring woman (Bassett, 1996, p.287). This is a different authority from that of the physician, who may only attend the labouring woman periodically during labour and who depends on reports of the nurse's assessment for management of the labour and birth. These essential contributions and the presence of nurses in providing rural perinatal care is ignored by all but a few authors.

Where midwives are present to manage perinatal patients, the nurse assists as needed in the same way as when assisting the physician. However, given the absence of midwives throughout most of rural Canada, nurses do the work of midwives, occasionally even managing delivery when the primary care provider is not available (MacKinnon, 2011a). Added to this, as known and reputed

community members, the burden of responsibility toward patients and families is much greater for rural nurses than might be experienced by nurses in an urban setting where connections are time limited to the hospital stay and there is out-of-hospital anonymity.

Collaboration is not always without tension, and the assumed hierarchy may be transgressed where a nurse is more experienced than a junior physician. MacKinnon (2011a) described physician resentment when nurses advocated for safety of patients in aspects of their care and acted as a safety check with less experienced physicians through coaching and ensuring that decision support tools were followed. In some communities where midwives practice homebirth, both nurses and physicians expressed concern that they would need to take responsibility in high-risk situations precipitated by homebirth without the necessary hospital services available (Munro et al., 2013). Where rural midwives had hospital privileges, nurses cited lack of communication and confusion regarding roles and responsibilities (Munro et al., 2013; Zimmer, 2006). Additionally, nurses sometimes believed that intervention was needed sooner than midwives, yet felt powerless to advocate for this (Munro et al., 2013; Zimmer, 2006).

4. Discussion

This hermeneutic review explored how nurses are understood to be involved in rural perinatal care. We found that nurses' involvement is occasionally acknowledged but more frequently overlooked in the literature, even though nurses are essential to services needed for rural women to birth in their home communities, or when required, to be transferred to larger centres. Nurses are continuously present. They take significant actions to provide the best possible care for rural and remote childbearing families; they work within the facilitators and constraints of their roles as employees and the systemic and environmental employment context. Few articles document the actual hands-on aspects of rural perinatal nursing practice. Where the work of nurses is the focus, greater emphasis is placed on the coordinating, relational, and anticipatory work of nurses (MacKinnon, 2008, 2010, 2011a). Throughout the literature, the ways in which nurses keep the delivery of care running within their facility contexts, all while attending to the birthing needs of individuals patients, though largely invisible, yet is also in plain sight between the lines.

As employees of hospitals and other healthcare delivery agencies, nurses are both knowledgeable of the systems in which they are embedded and adept at keeping those systems running smoothly. As in other countries and areas of nursing, this essential interconnection of direct care while ensuring the ongoing operation of the hospital or agency is largely overlooked (Allen, 2015; Kuijper et al. 2022; McWilliam and Wong, 1994). The dual functioning on the part of nurses contributes to both the quality and effectiveness of care.

Nurses' woman- and family-centred way of caring happens, in part, because many rural and remote nurses are members of the communities they serve. Their proximity and familiarity with community members heightens professional commitment and a sense of responsibility for the birthing experiences of the families in their care. Context shapes the perinatal work of rural nurses in myriad ways, including the institutional and community context, the professional and educational context, and the interprofessional context. Rural perinatal practice cannot be sustained without greater acknowledgement of nurses' contributions to woman and family-centred care.

4.1. Institutional and community context

The actions that rural nurses take for perinatal care within healthcare facilities and community must be inferred from much of the literature reviewed. Some authors help to illuminate what is hinted at For example, McWilliam and Wong (1994) echo MacKinnon's (2008, 2010, 2011a, 2011b) account of how rural nurses advocate for patients, invisibly anticipate and troubleshoot difficult or inadequate institutional situations, settle conflictual relationships, coordinate the work of others, and take leadership within the context to provide the safest possible care. Buckley (2015) describes the distress caused to nurses and communities when birthing services are closed. Yet, nurses bear the burden of responsibility when women arrive in labour or for other perinatal care, even where the hospital or health centre has not accommodated for it. Nurses face the conundrum of a duty and desire to care for community members, neighbours and friends, when adequate resources and expertise may not be available, resulting in stress, guilt and even shame for the nurse unable to deliver the care that is needed. This undue emotional and moral distress and a lack of built-in support in such situations has been identified as the cause of many nurses leaving practice, including rural practice (Stewart et al., 2011, 2020). Ben-Ahmed and Bourgeault (2022) and Tomblin-Murphy et al. (2022) site healthy, supportive work environments and embedded mental health support as essential to retaining the nursing workforce.

