Proceedings from the 3rd Invitational Rural Midwifery Symposium

Sutton Place Hotel, Vancouver BC
April 26-27th, 2011

Hosted by the Centre for Rural Health Research

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and the Rural and Remote Midwifery Committee

Contents

Executive Summary

Potential solutions for sustaining rural midwifery practice have been identified in previous rural midwifery symposia organized by the Centre for Rural Health Research. What is missing is the evidence to support the identified solutions. To further support the sustainability and growth of rural midwifery in BC, this *3rd Invitational Rural Midwifery Workshop* was organized to facilitate the development of a research agenda that aims to provide the missing evidence.

The one-day workshop was made up of research presentations, panel and group discussions, and a knowledge translation component. The workshop was guided by the principles similar to those established in the *2nd Invitational Rural Midwifery Symposium*, where the workshop's focus will be to emphasize:

- the importance of sustaining practice for all rural providers
- the importance of inter-professional collaboration in rural communities
- the importance for respecting women's choice of birth attendant across the province

The section, *Sustaining Rural Midwifery Practice through Research*, reviews **reasons for research in rural midwifery practice** presented by Dr Kornelsen, invited panelists from the Health Authorities and Midwives Association of BC (MABC), and representatives from the MABC Rural Midwifery Committee.

- **Negative maternal and newborn outcomes** and **loss of culture for Aboriginal communities** were the main points of argument emphasized by Dr Kornelsen to bring midwives into rural communities with no access to maternity services. She presented a cut-off population (calculation shown below) that can be used as a point of reference by decision makers when making healthcare human resource planning decisions for rural communities.

Communities which can sustain midwifery practice

2 midwives @ 42 births/year = 84 births
Plus an additional transfer rate for specialist delivery at 30-35%
=
109 births/year

A cut-off population of:
10,000-11,000

- **Practice environment, remuneration**, and **privileging** were common concerns for the sustainability of rural midwifery practice identified by the panel. **Issue of efficiency in improving rural midwifery practice** was also noted as a key reason to push forth a research agenda that can better support rural midwifery practice.

- **Poor working environments** and **burnouts** were experiences well shared by midwives practicing in rural communities. A survey collected by the MABC Rural Midwifery Committee points to the need to improve rural midwifery practice through the development of a rural midwifery locum program.

In *Exploring Research Areas*, current research programs and potential areas of research which all aim to support the sustainability of rural midwifery practice were explored. Three data collection programs were first presented by three different stakeholder groups.

- **Rural Midwifery Teleconference:** identifies the topic trend of the practice issues experienced by rural midwives in BC. Issues, such as *income loss with transfer to tertiary centres* and *funding for low volume settings*, have been a persistent concern and must be addressed.

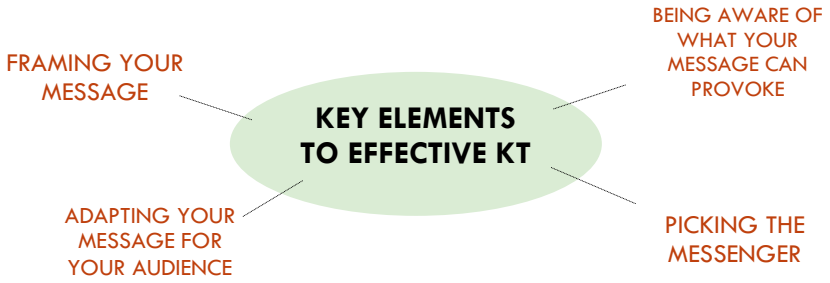
- **The Antenatal Form:** is a potential tool for research as it collects antenatal care data through the province. It ultimately can guide the development of practice and quality care guidelines for maternity care in the province.

- **Canadian Birth Place Study:** investigates maternity care providers' attitude and experience with planned home birth and its influence on women's birth choice and impact on midwifery practice. It aims to provide additional support for evidence-based maternity care that can better inform education curricula, inter-professional communication, policy and procedure, public messaging and design of cost effectiveness studies in maternity care.

Group discussion on potential rural midwifery practice research areas provided a guide for the **development of a research agenda for BC rural midwifery practice.**

THEME	AREAS TO EXPLORE
HUMAN RESOURCE MANAGEMENT & PLANNING	• Create a formula that calculates the target number of midwives needed in rural BC communities as a form of active recruitment • Investigate reasons for high attrition rate • Use Rural GP Locum program as a template for setting up a rural locum program suitable for midwives
INTERPROFESSIONAL COLLABORATION IN MATERNITY CARE	• Compare attitude & ability for providers to see birth as a normal life event • Investigate attitude towards midwifery practice (i.e. home birth) • Showcase successful midwifery stories to advocate midwives' practice
BETTER SUPPORT FOR RURAL MIDWIFERY PRACTICE	• Develop a rural maternity on call group that includes midwives • Investigate cost effectiveness of midwifery practice (i.e. saving on preventive care midwives provide, system savings due to better maternal outcomes) • Compare newborn readmission rates for cases followed by midwives versus cases followed by physicians

In *Translating Research into Knowledge*, Dr Nichol underlined the following four actions as key elements to effective knowledge translation:



Kathrin Stoll concluded the day with her emphasis on the need to build on existing midwifery research and invited participants to submit their research and share their practice experience in the *Canadian Journal of Midwifery Research and Practice*.

As pointed out by stakeholders at this event, there are still many barriers in sustaining rural midwifery practice in B.C. The inability to provide access to midwifery care in small communities that can sustain midwives, the absence of a locum pool for rural midwives, the failure to replace retiring midwives with new graduates all point to the need to connect these problems with solutions. The next step forward is therefore to maintain the momentum of interest generated from this workshop and partner with key decision makers to implement a sustainable and workable rural midwifery framework.

Perinatal Network Director Ruth Johnson (second left) & rural midwives who practice in Interior Health (from left to right): Leah Barlow, Ilene Bell, Joanna Nemrava, Alyson Jones, Jane Blackmore.

Rural midwives Sarah Hilbert-West, Deborah Kozlick, Karin Gerlach and Sheila Jager during the evening reception on April 26th.

Agenda

April 26

Room: Chateau Lafite, Sutton Place Hotel

7:00-9:00	Introductions & Evening Reception Hosted by Jude Kornelsen and Deborah Kozlick

April 27

Room: Chateau Belair, Sutton Place Hotel

7:30 - 8:00	Breakfast
8:00 – 9:00	Introduction, Goals for the Day, and Context Jude Kornelsen, CRHR Co-Director & Deborah Kozlick, RM
9:00 – 10:00	Common Concerns: Overview of Rural Midwifery Priorities and Constraints Health Authority, Decision Maker, MABC panel
10:00 – 10:45	Rural Maternity Locum Needs Assessment Deborah Kozlick, RM & Sheila Jager, RM
10:45 – 11:00	Coffee Break
11:00 – 11:30	Looking for Trends: History of over Ten Years of Rural Midwifery Teleconferences Deborah Kozlick, RM & Ilene Bell, RM
11:30 – 12:00	The Antenatal Form: Its importance to Research and its Redevelopment Kim Williams, Director of Perinatal Services BC
12:00 – 1:00	Networking Lunch
12:30 – 1:15	UBC Midwifery: Realizing the Vision Saraswathi Vedam, Director, Midwifery Education Program
1:15 – 2:45	Working session between midwives and decision makers articulating thematic concerns by Health Authority
2:45 – 3:15	The Role of Knowledge Translation and Effective Communication Anne-Marie Nicol, Assistant Professor, UBC School of Population and Public Health
3:15 – 3:30	Coffee Break
3:30 – 4:00	The importance of Midwifery Research and Knowledge translation in the Growth of the Profession Kathrin Stoll, Co-Editor, Canadian Journal of Midwifery Research and Practice
4:00 – 5:00	Next steps

Preface

In some ways, the *Third Invitational Rural Midwifery Symposium* seemed like a gathering of old friends. Many of us had come together before to discuss issues and brainstorm ways of overcoming challenges facing rural midwives. What set this meeting apart from previous gatherings was the level – and breadth – of involvement of decision makers on the day but also in the lead-up to the meeting. The interest expressed in finding feasible solutions to sustainable midwifery care and rigorously answering difficult questions like "how many rural midwives does the province need?" and "what systems are necessary to sustain midwifery care?" was clearly common to all participants.

It is difficult to let go of one's vantage point, whether that be supporting and strengthening the profession of midwifery or sustaining rural care within current fiscal challenges. Despite this, the confluence of the voices of rural midwives, rooted in their experience of practice, and decision-makers and other key stakeholders, at times transcended disciplinary perspectives by focusing on the key outcome: the needs of rural women. By bridging the "know-do gap", we are one step closer to solving the problem.

With the lofty goal of identifying a research agenda to contribute to rational decision-making, a range of topics were broached, from issues concerning human resource management and planning (such as investigating reasons for high attrition and setting up a rural local program), inter-professional collaboration and providing better support for rural midwifery practice (including the development of on-call groups, investigating the cost-effectiveness of midwifery practice, and comparing outcomes). Underscoring it all was the recognition of the importance of an effective knowledge translation strategy with both other practitioners (including urban midwives) but also community members and the media. Focusing on appropriate communication with these groups will augment the integrated KT approach with decision and policy makers.

Lists of recommendations and "next steps" are often daunting and prone to being set aside, especially when the tasks involve structural or ideological change. There comes a point in the trajectory of any phenomenon when we must abandon a course that does not require action but instead fosters only discussion. It is clearly now time to merge our on-going dialogue with concrete steps forward to grow midwifery in rural BC., ideally within a quality improvement framework. The suggestions contained within these proceedings were collaboratively developed and call all of us to action. We look forward to the next meeting reporting on our successes as we review the impact of policy and funding changes to rural midwifery in British Columbia.

We express our deepest gratitude to all who volunteered time away from their communities and commitments to participate in the discussion. May it lead to many positive advances for rural maternity care in British Columbia.

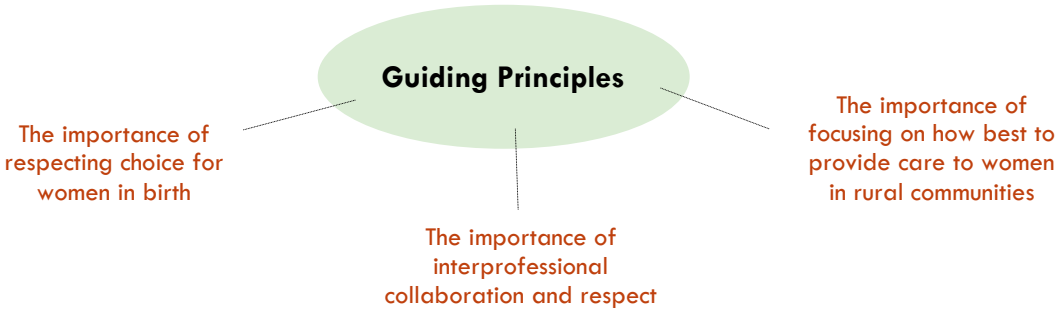
Jude Kornelsen & Deborah Kozlick

Introduction

Building on the two previous rural midwifery symposia held in June and October 2008, this *3rd Invitational Rural Midwifery Research Workshop* brought together the Centre for Rural Health Research, the Rural and Remote Midwifery Committee, rural midwives and key decision makers to establish a research agenda to further support the sustainability and growth of rural midwifery practice in BC.

> ***"The goal of this invitational symposium is to identify evidence needs to support the sustainability and growth of rural midwifery in British Columbia. This will be done by establishing a prioritized research agenda and work plan between the Centre for Rural Health Research, the Rural and Remote Midwifery Committee, rural midwives and key decision makers." - Dr. Jude Kornelsen, CRHR Co-Director***

The guiding principles of the workshop were similar to those established in the *2nd Invitational Rural Midwifery Symposium*, where the focus was to emphasize:



The emphasis was to move the dialogue beyond identifying barriers for rural midwifery practice and ultimately lay out a research agenda that can provide an evidence base for solutions proposed in previous symposia. An established research agenda will not only provide further support to the sustainability of rural midwifery practice but also further assist the decision making process in improving practice environments for rural midwives in BC.

