

Perinatal Services BC's 3rd Biennial Conference

Healthy Mothers and Healthy Babies

Working Together to Improve
Perinatal Outcomes

SYLLABUS

HOSTED BY:



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



THE UNIVERSITY OF BRITISH COLUMBIA

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Healthy Mothers and Healthy Babies

Working Together to Improve Perinatal Outcomes
March 1 - 2, 2018



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DESCRIPTION

This conference is hosted by Perinatal Services BC, an agency of the Provincial Health Services Authority. It is an opportunity for health care professionals interested in the care of pregnant and postpartum women and their newborns to be updated on new research and clinical best practices across the continuum of perinatal and newborn care. This conference will engage health care professionals from a wide range of disciplines in knowledge transfer and interprofessional collaboration in order to provide the best care possible and ensure healthy mothers and babies. The format will include plenaries, breakout sessions, poster sessions, and networking opportunities.

CONFERENCE OBJECTIVES

As a result of attending this conference, participants will be able to:

- Review clinical best practices and new research acquired from researchers, experts, women and their families, and fellow participants, that will enhance shared decision making with pregnant and postpartum women
- Reflect on five new developments across the continuum of care from conception to postpartum that will impact clinical practice
- Discuss current surveillance and system improvements in perinatal services that are relevant to improving maternal/fetal and newborn outcomes
- Integrate knowledge learned by engaging in dialogue with other health care professionals from a range of disciplines, as well as women and their families

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Perinatal Services BC (PSBC) provides leadership, support, and coordination for the strategic planning of perinatal services in British Columbia and is the central source in the province for evidence-based perinatal information.

The Midwives Association of BC

The Midwives Association of British Columbia (MABC) is the professional association for midwives in BC. The MABC's objectives are to: promote the profession of midwifery within the province of British Columbia; advocate for the ongoing development and enhancement of midwifery services; provide continuing education opportunities for its members; provide professional services to its midwives, including liability insurance and representation in matters of remuneration and benefits; support midwifery education programs which are provincially available, broad based, accessible and affordable; represent the interests of midwives and the profession of midwifery.

The Canadian Agency for Drugs and Technologies in Health (CADTH)

CADTH is an independent, not-for-profit organization responsible for providing health care decision-makers with objective evidence to help make informed decisions about the optimal use of health technologies, including: drugs diagnostic tests medical, dental, and surgical devices and procedures. In addition to evidence, CADTH also provides advice, recommendations, and tools.

Optimal Birth BC

Optimal Birth BC summarizes and communicates the best and most recent evidence to inform women and their care providers about normal childbirth. Optimal Birth BC has partnered with BC Health Authorities to offer SmartMom, a text-messaging program to deliver prenatal information timed to be salient to gestational age. The overall goal of the SmartMom is to support women in making evidence-informed decisions to improve their perinatal health and enhance utilization of local resources/supports to improve maternal and child health outcomes.

The College of Midwives of British Columbia

The College of Midwives of BC (CMBC) regulates the midwifery profession under BC's Midwives Regulation, Health Professions Act and CMBC bylaws. CMBC's legal obligation is to protect the public through the regulation of registered midwives, setting standards of practice, recognizing midwifery education programs, and addressing complaints about CMBC's registrants.

The Pacific Post Partum Support Society

Pacific Post Partum Support Society has been supporting mothers and their families experiencing postpartum/perinatal distress, depression and anxiety for over 45 years. The program started in 1971 as a grass roots initiative when a small group of women began meeting at the Vancouver Crisis Line office to support each other around postpartum issues. This established the pattern for our treatment model: mothers supporting mothers.

GPSC Maternity Working Group

The GPSC's Maternity Working Group promotes and supports the sustainability of family practice maternity care. This is done via the Maternity Care 4 BC (MC4BC) Program, Maternity Network, evaluating, monitoring and recommending GPSC incentive fees relating to FP Maternity care and women's reproductive health. Furthermore, the Group identifies opportunities for collaboration and engagement with Divisions of Family Practice and other organizations and initiatives.