4.2. Professional practice context

Rural nurses work as multi-specialist generalists (MacLeod, 1998; MacLeod et al., 2008), so understanding their actions in providing perinatal care must be considered in that light. Being a multi-specialist generalist means that nurses are expected to provide specialized nursing care in multiple areas, only one of which is maternity nursing. The breadth of knowledge and skill expected of rural nurses, then, is vast and highly dependent on gaining specialty education, experience and the support and mentorship of knowledgeable colleagues. Professional practice guidelines and competencies published by the British Columbia College of Nurses and Midwives (BCCNM, 2023), the Province of British Columbia (PSBC, 2011), and the national position paper on rural maternity care (Miller et al., 2012), for example, require that nurses responsible for perinatal patients have the knowledge to assess, intervene, and act, within the RN's scope of practice, for safe, quality care. Significantly, this includes managing birth when the primary care provider is not available.

Employers and professional bodies have advanced little policy and monetary support to provide rural nurses with specialty

education for rural perinatal care. Opportunities for nurses to access education and mentorship to develop perinatal nursing competence are often unavailable due to employer financial and staffing constraints as well as the dearth of coworkers able to mentor in this area of practice (MacKinnon, 2010; 2012). Some provincial professional and regulatory nursing bodies assume that nurses will take the agency to manage birthing care, at least initially, with or without the presence of a primary care provider. Others do not allow for this within the scope of RN practice without an order and supervision from the primary care provider (Canadian Institute for Health Information [CIHI], 2022). In both cases there is an assumption that the RN will have the knowledge and skill to provide the care that is needed.

MacLeod and Place (2015) described how rural nurses and their managers valued the specialty maternity education provided in a rural nursing certificate program with some saying that even more education for managing emergency intrapartum situations was needed. Nevertheless, having a modicum of additional perinatal knowledge beyond what is provided by basic nursing programs, accompanied by practica in a high-volume centres to gain experience, increased nurses' confidence for providing birthing care (Macleod and Place, 2015). Rural nurses can enhance their perinatal practice when employers adequately recognize, fund and staff for the ongoing educational needs of rural multi-specialist RNs.

In addition to education and mentorship, adequate staffing is an important factor noted as affecting the work of rural nurses that is dependent on resources provided by employers and the healthcare system. In their report, "Sustaining Nursing in Canada", Ben-Ahmed and Bourgeault (2022), as well as Durant (2023) in an article on addressing the nursing shortage, strongly advocate, among other strategies, for legislated nurse-patient ratios, adequate on-call staffing, ongoing education, leadership training, mentorship of new nurses, and additional financial and experiential supports for nurses working in underserved (e.g. rural) communities.

4.3. Interprofessional context

Rural RNs work most closely with nursing and physician colleagues, and more rarely with midwives, to deliver perinatal care. Based on the guidelines, policies, and risk assessment standards, childbirth is couched in biomedical philosophies and discourse. As Bassett (1996) and Bassett et al. (2000) have illustrated, these discourses are obstetrically related, rather than woman and birthing focused. Kelly et al. (2023) demonstrate how nurses' labour and delivery work is shaped by medicolegal texts and authority in terms of reliance on technological interpretation of labour and the documentation that is prescribed in records of women's labours and births. What these authors fail to show is the deeply relational aspects of nurses' birthing care. Relationship with the community and individual women and families is highly important to rural nurses as well as to physicians (Grzybowski et al., 2007) or midwives (Crowther and Smythe, 2016) who are embedded in and committed to the communities they serve.

The role of nurses in accommodating and finessing the interprofessional tensions that occasionally exist in rural settings is not evident in the Canadian rural perinatal literature even though it is noted in urban practice settings. Kelly et al. (2023) affirm that as well as navigating interprofessional tensions, nurses are challenged in communicating the holistic and woman-centred aspects of their work which offer wisdom for the individual case that statistically averaged and medically oriented guidelines cannot.