The following proceedings highlight the discussions made during this one day workshop. The discussions are organized into three key areas: **Sustaining Rural Midwifery Practice through Research,** where the reasons for research in rural midwifery practice are illustrated; **Exploring Research Areas,** where current and potential research programs are examined; and, **Translating Research into Knowledge,** where the need for knowledge translation is accentuated.

Ruth Johnson & Leah Barlow at the evening reception on April 26th

SUSTAINING RURAL MIDWIFERY PRACTICE THROUGH RESEARCH

In the following section, the need for research to help sustain and support rural midwifery practice in BC are highlighted through: **Utilization and Outcome Data** of current maternity services in BC, the panel discussion on **Common Concerns** for rural midwifery practice, and the survey **Assessing Rural Midwifery Locum.**

The Sustainability of Rural Maternity Care in British Columbia: Utilization Patterns and Outcomes - Jude Kornelsen, Co-Director, Centre for Rural Health Research

A growing number of women are travelling to access maternity care as a result of the provincial trend towards centralization of care and service since 2000. Previous research, measuring the stress and anxiety of parturient women who have to travel for maternity services, found that women without local access to obstetrical services were 7 times more likely to experience stress, both emotional and financial, than women with local services.

The reality of service closures in fact has not only increased stress for travelling mothers but also impacted the **maternal and newborn outcomes** of women across the province, and affected the **birthing culture of Aboriginal communities.**

CRHR Co-Director Dr Jude Kornelsen during Q&A with PSBC Director Kim Williams (distant)

Distance Matters: Worse Maternal & Newborn Outcomes in Communities with No Local Maternity Service

Analyzing the Perinatal Services BC maternal and newborn data, a significant negative impact on the maternal and newborn outcome was found to be related to the distance to access of services and level of service in home community. It was found that:

- **Higher rate of perinatal deaths** is seen for women who have to travel more than 4 hours to services (18 perinatal deaths per 1000 births vs 6 per 1000 births for women with access to specialist care) (See Table 1).
- **Higher rate of NICU 2 and NICU 3 admissions** for babies born to mothers living 1 to 2 hours away from services
- **More days spent in NICU 2 and NICU 3** for babies born to mothers living in communities with no local services

Interviews with moms and providers also reveal the dangers of living away from services. As dictated through a video interview, poor road conditions in rural areas add to the urgency of a mother in labour often increasing the risk to women who have no access to local maternity services.

The collected quantitative and qualitative data are important evidence to consider when planning for the health of mothers and babies, and calculating for the costs to the community and the system – average public costs for NICU 2 beds is $1300/day and NICU 3 is $2500/day.

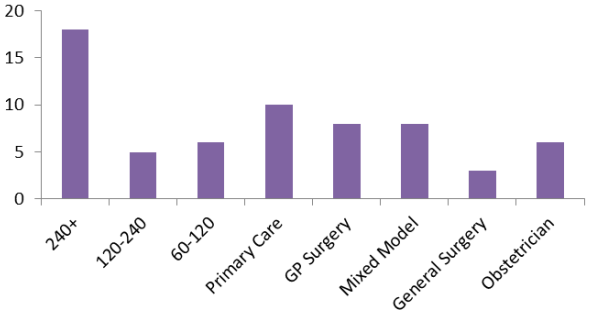


Table 1: Rate of perinatal death per 1000 births by mother's access to maternity services (time & level of service)

Delivering Away from Home: Loss of Identity for Aboriginal Communities

There are also social consequences as a result of service closures in rural communities. Historically, birth in the community has been very important for Aboriginal communities, where ties to the land and kinship ties among family members are strong. There is worry that a birth certificate that reads, for instance, Vancouver would equate to the loss of identity and tie to their home community.

"We're being restricted because we live in a rural area. And it's been – it's something we are all used to, but… they throw another blow on us, saying that they are not going to allow babies to be born here. We're supposed to be taking steps forward, not backward."

"We save babies, but lose teenagers."
– Elder from Aboriginal community

Elders in the community have noted that labour evacuations threaten cultural safety, as elders no longer feel they have a place to help guide women through the delivery. The life cycle of communities is imbalanced without the joy of birth to counter the weight of death. Significant community impact is also felt as teenagers who leave the community to give birth often do not return.

Midwives in Rural Communities

With significant decline in the involvement of family physicians in maternity care and the interventionist approach that frequently happens within specialist care, it is only appropriate to consider other maternity provider options – midwifery care – to resolve the current instability of rural maternity services.

Based on a calculation that two midwives are needed to sustain a rural community at 42 deliveries a year each and considering an additional transfer rate of 30-35% of all deliveries in the community for specialist care, it can be recommended that midwives can potentially be integrated in communities with population of 10,000 -11,000 people. Communities under 10,000 will have difficulty supporting local fee for service midwives.

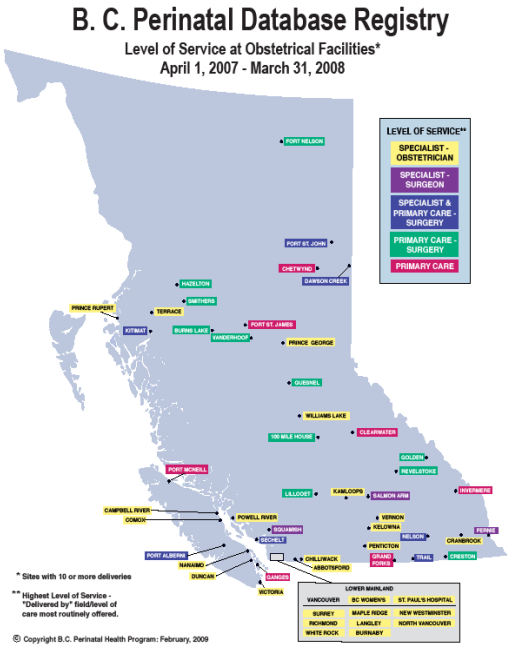
Communities which can sustain midwifery practice

2 midwives @ 42 births/year
With transfer rate for specialist delivery at 30-35%
=
109 births/year

A cut-off population of:
10,000-11,000

Using the above calculation, there are immediate opportunities to integrate midwives, around 30, into the following rural communities:

- **Prince Rupert, Terrace, and Williams Lake,** which are large enough to support a specialist model, but do not currently provide midwifery care options for women.
- **Port Alberni, Dawson Creek, Fort St. John,** and **Kitimat,** which currently run on a mixed care model (specialists and family physicians) have large enough communities to integrate midwifery care.
- **Salmon Arm** and **Fernie,** which are specialty surgical communities would benefit from midwives as travel would be reduced not just for women in these communities, but also in other nearby communities.



Other challenges beside remuneration, such as liability issues, lack of rural locum program and geographic access, need to be considered in order to integrate midwives into a rural community. The next step, therefore, is expanding on the existing research agenda that:

- examines current patterns of utilization of midwifery services by place of residence;
- examines current evidence related to outcomes for rural women; and,
- considers midwifery sustainability and the implications for meeting the maternity care needs of rural women.



THE SUSTAINABILITY OF RURAL MATERNITY CARE IN BRITISH COLUMBIA: Utilization Patterns and Outcomes

Jude Kornelsen UBC Department of Family Practice/Centre for Rural Health Research

April 26-27, 2011
Sutton Place Hotel
Vancouver, BC Canada

Hosted by the *Centre for Rural Health Research* in conjunction with the *Rural and Remote Midwifery Committee*

Objectives

- To examine current patterns of utilization of midwifery services by place of residence;
- To examine current evidence related to outcomes for rural women;
- To consider midwifery sustainability and the implications for meeting the needs of rural women.

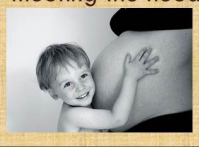


Table 1: Utilization of midwifery services by maternal residence in rural British Columbia

	Obstetric Service Level	Definition of Service Level	Total Deliveries	Midwife-involved courses of care n (%)	Midwife Delivered n (%)	Transfer n (%)
1	No local services	> than one hour travel time to nearest maternity service	3482	254 (7.3%)	165 (65.0%)	89 (35.0%)
2	Primary care services without Cesarean Section	Intrapartum care provided by Family Physicians and Midwives (No local access to CS)	2922	366 (12.5%)	220 (60.1%)	146 (39.9%)
3	Primary care services with Cesarean Section (GP Surgeons)	C-section provided by GP Surgeons	6849	302 (4.4%)	267 (88.4%)	35 (11.6%)
4	Mixed Model	C-section provided by GP surgeons or Specialists	7410	671 (9.1%)	520 (77.5%)	151 (22.5%)
5	General Surgeon	C-section provided by General Surgeons	2800	75 (2.7%)	53 (70.7%)	22 (29.3%)
6	OB/GYN and General Surgery	C-section provided by Obstetricians or General Surgeons	40007	3363 (8.4%)	2302 (68.5%)	1061 (31.5%)
	Total		63470	5031 (7.9%)	3527 (70.1%)	1504 (29.9%)

Context

- Rural parturient women are increasingly being evacuated from their home communities to access services in referral centers
- This is part of a general trend towards the centralization of care
- Recent qualitative research has suggested that rural parturient women from communities without local maternity services experience high degrees of stress and anxiety due to the actual or potential evacuation from their community for labour and delivery

Stress in Pregnancy

- The Rural Pregnancy Experience Scale (RPES) is a reliable and valid measure of the stress rural parturient women experience during their pregnancy.*
- Women without local access to obstetric services were **7 times** more likely to experience moderate/high stress.**

*Kornelsen J, Stoll K, Grzybowski S. "Development and psychometric testing of the Rural Pregnancy Stress Scale (RPSS)." *Journal of Nursing Measurement.*

**Kornelsen J, Stoll K, Grzybowski S. (2011) "Stress and anxiety with lack of access to maternity services for rural parturient women." *Australian Journal of Rural Health,* 19(1): 9-14.