The BC Centre on Substance Use

The BC Centre on Substance Use (BCCSU) is a provincially networked organization with a mandate to develop, help implement, and evaluate evidence-based approaches to substance use and addiction. Building on the extensive efforts of the BC Centre for Excellence in HIV/AIDS, the BCCSU's vision is to transform substance use policies and care in BC by translating research into education and evidence-based care guidance. By supporting the collaborative

development of evidence-based policies, guidelines and standards, the BCCSU seeks to improve the integration of best practices and care across the continuum of substance use, thereby serving all British Columbians.

Centre of Excellence for Women's Health

The Centre of Excellence for Women's Health will be sharing materials to support practice and policy on substance use and maternal health, developed in the course of two recent Pan-Canadian projects: 1) the Dialogue to Action on Discussing Substances with Women project funded by the Public Health Agency of Canada and 2) a national forum on Indigenous approaches to FASD prevention, which received funding from the Canadian Institutes of Health Research.

Fraser Health

Located in Metro Vancouver and the Fraser Valley, one of the most livable regions in the world, Fraser Health is one of Canada's largest and fastest growing health authorities. Over 1.6 million people – 1/3 of BC's population is served by 33,000 dedicated professionals in our 12 hospitals and other facilities.

BC Centre for Disease Control Immunization Program

Will provide information on BC immunizations and resources for health care professionals and the public.

The British Columbia Institute of Technology

The Neonatal and Perinatal Specialty Nursing Advanced Certificate programs offered at the BCIT are the benchmark for specialty practice in BC. The neonatal program equips nurses to care for infants who are in the first month of their lives and need hospitalization in neonatal nurseries and neonatal intensive care units (NICUs). The perinatal program provides technical expertise, sensitivity, and excellent communication skills to effectively support women in a dynamic and, at times, unpredictable work environment.

Northern Health

At Northern Health, we build for the future. Acquiring and retaining high-quality talent is a high priority for our organizations success. Our vision of building a strong primary health care system will create a dynamic work environment that challenges all of your skills. Meaningful and rewarding careers, and an outstanding quality of life await!

The Society of Obstetricians and Gynaecologists of Canada

The Society of Obstetricians and Gynaecologists of Canada (SOGC) promotes excellence in obstetrics and gynaecology and advances the health of women through leadership, advocacy, collaboration, outreach and education. We represent a wide variety of health professionals working in the field of sexual reproductive health.

The Women's Health Research Institute

The Women's Health Research Institute is devoted to improving the health and health care of girls and women through knowledge generation, serving as a catalyst for research in women's health and supporting an expanding provincial and national network of women's health researchers, policy makers and healthcare providers. The Women's Health Research Institute is the research arm of BC Women's Hospital and the face of women's health research for the Provincial Health Services Authority.

The British Columbia Nurses' Union

The BC Nurses' Union protects and advances the health, social and economic well-being of our members, our profession and our communities. We are the largest nursing organization in BC, and the only union to offer services to nurses related to all four domains of nursing: research, clinical practice, leadership, and education. We are committed to defending nurses' individual rights as well as the nursing profession, and are the only health care union that has a long and successful track record of gains in wages and working conditions.

PROGRAM AT A GLANCE

THURSDAY, MARCH 1

7:00 AM - 8:00 AM	Registration and Breakfast
8:00 AM - 9:00 AM	Traditional Welcome and Opening Remarks
9:00 AM - 10:00 AM	Plenary by Belinda Fu
10:00 AM - 10:30 AM	Break
10:30 AM - 12:00 PM	Concurrent Sessions A (<i>Page 4</i>)