Occasional role confusion and conflict between nurses and midwives in rural settings was mentioned in the literature. Nurses' accustomed reliance on institutional and medical guidelines and risk assessment sometimes clashed with midwives' ways of caring for their clients. Likewise, the overlapping work of midwives and nurses in offering birthing care contributed to role confusion and territoriality. Some authors (Munro et al., 2013; MacDonald et al., 2015; Zimmer, 2006) have given accounts of distrust and lack of professionalism between midwives and nurses. These authors also pointed to positive working relationships that provide hope for interprofessional understanding and collaboration. Given that midwives, as perinatal primary care providers, are increasingly offering support for rural families, opportunities for interprofessional dialogue, learning and participation in patient care are on the rise.

4.4. Addressing the need for sustainable rural perinatal nursing

As is evident from the Canadian rural perinatal care literature, despite that fact that nurses' practice is largely unacknowledged and invisible, many rural nurses stay in their jobs because they live and are committed to their communities. However, for young, and especially newly graduated nurses, the burden of responsibility and the lack of recognition for the careful and knowledgeable work they do, regardless of context, is debilitating and demeaning. As a result, some rural nurses move on to larger centres where responsibility is shared, while other nurses leave the profession all together (Stewart et al., 2011). A lack of recognition combined with the extreme stresses and attrition occasioned by the COVID-19 pandemic have exacerbated the longstanding nursing shortage. Powerful suggestions to retain nurses have been made globally (Buchan and Catton, 2020) and in Canada (Almost and Mildon, 2022) highlighting that nurses need to be respected and valued. Without a clear demonstration of respect for nurses through such aspects as healthy workplaces, adequate tools, resources and supports (e.g. workload, education), adequate recognition and compensation, and corporate practices that give voice to frontline nurses in decision-making (Ben-Ahmed and Bourgeault, 2022), rural nurses will not be retained and rural perinatal services will suffer.

The voices of rural nurses engaged in birthing care need to be heard and their concerns taken seriously by those who have the authority to affect policy and funding at the federal, provincial and health authority levels. Rural nurses have an important, context-based perspective that is needed to create relevant, responsive policy and health services (Kulig et al., 2004). To gain their perspective requires enhancing an evidence-based nursing voice at the local, national, and international levels (Rasmussen et al., 2022).

5. Strengths and limitations

This hermeneutic literature review has focused on rural perinatal nursing practice in Canada and on literature in English only. While a scoping or other type of review might have highlighted important aspects of rural perinatal nursing, the requirements for *a priori* search and evaluation criteria would have required a focus on what is strictly evident in the literature. Instead, a hermeneutic review allowed for the complexity of the literature to be explored, along with illuminating what was absent or only alluded to.

A global perspective on the topic of rural perinatal nursing might provide a broader account. There are likely many parallels with the work of midwives and nurse midwives in rural Australia, New Zealand, and the United Kingdom. However, given that rural Canadian nurses are charged with similar responsibilities for birthing care without the additional mandated education and the authority of independent practice, Canadian nurses' involvement in perinatal care is unique and highlights a particular need for their practice needs and concerns to be heard.

6. Conclusion

In the Canadian rural perinatal literature, nurses were found to be largely invisible, and their essential contributions not accorded their deserved attention or value. The majority of the research and grey literature focused on the crisis in rural perinatal care. Solutions highlighted joint physician-midwife models of practice, monetary compensation for these providers, and the coordination of regional specialist services. Supports for rural perinatal nursing practice were rarely mentioned. Nurses were taken for granted, their practice seldom acknowledged, and their voices difficult to distinguish with only a few studies actually focused directly on nurses and their practice. In those studies, nurses' autonomy and agency, enacted for the benefit of patients, other healthcare providers, and system functioning was substantial and remarkable, particularly given the many constraints of various rural and remote contexts. We found that rural nurses' actual experiences and insights are rarely represented in perinatal policy and guidelines. Nurses' insights, experiences, and voices are essential to ensure that policies and practices in healthcare organizations foster the sustainability of rural perinatal care and the retention of nurses in rural perinatal practice.

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Lela V. Zimmer: Writing – review & editing, Writing – original draft, Visualization, Validation, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Conceptualization. **Martha L.P. MacLeod:** Writing – review & editing, Validation, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Conceptualization. **Amanda De Smit:** Writing – review & editing, Validation, Investigation, Formal analysis. **Steinunn Jónatansdóttir:** Writing – review & editing, Visualization, Software, Investigation, Formal analysis, Data curation.

Declaration of competing interest

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Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.ijnsa.2025.100300.

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