Poor newborn outcomes associated with perinatal stress

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Poor newborn outcomes associated with perinatal stress

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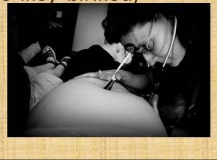
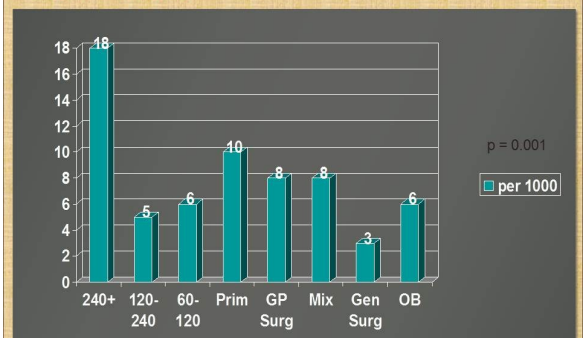
Maternal-Newborn Outcomes

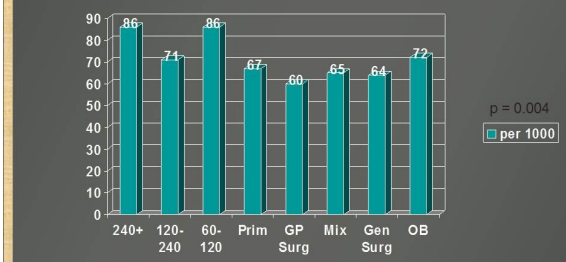
- Based on PSBC data 2000-2004
- Cohort study of newborn outcomes analyzed by distance to access services and level of service in home community
- Analysis was by residence of mother (where patients lived, not where they birthed)



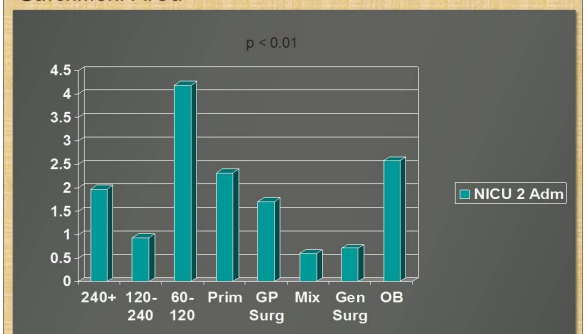
Perinatal Deaths by Service Level of Mother's Catchment Area



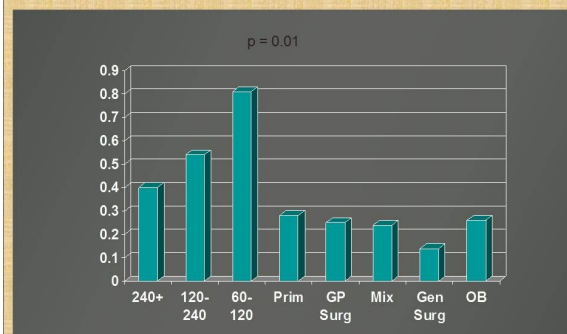
Prematurity by Service Level of Mother's Catchment Area



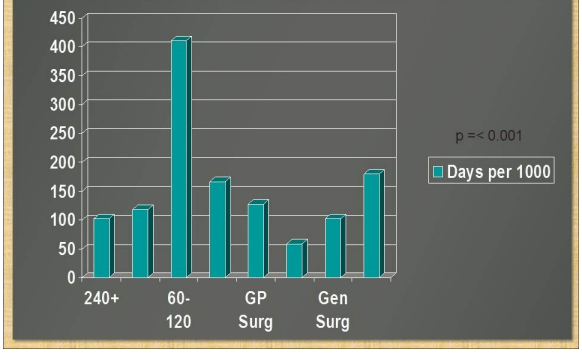
NICU 2 Admissions by Service Level of Mother's Catchment Area



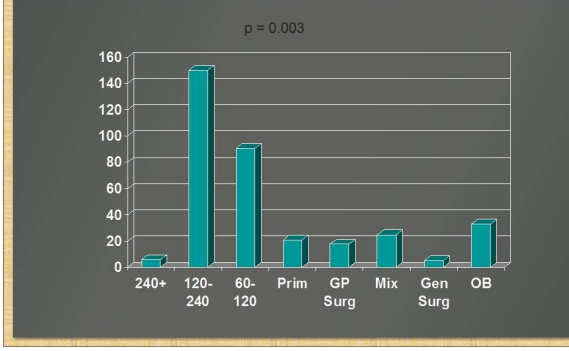
NICU 3 Admissions by Service Level of Mother's Catchment Area



Total NICU 2 days per 1000 births by Service Level of Mother's Catchment Area



Total NICU 3 days per 1000 births by Service Level of Mother's Catchment Area



Cost of NICU days in British Columbia

Average public cost of a NICU 2 Day:

- $1300
- Private Cost - $1700

Average public cost of a NICU 3 Day:

- $2500
- Private cost - $4300

OB Model

- Prince Rupert
- Terrace
- Williams Lake
- Powell River

Mixed Model

- Port Alberni
- Dawson Creek
- Fort St John
- Kitmat

Specialist Surgeon

- Squamish
- Salmon Arm
- Fernie

= 30

First Nations Maternity Care

- Evidence suggests impact of travel is more acutely felt by First Nations communities
  - Historical place of birth in the community
  - Strong kinship ties
  - Younger average age for first birth
- Significant impact of evacuation
  - Significant psycho-social and physiological stress
  - Loss of competency felt by older women who acted as midwives
  - Health effects on women include loneliness, worry, anxiety, loss of appetite, increased smoking behavior [Jennifer Stonier]
  - Health effects on family include increased rates of illness, school problems for children left behind, loss of understanding of the birthing process for men [Jennifer Stonier]
- Importance of cultural safety: "Care that strives to honour, support and uplift a patient's culture and beliefs to improve quality of care and health outcomes."

Aboriginal concept of self

"The identity of indigenous peoples, whose concept of self is rooted in the context of community and place, differs strikingly from the identity of many Euro-Canadians whose concept of self is frequently encapsulated in independence of the individual."
(Wilson, p. 9)

Meaning of Birth in Bella Bella

"I would want my grandchildren to be born here, like other kids. This is where we're from! You know, looking on the birth certificates, they say 'Vancouver, BC.' You know, they're not from Vancouver. We're from [our community]! So when they are born in Vancouver, does that mean they are from Vancouver?"

"I think it's a huge void for people not to be born here, because all we see is death. You've probably heard that before. We're in a small community and it's constantly death, death, death, death. When you don't have birth here, and they're born outside, you know, it's different. There has to be a balance. There's end of life and beginning of life. "

Aboriginal Women's Experiences

- "My oldest son was born in Vancouver – not by choice. It does make a difference. [The children] are bothered by it, so it does make a difference."
- "I didn't get the see the birth of my nephew. I really wanted to be there with my sister, but it just didn't work out, eh? But if she had been allowed to have her baby here, I would have been 30 minutes away."
- We're being restricted because we live in a rural area. And it's been – it's something we are all used to, but… they throw another blow on us, saying that they are not going to allow babies to be born here. We're supposed to be taking steps forward, not backward."

How can we sustain midwives in low-volume communities?

- **Communities with a population of 10,000 – 11,000**
  - 2 midwives @ 42 births/year (=84)
  - Transfer rate of 30% (=25)
  - 109 births / year
  - 10/1000
  - Communities under 10,000 pop. will have difficulty supporting local midwives

Main Points

- Rural women are traveling to access midwifery services at considerable costs (Tofino, Bella Bella, Squamish)
- Currently, the distribution of midwives is largely urban
- There are significant psycho-social costs and adverse perinatal outcomes associated with traveling to access care
- There has been a significant decline in the involvement of physicians in maternity care
- There are immediate opportunities to integrate midwives into rural communities in BC

Challenges to Midwifery Practice in Rural Communities

- **Home Birth**
- **Remuneration** [course of care / fee for service]
- **Liability issues** [CMPA: In IP care models, all care providers are named defendants if a patient takes legal action]
- **Leadership provided by the professional and regulatory organizations** ["Physicians' involvement with midwifery care may occur at the discretion of the physicians but they are not under an obligation to provider back-up care to midwives…"]
- **Scope of Practice:** compared to GPs midwives have a limited scope of practice in prescribing, using instruments, doing procedures, and doing tests & diagnositics

Common Concerns: Overview of Rural Midwifery Priorities & Constraints

Panel Discussion with representatives from Health Authorities & Midwives Association of BC (MABC)

This panel was set up to provide an informal opportunity for perinatal leads and representatives from MABC to voice their concerns in sustaining rural midwifery care.

Remoteness, sparse practice location, and **broken communication** are key concerns for perinatal leads from three health authorities – Vancouver Island, Interior and Northern. It is also difficult to cover practice if the service area is large and road conditions in the North, the Island and Interior can be dangerous. Midwives who are just starting up a practice and are without support from the local medical community often "starve" until they can get their practice up and running.

A reoccurring theme is the need for continuum of care – what does the mother need and how does that work if she is in a community of 300 people? We can't be all things to all people; but, how do we do the best we can? What is needed is a *more robust, sustainable, collaborative, mixed model practice so women can deliver closer to home.*

Representatives from MABC emphasized the need to address issues related to midwifery practice.

- **Financial costs of home births**: It was noted that midwives take on financial costs when they do a home birth. Midwives have to pay out of pocket for supplies and second attendants. There were stories of midwives being threatened with loss of their privileges when they asked for hospital supplies.
- **Privileging**: This is especially difficult in communities with little experience with midwifery. Administrative staff, who hold the power dynamic of privileging, might not understand the practice needs for midwives. It is a common disincentive for newer midwives who would like to move to rural communities.

"People aren't meeting to discuss it. (We need to) put aside differences of title, ideology and practice background. We need to sit in the same room and talk about these things."

Frustration in the progress for improving midwifery practice was also voiced by the representatives. In the past 12 years since licensing, several papers identifying practice issues had been put forward by the Joint Policy Committee. They are signed off by the committee and ministry with the intent to address the issues, but there is **issue of efficiency in seeing progress.** This has also been the case when working with the Department of Family Practice at GPSC. There needs to be a sense of urgency for improving rural midwifery and the need to service rural communities.

"Some (issues with privileging) are unique and cultured but understanding and acceptance are not where we like it to be."

"My practice partner broke her arm and I needed a locum fast, but (the locum) came and left before she could get privileges in time for her to do deliveries."

Common concerns for sustainability and support for rural midwifery practice resonated during the open discussion – with privileging being a key issue.

PROBLEMS WITH PRIVILEGING FOR MIDWIVES	
Administrative Problem	New midwives, and other maternity providers, don't always understand how privileging may work. There are bylaws within each health authority and it differs from hospital to hospital who holds the authority. It should be a straight-forward system, but often this is not the case.
Cultural Problem	Despite having an overarching health authority and bylaws, each hospital is a world unto itself and it might not be the culture for some hospitals to have midwives delivering in their facility.
Logistical Problem	Turn-around times for privileging delays midwifery practice. For instance: • Summer vacation delays practice and delivery opportunities for May graduates • Locums are not able to practice for short term in emergency situations when there are no back up midwives with hospital privileges in the community

Panelists (from left to right): *Erin O'Sullivan (VIHA Perinatal Lead), Ruth Johnson (IH Perinatal Lead), Shannon Norberg (President, MABC), Ganga Jolicoeur (Executive Director, MABC), Rose Perrin (NH Perinatal Lead)*

"This work is timely. Conditions haven't improved since the last (symposium) and care is unraveling in some communities."

BC rural midwives' working conditions

62.2% have *no days a month for holiday* with complete coverage.
– A hard and unsafe working condition. Midwives may work up to 48 hours with little rest.

76.5% received coverage provided by practice partner
– Midwives can come back to a burnt out practice partner, which leads to stress within the practice itself.

45% have had *no full coverage for professional development* in the past year

If a health concern or bereavement situation arose suddenly, only **12.8%** of respondents have access to locum coverage

57.1% have had success in recruiting a locum for coverage

51.1% respondents noted that there are unmet locum needs for their practice

Rural Maternity Locum Needs Assessment: An Example of Research Influencing the Development of Policy and Practice - Deborah Kozlick, RM & Sheila Jager, RM

Rural midwifery practice is under stress. In BC, 48% of rural midwives work in solo practice. This is inherent in rural practice because of low birth volumes, where communities often can only support one midwife. This puts rural midwives at risk for higher levels of isolation, burnout, and lack of professional support. In rural communities where midwives have practice partners, it is still difficult to provide home births without the coverage and availability of a third partner if they want or need time off, as this services requires two attendant midwives, meaning both have to be on call.

"It is (just) easier to turn away clients"

With the lack of a midwifery locum pool in BC to provide support to over-worked midwives, the sustainability of midwives, especially, in rural communities is at risk. To provide a better assessment of the condition that rural midwives are working in, a survey was issued to midwives practicing in rural communities in BC. The preliminary results from the 49 completed surveys are on the next page.

What do the results mean?

The situation for rural midwives has not changed for the past 12 years. It also illustrates the huge disincentives to enter into rural practice and a reiteration of what really needs to be established: a rural midwifery locum pool.

Research conducted could provide evidence of the need to create a fully funded locum pool. Calculating the number of locums needed to fill the unmet needs in rural communities should be a key focus. Research should also target the barriers to locum availability, which were identified in the survey. Barriers include:

- Volume too low to attract a locum
- Cost of locum travel and locum professional or liability fees
- Difficulty in gaining hospital privileges for short and long-term locums
- Lack of locum accommodations and locum training and orientation (8.7%)
- Locum practice conditions – geographic access, road conditions, long travel times to reach the clients.

Potential solutions to increase the availability of midwives to provide locums were discussed, including providing forgiveness of student loans and recruiting midwives from overseas. Midwives also need a clear referral system, including smooth transfers. Often, they work in an atmosphere that is not always welcoming and accommodating. Along with this unchanged working environment for burnt out rural midwives, the impending retirements in many BC rural midwifery practices should only make the establishment of a rural midwifery locum pool a priority.

"I had a locum for about 2 months when I had a baby – I had to go back on call when I was 4.5 weeks postpartum. I was heartbroken."

Rural Maternity Locum Needs Assessment

Deborah Kozlick
3rd Invitational Rural Midwifery Research Workshop
April 26-27, 2011
Vancouver, BC

2. In which Health Authority is your practice located? Check all that apply.

	Response Percent	Response Count
Vancouver Coastal Health	10.2%	5
Fraser Health	0.0%	0
PHSA/St. Paul's Hospital	0.0%	0
Vancouver Island Health	28.6%	14
Interior Health	44.9%	22
Northern Health	12.2%	6
Variable-practice as a locum midwife	4.1%	2
answered question		49
skipped question		1

3. How many midwives are in your practice including yourself?

	Response Percent	Response Count
1	48.0%	24
2	16.0%	8
3	26.0%	13
4	8.0%	4
5	0.0%	0
6	2.0%	1
answered question		50
skipped question		0

4. How many births do you attend, on average, per month?

	Response Percent	Response Count
0	0.0%	0
1	8.3%	4
2	12.5%	6
3	14.6%	7
4	41.7%	20
5	14.6%	7
6	6.3%	3
7	0.0%	0
8	0.0%	0
9	2.1%	1
answered question		48
skipped question		2

5. How many days per week, on average, do you have off with full coverage?

	Response Percent	Response Count
0	62.2%	28
1	13.3%	6
2	15.6%	7
3	6.7%	3
4	0.0%	0
5	0.0%	0
6	2.2%	1
7	0.0%	0
answered question		45
skipped question		5

6. Over the past year, how many weeks of recreational holiday time did you have with full coverage?

	Response Percent	Response Count
0	25.0%	12
1	6.3%	3
2	2.1%	1
3	8.3%	4
4	14.6%	7
5	4.2%	2
6	8.3%	4
7	2.1%	1
8	22.9%	11
9	0.0%	0
10	0.0%	0
11	0.0%	0
12	4.2%	2
13	0.0%	0
14	2.1%	1
answered question		48
skipped question		2

7. In reference to question 6, was coverage provided by a practice partner or a locum?

	Response Percent	Response Count
Practice Partner	76.5%	26
Locum	23.5%	8
answered question		34
skipped question		16

8. Over the past year, how many days of professional development and/or continuing education did you have with full coverage?

	Response Percent	Response Count
0	44.7%	21
1	12.8%	6
2	10.6%	5
3	10.6%	5
4	14.9%	7
5	4.3%	2
6	0.0%	0
7	0.0%	0
8	2.1%	1
9	0.0%	0
10	0.0%	0
11	0.0%	0
12	0.0%	0
13	0.0%	0
14	0.0%	0
answered question		47
skipped question		3

9. With regards to your primary practice and the accessibility of locum coverage over the past year, which of the following apply (may choose more than one):

	Response Percent	Response Count
Required locum coverage, was able to obtain	31.9%	15
Required locum coverage, was not able to obtain	29.8%	14
Did not require locum coverage	25.5%	12
Other (please specify) Show replies	36.2%	17
answered question		47
skipped question		3

Midwives' Association of British Columbia • Rural and Remote Midwifery Committee

10. What do you feel are the most significant barriers to locum accessibility is in BC?

	Response Percent	Response Count
Volume too low to attract a locum	43.5%	20
Lack of locum availability	71.7%	33
Cost of locum travel	30.4%	14
Locum privileging	19.6%	9
Locum accommodations	34.8%	16
Locum orientation	8.7%	4
Locum practice conditions	2.2%	1
Other locum costs	30.4%	14
Lack of locum support in rural areas	52.2%	24
Locum professional or liability fees	37.0%	17
Please provide specifics, especially if you chose Privileging as an issue: Show replies		19
answered question		46
skipped question		4

Midwives' Association of British Columbia • Rural and Remote Midwifery Committee

11. If a health concern or bereavement situation arose for you suddenly, would you have access to locum coverage for your practice?

	Response Percent	Response Count
Yes	12.8%	6
No	21.3%	10
Unsure	25.5%	12
It depends on: Show replies	40.4%	19
answered question		47
skipped question		3

Midwives' Association of British Columbia • Rural and Remote Midwifery Committee

12. When was the last time you hired a locum to cover your practice?

	Response Percent	Response Count
0-3 months ago	26.9%	7
3-6 months ago	3.8%	1
6-12 months ago	34.6%	9
12-24 months ago	26.9%	7
Over two years ago	7.7%	2
Other (please specify) Show replies		22
answered question		26
skipped question		24

Midwives' Association of British Columbia • Rural and Remote Midwifery Committee

13. How long has it been since your last day off with full coverage?

	Response Percent	Response Count
0-1 week	29.8%	14
1-2 weeks	12.8%	6
2-4 weeks	12.8%	6
1-2 months	12.8%	6
2-4 months	2.1%	1
4-6 months	6.4%	3
6-12 months	6.4%	3
Greater than 12 months	17.0%	8
answered question		47
skipped question		3

Midwives' Association of British Columbia • Rural and Remote Midwifery Committee

14. Choose any of the methods you have used to find locums and indicate whether you had a response to that method:

	Yes, positive response	No, negative response	Variable response	Response Count
Within community	56.5% (13)	21.7% (5)	21.7% (5)	23
Word of mouth	47.4% (9)	36.8% (7)	15.8% (3)	19
New graduate(s)	44.4% (4)	44.4% (4)	11.1% (1)	9
Through MABC listserv	33.3% (5)	46.7% (7)	20.0% (3)	15
Through CAM listserv	37.5% (3)	50.0% (4)	12.5% (1)	8
Direct phone call or email	50.0% (11)	31.8% (7)	18.2% (4)	22
Share locum within practice group	71.4% (5)	28.6% (2)	0.0% (0)	7
Advertising - other than above	0.0% (0)	71.4% (5)	28.6% (2)	7
Other (please specify) Show replies				11
answered question				35
skipped question				15

Midwives' Association of British Columbia • Rural and Remote Midwifery Committee

15. Have you successfully recruited a locum in the past three years?

	Response Percent	Response Count
Yes	57.1%	28
No	6.1%	3
N/A	36.7%	18
answered question		49
skipped question		1

16. If you chose 'yes' for question 13, was this a successful arrangement?

	Response Percent	Response Count
Yes	88.0%	22
No	12.0%	3
Please provide details as to why this arrangement was successful or not: Show replies		19
answered question		25
skipped question		25

Midwives' Association of British Columbia • Rural and Remote Midwifery Committee

17. Do you currently have unmet locum needs for your practice?

	Response Percent	Response Count
Yes	51.1%	23
No	48.9%	22
Please provide specific details regarding your own practice situation and your locum needs at this time: Show replies		33
answered question		45
skipped question		5

Midwives' Association of British Columbia • Rural and Remote Midwifery Committee

What's Next?

- We need to do research in the area of forming a fully funded locum pool for coverage.
- We need to access an agreement such as the one rural physicians already have in place.
- Questions to answer:
  - How many midwives will it take to have an adequate pool?
  - Where will these midwives come from?
  - How do we prioritize who gets first options for usage of the pool of midwives?
  - What training is required and where do we access this?
  - Obtaining forgiveness of loans for the training, if they agree to work as a locum for a minimum of two years

EXPLORING RESEARCH AREAS

The following sections **Using What We Have,** which summarizes different data collection programs currently running, and **Formulating Questions,** which details a research agenda framed by stakeholders at the event, highlight areas of research that can potentially support the goal to sustain and support rural midwifery practice in BC.

Using What We Have

Three data collection programs were presented by representatives from different stakeholder groups: **Deborah Kozlick** and **Ilene Bell,** midwives, presented on topic trends from the annual rural midwifery teleconference; **Kim Williams,** decision maker, re-emphasized the importance of the Antenatal Form and its potential utilization for research; and, **Saraswathi Vedam,** educator and researcher, presented on the findings of *Canadian Birth Place Study* and its significance to the sustainability of rural midwifery practice.

Looking for Trends: History of Over Ten Years of Rural Midwifery Teleconference

Deborah Kozlick, RM & Ilene Bell, RM

Rural midwives are largely not present at meetings and conferences due to the difficulty of leaving their practice. With the need for a forum for rural midwives, especially in solo practice, to feel connected, the Midwives Association of BC (MABC) Rural and Remote Midwifery Committee and College of Midwives BC (CMBC) funded the development of rural midwives teleconference in 2001.

Since its initiation in 2001, the rural teleconference has been well attended. Restricted to only rural midwives, the teleconference has created an unprecedented and dynamic forum for midwives to network and exchange ideas and has facilitated the development of a core group of dedicated midwives in BC.

Reviewing the undistributed notes taken for record from each teleconference, Deborah and Ilene were able to outline topic trends of the teleconferences and shared some realities of rural midwifery practice. Challenges faced by solo practitioners and costs were common issues brought up by midwives. The big topics pointed out in the 2011 teleconference were: difficulties in obtaining privileges, availability and costs for second attendants for home births, availability and costs of locums, and specialist shortages.

Deborah and Ilene noted the need to solve these problems and that the teleconference could be extremely useful as a tool to help build solutions into rural practice.

The following table summarizes the topic trends from the past 12 annual teleconferences. It details the issues that have been brought up, the years when they have been mentioned, and details or resolution that were pinpointed during the teleconferences.

Issue	Years Discussed	Detail
Funding for low volume settings	2003, 2005-2009, 2011	• Possible solution is switching to a salaried funding model or expanding the scope of practice for rural midwives.
Income loss with transfer to tertiary centers	2003, 2005, 2007-2011	• Common problem. Critical in low volume settings. • Transfers are sometimes necessary in the midst of labour. Though midwives have helped in the transfer of the women, midwives often lose a large portion of income if they are not the ones to deliver the baby.
Continuing education with locum support	2003, 2006-2008, 2010-2011	• Common problem. Especially problematic in solo or two midwives practicing. • Possible solution is development of a locum pool to resolve issues in the availability and prohibitive cost of locums.
Work sharing with nurses	2003, 2005, 2008-2009, 2010	• Nursing shortages is an on-going issue. With a heavier work load, the stressed nurses often offload maternity services onto the midwives. • This cannot be a permanent solution as it is only a shift in work load which results in burn out for midwives and makes it difficult to maintain good inter-professional relationships. • Some communities have reported improvements in conditions. New work relationship policies have been put in place, can be used in other communities.
Shortage of consultants	2003, 2006, 2009-2011	• This is the case for particular communities • Consequences for this are stressed mothers and income loss for midwives as women would need to be transferred (i.e. for an epidural).
Relationship with hospital	2003, 2005, 2008 – improvement reported by some	• Established practice areas improving, difficult for new practices. • Need to take advantage of the knowledge and good relationships that have grown in communities who have had midwifery care for a number of years and apply this to communities who are just getting midwifery care.
Support for midwives in new areas	2005, 2008-2009, 2011	• Lack of mentorship and orientation programs, isolation, lack of access to continued education are common challenges for midwives moving to new rural communities.
Rural representation on contract committee	2007-2009	• MABC now supports rural midwives.
Home Births	2008-2011	• Cost of home birth supplies comes out of midwives pocket • Finding a second attendant can be challenging, especially if it is a maternity nurse who has to get registered

Participants during a research presentation

Perinatal Lead Rose Perrin (far left) with rural midwives who practice in Northern Health (left to right): Karin Gerlach, Celina Laursen & Sarah Hilbert-West

The Antenatal Form: Its Importance to Research and its Redevelopment

Kim Williams, Executive Director Perinatal Services, BC Perinatal Services

The Antenatal Form is an important tool for developing **province-wide data collection and analysis on antenatal care** and provides a **communication standard between care providers**. It not only serves to prompt time sensitive screening, but it advances care and research in antenatal care across the province. The surveillance team at BC Perinatal Services currently provides a two-year retrospective annual population health data by health authority and quarterly quality outcomes reports using the data collected.

Besides reporting, the next step is to use this comprehensive data for best practice change. Uptake has been good with midwives and nurses, but with other providers, mainly physicians, some still find the form time consuming. In order to facilitate research programs from the data collected, the current form is undergoing updates to revise the form with data fields that are both measureable and actionable.

The revised Perinatal Data Registry will potentially serve to support research that can **improve the quality of care and practice**.

Perinatal Services BC
An agency of the Provincial Health Services Authority

Kim Williams RN, MSN
Provincial Executive Director
Perinatal Services BC
Provincial Health Services Authority

Provincial Health Services Authority
Province-wide solutions. Better health.

Perinatal Services BC
An agency of the Provincial Health Services Authority

- **BC Perinatal Forms**
  - Allow for province wide data collection and subsequent analysis
  - Provide clear communication tool between care providers
  - Serve as prompts to time sensitive screening

Provincial Health Services Authority
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An agency of the Provincial Health Services Authority

- **Updated/Revised Data Registry**
  - Perinatal Data Registry will be influenced by data fields
  - Working groups to determine data fields
    - Measurable
    - Actionable
  - Need to use the data to influence best practice change

Provincial Health Services Authority
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Perinatal Services BC
An agency of the Provincial Health Services Authority

- **Submitting forms to Perinatal Services BC**
  - Consistent timing is easier
  - End of fiscal year data is important to receive in timely manner
- **Submitting forms to local hospital**
  - Barriers?
  - How can we help?

Provincial Health Services Authority
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Perinatal Services BC
An agency of the Provincial Health Services Authority

- **Electronic Health Records**
  - Incentives by vendors to choose their product
  - Kenny.Der@phsa.ca for all questions and support

Provincial Health Services Authority
Province-wide solutions. Better health.

Perinatal Services BC
An agency of the Provincial Health Services Authority

- **New postpartum and newborn forms**
  - Continent is mostly the same
  - Layout is different
  - Guidelines for newborn assessment
  - Part 1 and Part 2 necessary to fill out all

Provincial Health Services Authority
Province-wide solutions. Better health.

UBC Midwifery: Realizing the Vision

Saraswathi Vedam, Director, Department of Midwifery, University of British Columbia

UBC Midwifery has been going through a lot of change over the last few years. This mainly is due to program renewal and evaluation every five years. Feedback from new grads, current students, and faculty were collected, and based on conferences with rural midwives, the next step is to realize the vision needed for 'care in low-resource settings'.

The goal for UBC Midwifery is to increase research capacity and productivity of UBC midwifery and Canadian midwives. This stems from the interest in increasing research capacity of graduates where it will ultimately allow graduates to evaluate best practice models and effects and outcomes. The following is a description of a data collection program currently running at UBC Midwifery:

Current Research: Canadian Birth Place Study

This is a mixed methods study of Canadian Maternity care providers' experiences and attitudes about planned home birth. It has been running for a few years under Canadian Institute of Health Research funding. The **goals** of the study are to identify:

- demographic, practice and experiential variables that modify opinions towards home birth
- external factors and demographics which interact with choice of practice site
- interprofessional barriers to home birth practice.

Background - Providers' attitudes matter: Providers' attitudes impact care options and influence women's choices. Providers may present options that are congruent with their own education, experience, and scope of practice. For instance, providers who choose to have a cesarean section themself, or for their partner, have higher rates of cesarean sections among their patients, and this is also true for breastfeeding practices. It is therefore important for this current study to investigate how providers' experiences and attitudes about planned home birth can influence women's choice and ultimately impact midwifery practice.

Results: Generally, physicians have a good knowledge about home birth, in terms of various home birth items and equipment, where obstetricians were found to be more knowledgeable than family physicians. Both midwives and physicians agree that the home environment is ideal for mother-baby bonding.

For the most part, however, the results from the survey revealed a polarized experience and attitude about planned home birth when comparing the response provided by midwives and physicians. Physicians were less likely to have been to a birth prior to clinical training, had little experience with intrapartum birth in the home, less likely to believe home birth is safe, and less likely to collaborate with other providers if remuneration of birth is equalized.

Questions related to rural midwifery practice were also asked. It was found that compared to urban counterparts, physicians practicing in rural settings have less exposure to midwives and thus less experience being involved in home births. One area of agreement was the mutual concern indicated by midwives and physicians in rural practice about limited hospital facilities and access to resources in rural communities.

Next phase: The next phase in the study is to collect providers' experience and attitudes towards planned home birth in rural BC (Nelson, Trail, Courtney/Comox, Squamish) using focus groups.

Significance of study: The results of the study provide additional support for an evidence-based maternity care where the information collected can impact and inform education curricula, interprofessional communication, policy and procedure, public messaging and design of cost effectiveness studies in maternity care. The results also reflect the effectiveness of current inter-professional programs designed to encourage better inter-professional communication (i.e. MCP^2).

Saraswathi Vedam during her presentation on the Canadian Birth Place Study

UBC Midwifery Realizing the Vision

How can UBC Midwifery support the growth and sustainability of rural midwifery?

Saraswathi Vedam & Laura Schummers

Presented at the Rural Midwifery Research Workshop: April 27, 2011

Roles in rural midwifery

1. Curriculum & program development
2. Clinical faculty development
3. Research
4. External Representation

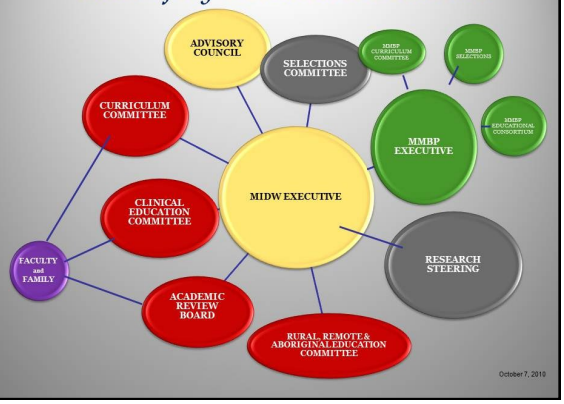
Vision

UBC Midwifery is a global leader in creating excellence and innovation in care for women and families.

Mission

Fostering excellence in the art and science of midwifery education, research and practice.

Midwifery Committee Structure



Enhancements

- ***Admissions***
- ***Rural, Remote, & Aboriginal education***
  - *2 midwifery faculty*
  - *Midwifery alumna*
  - *Representative of rural midwives network*
  - *Student representatives*
- ***Clinical Education***
- ***New Courses and Curriculum***
- ***Continuing Education and Online Resources***

UBC Midwifery Research

- Goal:
  To increase research capacity & productivity of UBC Midwifery and Canadian midwives
- **'Care in low-resource settings'** emerged as overarching research theme at UBC Midwifery.
  - Home birth & community based maternity care
  - Rural & Remote Canada
  - International settings: Nepal, Uganda

UBC Midwifery Research projects

Fetal health surveillance: improving test validity

- Antepartum: Accelerated auscultative test vs. NST
- Intrapartum: Intermittent auscultation vs. EFM

Canadian Birth Place Study:

- Mixed methods study of Canadian maternity care providers' experiences & attitudes about planned home birth

The Canadian Birth Place Study

Funded by CIHR to:

- Describe opinions about and experiences with home birth among Canadian maternity care providers
- Identify demographic, practice, and experiential variables that modify opinions towards home birth
- Identify external factors & demographics which interact with choice of practice site
- Identify interprofessional barriers to home birth practice

The Canadian Birth Place Study

Investigator Team:

Saraswathi Vedam (PI), RM, FACNM, MSN, Sci D (h.c.); Director, Midwifery Program, University of British Columbia
Shafik Dharamsi, PhD, Assistant Professor, Department of Family Practice, University of British Columbia
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Janusz Kaczorowski, MA, PhD; Research Director, Department of Family Practice & Child & Family Research Institute, University of British Columbia
Michael Klein, MD, CCFP, FCFP, FAAP; Professor Emeritus, Family Practice & Pediatrics, University of British Columbia
Jude Kornelsen, PhD; Co-Director, Centre for Rural Health Research, Department of Family Practice, University of British Columbia
Judy Rogers, RM, MA; Associate Professor, Midwifery Education Program, Ryerson University

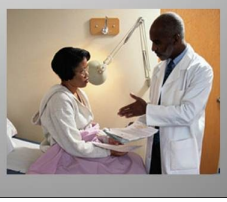
Background: Home birth in Canada

- Is it safe?
- Is it growing?
- Should it remain an option?
- Why do providers disagree?

Providers' Attitudes Matter!

Providers' attitudes impact care options & influence women's choices

Providers may present options that are congruent with their own education, experience, and scope of practice



What shapes attitudes?

Safety?
Exposure?
Education?
Professional culture?
Peer pressure?
Regulation?
Public Opinion?
Media?

What we know:

For US Nurse-midwives:

- Exposure
- Education

→ Favorable attitudes

- Financial factors
- Liability

→ Unfavorable attitudes

In Canada

- Lack of consensus on safety of home birth
- Obstetricians had least positive attitude compared to family physicians and midwives*

*Klein et al. The Attitudes of Canadian Maternity Care Practitioners Towards Labour and Birth: Many Differences but Important Similarities. J Obstet Gynaecol Can. 2009 Sept; 31(9): 827-40

Measurement tools

1. Surveys

2. Interviews & Focus Groups

Reducing bias, ensuring validity

In order to have credible, usable data, we need to:

1. Ask the right questions,
2. Ask the questions the right way
3. Ask the right people,
4. Ask enough people

Methods - Content Validation

STEP 1: Development Stage

Adapting US survey to interdisciplinary Canadian context

- Review existing survey for relevance & review literature to re-focus for Canadian context

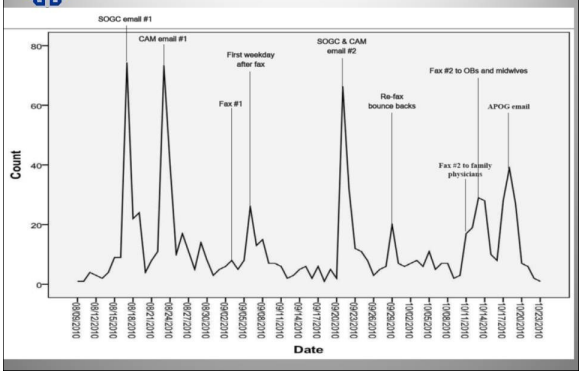
STEP 2: Judgment-Quantification Stage (Expert review)

- Multi-disciplinary expert panel: 27 experts participated
- Experts Rate each item for importance, relevance, and clarity on 4-point scale
- Modify survey based on responses

Methods - Sampling plan

- All RMs (n~900)
- OBs who provide intrapartum care (n~800)
- Random selection of 3000 practicing Family Docs: approx 10%

Methods- Survey Administration



Results: Response rates

Provider group	*N, population*	*# recruited*	*Started survey*	*Completed survey*	*Response rate*
Registered midwives	759	759	523	451	59.4%
Family physicians	31,562	3000	153	139	4.6%
OB/GYN	1,653	800	270	232	29.4%

Results: Education

RMs:

Bachelor of midwifery	58.8%
International	26.9%
Portfolio review	14.3%

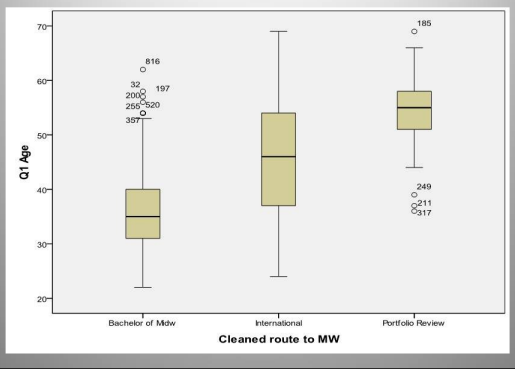
Physicians:

Canadian medical school	87.0%
International	13.0%

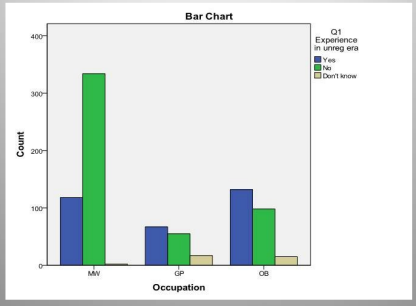
Education: mentors & curriculum

		Curriculum content			
	Taught by HB providers	**None**	**Favorable about home birth**	**Unfavorable about home birth**	**Both favorable & unfavorable**
Midwives	91.6%	5.7%	80.4%	1.3%	12.1%
Family Physicians	10.8%	75.5%	2.2%	10.8%	11.5%
OBs	16.7%	66.9%	1.2%	14.7%	17.1%

RM age compared to route to practice

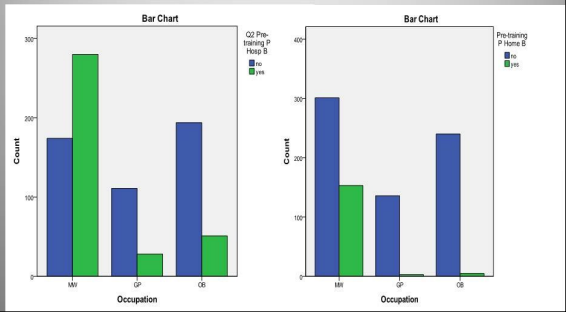


In practice before midwifery regulation



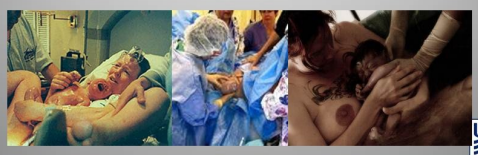
Pre-training birth attendance

HOSPITAL HOME



Intrapartum Practice Experience

	Physicians	Midwives
Home	2.3%	99.1%
Birth Centre	8.4%	39.7%
Hospital	86.4%	97.8%
Nursing station/ health centre	8.4%	12.4%



Rural providers in our sample

	Rural/remote
RM	13.3%
OB	6.4%
FP	16.5%
Total	68

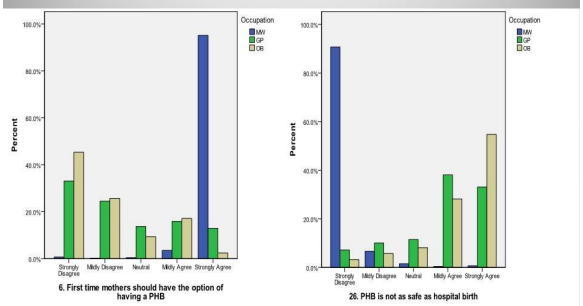
Primary Maternity Care in the Community

	Response by profession (%)		
In your community, there are:	**Midwife**	**GP**	**OB**
Midwives	82.9	71.9	78.8
Family Docs	94.3	95.0	91.0
OBs	88.8	78.4	86.9
Nurse Practitioners	26.2	16.5	16.3
Unregistered Midwives	20.0	10.1	15.1

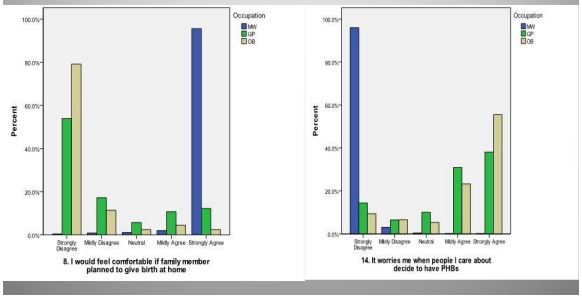
Knowledge about home birth

	Response by profession (%)		
Item	**MW**	**FP**	**OB**
Doppler	99.6	84.9	91.8
Epidural equipment	0	3.6	0.4
Epinephrine	90.5	44.6	31.4
IV solutions	98.7	60.4	73.5
Oxygen	99.3	81.3	78.0
Oxytocin	98.9	64.7	80.4
Suturing supplies	99.6	77.7	91.0
Narcotics	0.2	34.5	22.9

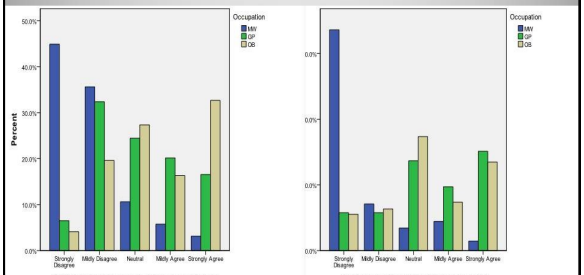
Attitude items: safety



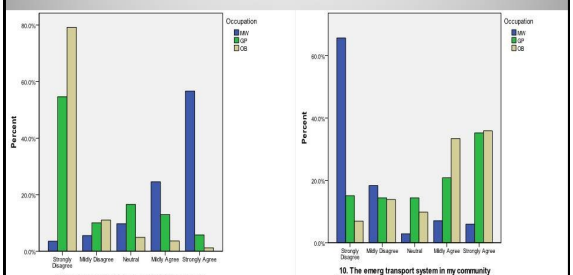
Attitudes: personal choices



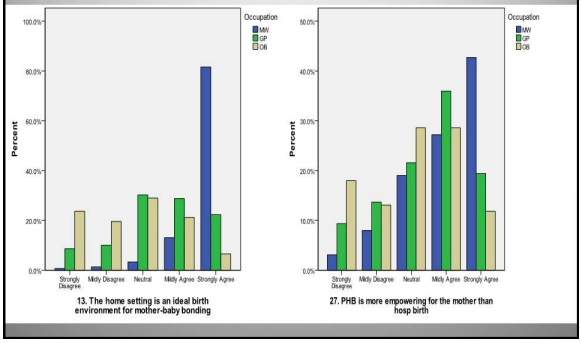
Attitudes related to rural practice



Attitudes related to rural practice



Attitudes: areas of agreement



Next phase: Focus groups & interviews

Focus groups in rural BC:

1) Nelson & Trail
2) Courtney/Comox
3) Squamish

With:

- Midwives, OBs, Family physicians, & nurses
- Hospital administrators, policymakers, & decision makers

Potential Impact of Study

Evidence-based maternity care

- *Curricula*
- *Interprofessional communication*
- *Policy and procedure*
- *Modeling*
- *Public Messaging and Access*
- *Cost-effectiveness*

Formulating Questions

Participants were split into three groups based on the Health Authority they practiced or worked in: Northern Health, Vancouver Island Health, and Interior Health. Each group was asked to brainstorm potential research areas that can be used to make rural midwifery practices more sustainable. A thematic overview of participant-generated research priorities was provided as a guide (Appendix B).

Common themes emerged from the group discussions, and, therefore, the following synopsis is thematically organized. The topics examined include: **Human Resource Planning, Inter-professional Collaboration in Maternity Care,** and **Better Support for Rural Midwifery Practice**.

HUMAN RESOURCE MANAGEMENT & PLANNING

CONCERN	ISSUE	AREA TO EXPLORE
Rural Community Recruitment	• Positions can only be advertised passively • Possible to recruit overseas but difficult to attract midwives to rural communities • Possible to recruit registered midwives that are practicing in other provinces but difficult because other provinces are also under served.	• Use RBI (Rural Birth Index) as template to create a formula that calculates the target number of midwives needed in rural communities as a form of active recruitment • Better incentives (i.e. Start Up Funds) to attract out-of-province and oversea midwives
Retirements & Replacement	• Difficult to replace retiring midwifery population and fill unmet needs with only 11 graduates a year from UBC Midwifery program • High attrition rate with recent midwifery graduates	• More funding to increase number of midwifery seats at UBC • Investigate reasons for high attrition rate
Locums	• Lack of a midwifery locum pool create burnouts in solo rural midwifery practice • Lack of locum availability, coverage, and training and orientation for locums add to the difficulty of the situation	• Use Rural GP Locum program as a template for setting up a rural locum program suitable for midwives

Kim Williams, Marty Willms, and Joanna Nemrava, during the working group session

INTERPROFESSIONAL COLLABORATION IN MATERNITY CARE

CONCERN	ISSUE	AREA TO EXPLORE
Sharing Role as Maternity Care Providers	• Need to focus attention on how best women's choice and care can be met and not on <u>who</u> should be providing care	• Compare attitude & ability for providers to see birth as a normal life event • Compare attitude towards midwifery practice (i.e. home birth)
Equal Treatment	• Equal treatment and understanding so midwives and physicians have a shared environment for incentives	• Reallocation of funds that is available from fee codes that are not used by physicians • Better integration of midwives into maternity departments
Public Relations for Midwives	• Physicians have questions regarding practice of midwives and have no one to turn to for answers • Misunderstanding of midwives and the scope of their practice still exists	• Provide a contact, as developed for Nurse Practitioners, for other providers if they have question about midwives' scope of practice • Showcase successful midwifery stories to advocate midwives' practice

Group discussion (from left to right): Jude Kornelse, Susan Illmayer, Kelly Hayes, Illene Bell, Laura Schummers, Debroah Kozlick

BETTER SUPPORT FOR RURAL MIDWIFERY PRACTICE

CONCERN	ISSUE	AREA TO EXPLORE
Sustainability of Current Remuneration Model	• Income lost due to transfers • Compensation not available for on call work • Difficulty to make living in low volume communities	• Add in a *Intent to Deliver* code • Develop a rural maternity on call group that includes midwives • Salary option for low volume communities
Rural Solo Practice for New Midwives	• No peers who understand your model of care to share ideas with • Unexpected responsibility and role of running a new business while trying to gain practice experience.	• The creation of a template or guide listing items associated with setting up an office, running a business and relationships to develop
Evidence for Midwifery Practices	• More evidence to show the benefits of midwifery care	• Investigate cost effectiveness of midwifery practice (i.e. saving on preventive care midwives provide, system savings due to better maternal outcomes) • Compare newborn readmission rates for cases followed by midwives versus cases followed by physicians

LOOKING FORWARD

Refocusing Funding and Attention on Maternity Care: Provincially, budgets dominate the discussion for spending. With a declining birth rate and aging population, it is difficult to make babies the priority. Recently attention and funding has been placed in chronic disease management, but what is missed is the link between pregnancy and the development of chronic diseases later in life. Focusing attention on the connection between chronic disease prevention and importance of healthy new born and maternal outcomes could garner interest and support.

Further Considerations: An overarching plan, where the ultimate goal is to develop a better maternity framework provincially, is needed. It is clear that the areas identified above resonates the discussion that had happened in previous symposia. Health Authority and Ministry of Health attendees were actively engaged in brainstorming solutions to the barriers discussed during the day. The only step left is to initiate the planning.

Laura Schummers, Research Coordinator at UBC Department of Midwifery and Deborah Kozlick, RM (closest table)

TRANSLATING RESEARCH INTO KNOWLEDGE

Dr. Anne-Marie Nichol, from the School of Public Health at the University of British Columbia, and **Kathrin Stoll**, from the Canadian Journal of Midwifery Research and Practice, highlighted the methods and medium where midwifery research can be effectively translated into knowledge for practice.

The Role of Knowledge Translation and Effective Communication

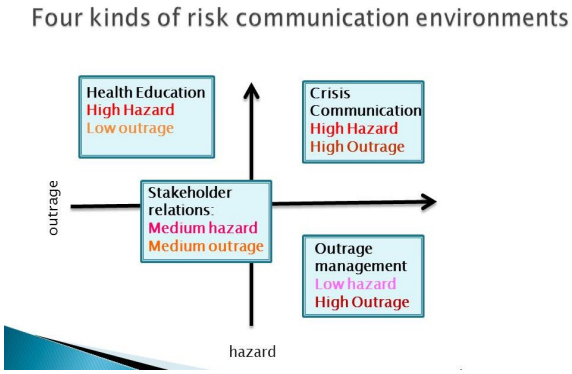
Dr Anne-Marie Nichol, Assistant Professor, UBC School of Population and Public Health

Dr Nichol defined knowledge translation as an important step in taking evidence and presenting it to policy makers. There are often challenges that are faced in taking this step by any group, not just midwives. In order to effectively translate and present information, Dr Nichol advised the group to be aware of four key elements when attempting to translate research into knowledge.

Framing your message

"How you frame a risk makes a difference." The way to catch policy makers' attention is to make an economic argument. If the information is presented in financial terms, people will listen, as this is the language decision makers are familiar with and understand.

Pilot projects can be a useful way in framing your message. It often makes a more significant impact in how the evidence is viewed than presenting passive observations. If a city or a town becomes involved in a project and it works, people will pay attention as it can be used as a concrete example. However, there is danger in doing pilot projects. This is the case when a project is started and it worked, but it is later removed as the pilot ended. It often does more damage than if it never happened in the first place.



Being aware of what your message can provoke

As illustrated by Peter Sandman's quadrant in health risk communication, risk is hazard plus outrage. Outrage can be defined as feelings, perceptions, affect, likes, trust, fear; and, hazard is the technical probability of risk. The paradox of this equation of risk is that people tend to be less upset about the things that actually kill them. For instance, heart disease and stroke do not generate outrage;

whereas, rare events, like mad cow disease and vaccination adverse effects, cause much more outrage. Attempting to communicate health risk or messages to change people's behavior can be difficult, and, therefore, it is important to think about how the message is going to be received.

Adapting your message for your audience

Different audiences, different messages: Crafting messages differently depending on the target group will make knowledge translation easier – when you are speaking the same language as your audience, that is when people start to listen. Though one-to-one communication is most effective in adapting your message, picking a community that is willing to listen is a great way to start.

Picking the messenger

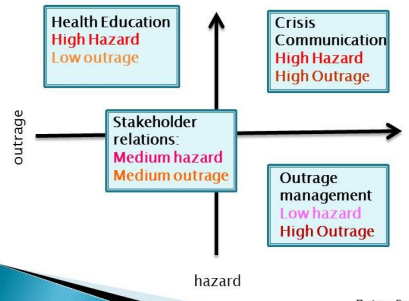
One final element in knowledge translation is to know who to deliver the message. Advocating, for instance, the safety of home births, from midwives might look like self-interest promotion. This is as opposed to Health Authority advocacy which can be viewed as having less of a vested interest and objective.

Dr Anne-Marie Nicol

Knowledge Translation and Low Prevalence Diseases

Anne-Marie Nicol, Phd
Assistant Professor
School of Environmental Health, UBC

Four kinds of risk communication environments



Peter Sandman, 2009

The challenges of the low prevalence risk paradigm

- Low prevalence diseases tend to fall into two categories
  - High outrage:
    - High emotional upset a risk even though the hazard is only moderate on a population scale
  - Low outrage:
    - Low overall interest in condition even though the outcome may be higher than anticipated or novel

Low outrage communication

- How do you get people to care or pay attention?
  - Social Marketing and Health Promotion
    - Not easy to get people to care
    - Comprehensive campaigns, branding
  - Media is often your friend in this case
    - Can transmit messages effectively
    - You get to control the messages
      - Defining risks rather than responding to them
- TARGETED Messaging: most cost effective
  - Communicate directly to those most at risk
    - High exposure communities, high risk sub-populations
      - Can feel uncomfortable

Low outrage examples

- Where public and/or media attention to the issue is low to non-existent
  - C. gattii
  - Mesothelioma
- Environmental exposures/pathogen issues often fall into this category
  - Challenges of getting people to care about Radon
    - Second leading cause of lung cancer in Canada

Low prevalence KT issues

- May hamper diagnostic capacity
  - Do doctors have information?- Medical education
- Misattribution of disease
  - Lost health care dollars
    - Occupational (asbestos=cancer, wood dust= asthma)
    - Inappropriate and expensive treatment
- Small groups of people can co-opt authority
  - Facilitated by Internet health seeking behaviors
    - People find different treatment regimes elsewhere
      - Large evolution of patient groups
    - CAN increase Outrage
      - Fairness and justice issues very important factors
      - VERY IMPORTANT FOR PATIENT AND PARENTS

From low to high: outbreaks

- Environmentally mediated diseases can evolve into outbreaks or disease clusters
- Poses significant communication challenges
  - TRUST: local health agencies need to appear trust-worthy in order to navigate these conditions
    - Reduces outrage
  - COMMUNICATE EARLY AND OFTEN: you need to set the stage, not the patient group
- Can you be prepared?
  - How to justify spending on "potential" risk communication?
  - Media surveillance may be an option

An emerging exposure: example

High levels of cadmium found in area oysters

Expert calls for stricter control

by Kyle Wells | reporter@prpeak.com

Published: Wednesday, December 29, 2010 10:12 AM PST

A recent report from a Simon Fraser University professor criticizes the oyster farming industry for ignoring dangers associated with the presence of cadmium in its product and points to Desolation Sound as a particular "hot spot" for the potentially harmful substance.

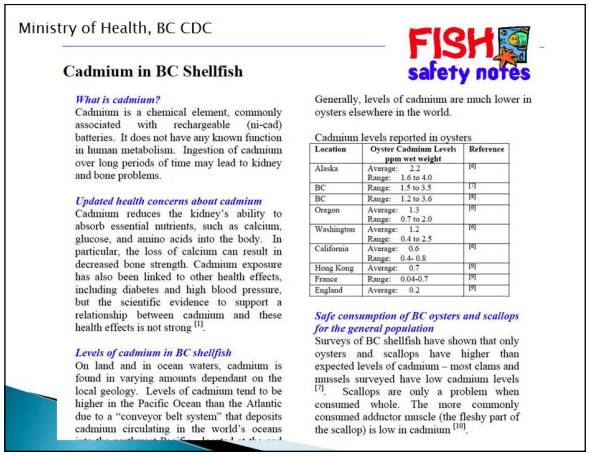
Leah Bendell, who specializes in ecotoxicology and biological sciences, published an article in a recent *Toxicology Letters* journal issue entitled "Cadmium in shellfish: The British Columbia, Canada experience." In the article Bendell writes about high levels of cadmium in BC oysters and about the industry's reluctance to tackle the issue directly.

Bendell's research took place over a three-year period and in relation to 25 specific areas. She and her researchers examined more than 2,000 oysters over the course of her study and found an average level of 2.23 micrograms of cadmium per gram of oyster. The Canadian Food Inspection Agency in its own study found an average of 2.6 micrograms per gram, the level on which that Health Canada bases its own consumption rates.

Bendell's research revealed Desolation Sound to have higher levels of cadmium in oysters compared to other regions. It's hard to say why this is but Bendell said research suggests Desolation Sound oysters are getting their cadmium from a terrestrial source rather than a marine source. Within the sound, Bendell points to Redonda Bay, Thors Cove and other areas as particularly worrisome.

CADMIUM CONCERNS: A new report singles out oysters from Desolation Sound as having particularly high levels of cadmium, a metal that can lead to health problems if consumed in high concentrations.

Powell River News, December 2010



High Outrage issues

- Requires outrage management:
  - Aim to reduce anger
    - Techniques: listening, acknowledging, apologizing, sharing control/credit
  - Anger reduction necessary to impart risk messages
    - No one listens when they are upset
  - Preferred communications channels
    - Getting involved with the angry people
      - Can be very uncomfortable for communicators
  - News media often makes this situation worse
    - Pitting groups and opinions against each other makes for good news- bad news for you

The patient group contribution

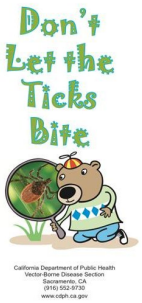
- Grass roots patient groups
  - More prevalence, vocal and organized
  - This is a reality: doesn't matter if its good or bad
- Troubling trend of funding via pharma
  - Rare disease with expensive treatments which have uncertain effectiveness
    - Lobbying for access to drugs with unknown efficacy
- Evokes concepts of FAIRNESS and JUSTICE
  - These are known to increase outrage
  - Media feeds on this sort of story
- How can patients navigate complex treatment options?

The UBC/ BCCDC "Tick-Talk"

- Increasing incidence of ticks in BC
  - Potential for greater contact and tick borne disease
- How to talk when there are outraged people?
  - We chose not to
- UPSTREAM knowledge translation
  - How can we educate people to reduce risk?
    - Reduce exposure -> reduces disease
    - Commonly used tactic in other infectious diseases

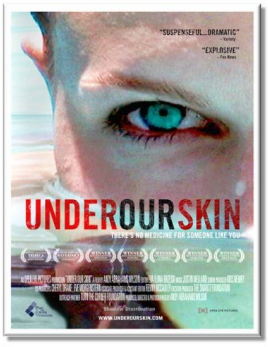
Current Tick Communication Landscape

- Environmental scan of government sponsored tick awareness programs
  - Particularly visual
- Results
  - Predominantly print
    - Elementary school-based curricula in California, Ontario
  - Federal Governments
  - Other
    - Novel program with "tick entertainment" found to be effective in Massachusetts (RCT, 2007)



Ticks and Lyme Disease

- Documentary film
  - "Telling stories through rich and poetic imagery"
- Classic Topic:
  - Political
  - Emotional
  - Controversial
- Persuasive to uninformed audiences



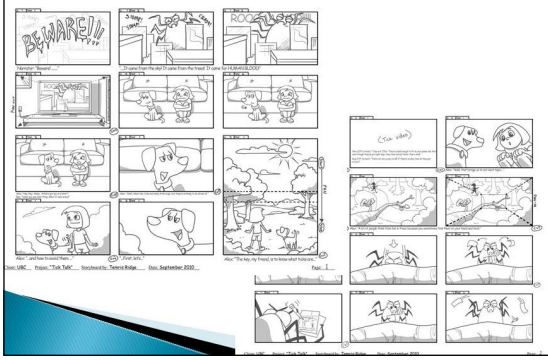
Noisy Visual Landscape…

- Large number and range of tick videos
  - Professional videos focused on lyme disease and people with lyme-like symptoms
  - Amateur "horror" films starring ticks
    - Kids, pets and ticks
  - Wrong tick removal techniques
  - Nature films
- Perpetuation of tick myths

The "Tick Talk"

- Team of academics, public health and professional animation producers
- Refine messages
- Began with character development
  - Tailored to children
    - Consistent with current popular media
- Generated a storyline for characters
  - emphasis on identification by audience
    - Emotional engagement aids message uptake

Script development…



Address of cultural norms

- Super-villains (or not-so-super-villains)
  - Tangentially address the scary bug factor
  - Video deconstructs this concept through humour
- Grossness factor
  - Child notes that ticks are gross
- Music
  - Uses popular local children's musician

Next Steps

- Develop outreach materials
  - Web resources
  - Brochure with key messages
  - Short school curriculum (work with local school boards in endemic areas)
  - PSA on local programming
  - Integrate into existing programs (Treehouse)

Thanks to:

- The members of the tick team: Temris Ridge, Jack Teng, and Christie Hurrell
- The SFU Communication 428 students for the voices of Alex, Raji, and the TV Announcer
- Dann Thombs for the live tick video
- The Canadian Centre for Agricultural Health and Safety and CIHR for funding

Midwifery Research: Why you should get involved

Kathrin Stoll – Co-Editor, Canadian Journal of Midwifery Research and Practice

Kathrin provided a short presentation on the importance of building midwifery research. Examples of where midwifery research and the type of research that have been conducted were also given. This helped illustrate the utility of research in practice.

Building Midwifery Research: Five reasons for developing an evidence base for midwifery practice

1) **Raises the profile of the midwifery profession,** which in turn contributes to the growth of the profession, and informs obstetric practice
2) **Promotes normal birth,** which can better educate maternity care consumers about birth and options
3) **Improves practice conditions.** Proceedings from last midwifery symposium identified barriers to practice and offered solutions for a sustainable future for rural midwifery
4) **Informs health research and funding allocations,** as evidence is essential when communicating with decision makers and stakeholders for recommendation and planning of maternity services
5) **Encourages more midwives to be involved in research,** which potentially: Implicates greater involvement and ability for midwives to compete for federal research grants and collaborate with other health care providers and non-clinicians

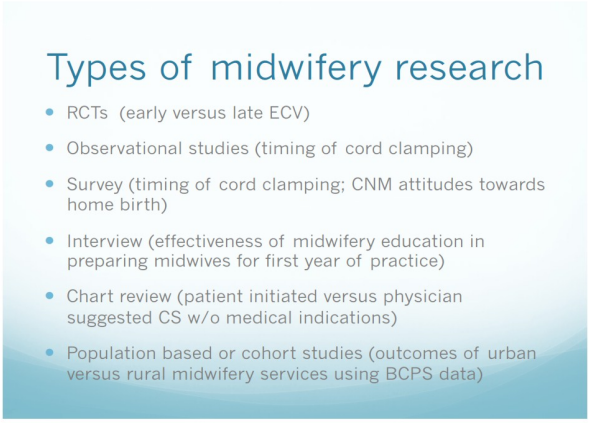
A wide range of research designs has been used to conduct midwifery research, including:

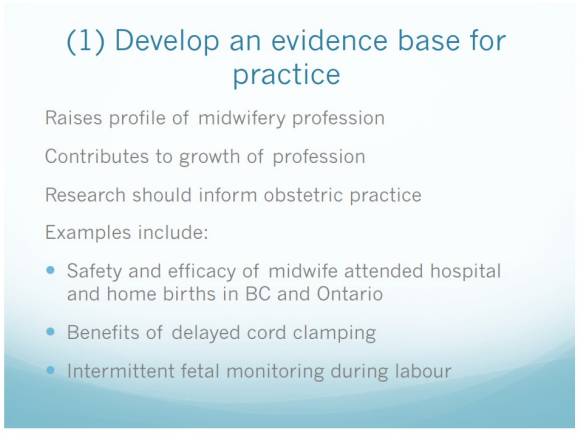
Type of Research	Example
Randomized Controlled Trials	*Early versus late external cephalic version*
Observational Studies	*Timing of cord clamping*
Survey	*Timing of cord clamping: Certified nurse-midwives attitudes towards home birth*
Interview	*Effectiveness of midwifery education in preparing midwives for first year of practice*
Chart review	*Patient initiated versus physician suggested C-Section without medical indications*
Population based/ Cohort studies	*Outcomes of urban versus rural midwifery services using BC Perinatal Services data*

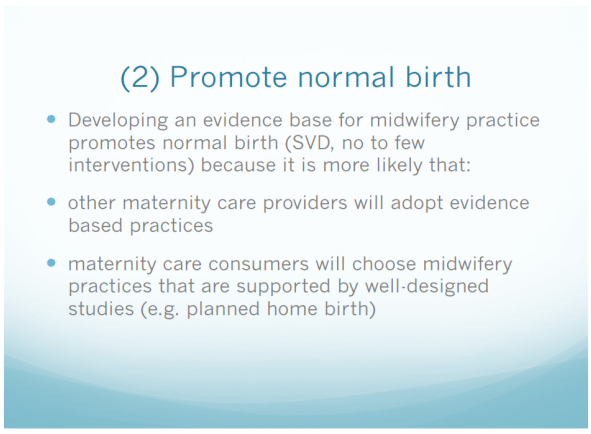
Knowledge Translation in Midwifery Research

There are several midwifery and obstetric journals available and are mainly affiliated with professional organizations. The Canadian Journal of Midwifery Research and Practice (CJMRP) was developed ten years ago by Dr Jude Kornelsen and Dr Eileen Hutton with the mandate to act as a forum for both experienced and new researchers to share research output and clinical experience.

A high percentage of articles contain Canadian content and many are authored or co-authored by midwives. By expanding research capacity in midwifery and engaging midwives, researchers, Health Authorities and policy makers in the research process, it can ultimately contribute to the growth of the profession.







(3) Improve practice conditions

- Proceedings from last midwifery symposium identified barriers to practice and offered solutions for a sustainable future for rural midwifery.
- Paper was published in CJMRP; is helpful for key stakeholders and policy makers in determining ways to reduce barriers to practice.

(4) Inform health resource allocations

- Midwifery research is essential in planning for maternity services. Examples include:
- Studies of consumer demand for midwifery
- Studies of retention issues in midwifery
- Cost effectiveness of midwifery care?
- Lack of access to midwifery services in rural BC

(5) Need for midwifery researchers

- Very few midwives trained in research

  (lack of time and midwifery graduate programs)
- This has implications for:
- training the next generation of midwifery researchers
- midwives' ability to compete for federal research grants
- collaborating with other health care providers and non-clinicians

KT in Midwifery Research

- Several midwifery and obstetric journals
- Many are affiliated with professional associations:

  ACNM: Journal of Midwifery and Women's Health

  CAM: Canadian Journal of Midwifery Research & Practice

Small operation

- 2 volunteer editors
- 1 part time managing editor
- 1 part time admin person
- Translator
- Advisory committee
- Peer reviewers

Who receives the CJMRP?

PRINT (1200)

- All Canadian midwives registered with CAM
- International midwifery education programs

Immediate ELECTRONIC access (articles only)

- Researchers, academics and students world wide through Ebsco

Delayed ELECTRONIC access on www.cjmrp.com

Online archives

Content

- High % of Canadian content, French content
- Most articles authored or co-authored by midwives
- Articles relevant to midwifery practice, policy and organization
  Significant provincial news – milestones, achievements, updates
  Collaborative activities
  Editorials, dialogues and/or commentaries
- Forum for both experienced and new researchers
- Consider CJMRP as a venue for publication for your research and for a collaborative paper based on the proceedings of this symposium

Conclusion

- Midwifery research is in its infancy in Canada
- We want to establish a strong presence of midwifery researchers; so that research can inform practice and vice versa.
- By expanding research capacity in midwifery and engaging midwives, researchers, HAs and policy makers in the research process we contribute to the growth of the profession.

Appendix 1

Midwives	
Leah Barlow, RM	Cranbrook
Ilene Bell, RM	Nelson
Jane Blackmore, RM	Cranbrook
Karin Gerlach, RM	Prince George
Kelly Hayes, RM	Salt Spring
Sarah Hilbert-West, RM	Quesnel
Sheila Jager, RM	Campbell River
Alyson Jones, RM	Penticton
Deborah Kozlick, RM	Courtenay
Celina Laursen, RM	Haida Gwaii
Joanna Nemrava, RM	Kamloops
BC Ministry of Health Services Representatives	
Susan Illmayer	Program Manager, Allied Health Human Resource Planning
Effie Henry	Director, Performance Accountability
Zeb King	Senior Policy Analyst, Allied Health Human Resource Planning
Alex Scheiber	Director, Performance Accountability
Richele Shorter	Director, Performance Accountability
Presenters & Other Stakeholders	
Elaine Carty	Professor Emeritus, UBC Divisions of Midwifery & School of Nursing
Ganga Jolicoeur	Executive Director, Midwives Association of BC
Ruth Johnson	Network Director, Perinatal, Interior Health Child Health Services
Anne-Marie Nicol	Assistant Professor, UBC School of Population and Public Health
Shannon Norberg	President, Midwives Association of BC
Erin O'Sullivan	Leader, Perinatal Program Development, Vancouver Island Health Authority
Rose Perrin	Perinatal Program Executive Lead, Northern Health Authority
Laura Schummers	Research Coordinator, UBC Divisions of Midwifery
Kathrin Stoll	Co-Editor, Canadian Journal of Midwifery Research and Practice
Saraswathi Vedam	Director, UBC Divisions of Midwifery
Kim Williams	Director, Perinatal Services BC
Marty Willms	Leader, Provincial Networks, Perinatal Services BC
Centre for Rural Health Research Team	
Leslie Carty	Project Manager
Jude Kornelsen	Co-Director
Barbara Lai	Research Assistant
Ashley Love	Research Assistant

Appendix 2

Theme	Other Priority
Rural practice	What is the minimum number of midwives to support a rural practice in terms of sustainability, lifestyle, safety, mental and physical health?
	How do we begin building a sustainable local program for midwives?
	What are the different demands of a rural practice relating to travel, weather conditions, satellite phones, etc?
	Is it sustainable for rural midwives working solo or in small practices? How to best take time off for CME and personal time.
Cost-effectiveness	What are the cost savings of midwifery care? Can we research a cost analysis of the midwives course of care?
	We need updated figures and a broad approach looking at the cost savings of home birth, savings of out of hospital care and assessment, savings from early discharge and lack of readmission rates.
	Do midwifery clients who breastfeed longer provide any cost savings to the health care system? Do midwifery patients breastfeed longer than non-midwifery patients?
Funding	Are there other salary models for rural midwives across Canada? How do we sustain a living billing MSP in communities that have obstetricians and midwives?
	Research into alternative inter-professional funding models / special projects in existence that may support sustainability of midwives in lower volume communities.
Integration	What are the best ways for midwifery integration into rural communities? How do midwives start up a new practice where there haven't been midwives before?
	Do we establish / create collaborative care in a rural setting and research related to physicians covering midwifery clients / midwives covering physician clients / remuneration / client impact?
	Assessment of and prioritization of communities suitable for integration of midwifery care. Needs analysis of community for maternity care needs.
	Assessment of and prioritization of communities suitable for integration of midwifery care. Needs analysis of community for maternity care needs. Needs analysis from midwife's perspective – what is required to support integration, practice set-up and sustainability.
Locums	How can we support a rural midwifery locum program? What is needed to train locums, and where can we get midwife locums with experience.
Education	Is there any extra training that would be useful for midwives planning to practice in rural and remote communities?
	How can we support the transfer of knowledge and continuity from retiring midwives to newer midwives in rural communities?
Perceptions of midwives	What are physicians' perceptions of registered midwives? Research related to perceptions of training, experience / knowledge / remuneration / midwives as primary caregivers
Midwives' experiences	Qualitative analysis on experiences of rural midwives during integration and practice in rural communities. When rural midwifery care / practice was abandoned assess why, what the challenges were, why financially/functionally non-viable to remain in practice.


Centre For
Rural Health
Research