A1i (45 Minute Session) <i>Improving the Health Care Response to Gender-based Violence</i>	A2i (45 Minute Session) <i>First Nation Families and Health Care Providers – Walking the Perinatal Journey Together</i>	A3i <i>SmartMom: Texting for Prenatal Education</i>	A4i <i>Newborn Sepsis: Who Needs Treatment?</i>
A1ii (45 Minute Session) <i>Cultivating Resilience: Maternity Care Providers Mitigate Intergenerational Impacts of ACEs</i>	A2ii (45 Minute Session) <i>Building Blocks for Sustainable Rural Maternity Care</i>	A3ii <i>Is Your Prenatal Ultrasound Department Family-Centred? Why You Should Care and What You Can Do</i>	A4ii <i>Sudden Unexpected Postnatal Collapse</i>
		A3iii <i>Developing Provincial and National Breastfeeding Protocols: A Cross-Organizational...</i>	A4iii <i>Shaping Health Equity Practice: A Review of Key Perinatal Documents in British Columbia (2002-2017)</i>

12:00 PM - 1:00 PM	Lunch
1:00 PM - 1:30 PM	Poster Session
1:30 PM - 3:00 PM	Concurrent Sessions B (<i>Page 6</i>)

B1i <i>Immigrant Women and Reproductive Mental Health Care Access: An Environmental Scan</i>	B2i <i>Pasteurized Donor Human Milk: When Do We Use and When Do We Abuse?</i>	B3i (45 Minute Session) <i>Informed Decision Making for Next Birth after Caesarean Section</i>	B4i <i>Legalization of Cannabis: Implications for Maternal and Infant Health in BC and Emerging Best...</i>
B1ii <i>Interventions That Improve Maternity Care for Immigrant Women in England: A Narrative Synthesis...</i>	B2ii <i>Domperidone for Breastfeeding: What Does the Evidence Tell Us?</i>	B3ii (45 Minute Session) <i>Forceps, Vacuum, or Cesarean? Evaluating Mode of Delivery Options Following an Arrest in Labour</i>	B4ii <i>Are We Over-Treating Infants with Neonatal Abstinence Syndrome?</i>
B1iii <i>MotherFirst: Maternal Mental Health Strategy for Saskatchewan</i>	B2iii <i>Baby-Friendly Re-Designation: Not All Sunny Ways and Sunny Days!</i>		B4iii <i>Clinical Management of Opioid Use Disorder in Pregnant Women</i>

3:00 PM - 3:30 PM	Break - Exhibits Open, Poster Viewing
3:30 PM - 4:30 PM	Plenary Session by Cindy-Lee Dennis
4:45 PM - 7:00 PM	Networking Reception <i>(Held at the Conference Hotel)</i>

PROGRAM AT A GLANCE

FRIDAY, MARCH 2

7:30 AM - 8:00 AM	Registration and Breakfast
8:00 AM - 8:30 AM	Opening Remarks and Door Prizes
8:30 AM - 9:30 AM	BC Success Stories Panel
9:30 AM - 10:30 AM	Plenary by Chelsea Elwood
10:30 AM - 11:00 AM	Break
11:00 AM - 12:30 PM	Concurrent Sessions C (Page 10)

C1i <i>Healthy & Home: A Program for New Mothers</i>	C2i <i>Shifting the Public Health Nursing Care Paradigm in Island Health: The Mother's Story</i>	C3i (45 Minute Session) <i>Rolling into Parenthood: Key Physical, Mental Health and Breastfeeding Considerations When Working...</i>	C4i <i>HerWay Home: Lessons Learned and Promising Practices for Supporting Perinatal Substance Using Women...</i>
C1ii <i>Smoothing the Transition from Hospital to Home - Innovative Strategies to Prepare for Parenting...</i>	C2ii <i>Walking Together: A Participatory Action Research Approach to Developing Physical Activity...</i>	C3ii (45 Minute Session) <i>Benefits of Kangaroo Care: Patient and Provider Perspectives</i>	C4ii <i>Mobile Maternity (MoM) - A New Kind of Telehealth</i>
C1iii <i>Can the "ABC's for New Parents" book, Developed through an Interprofessional Collaboration...</i>	C2iii <i>MOREOB in BC: Improving Outcomes During Large Scale Change</i>		C4iii <i>Evaluating the Impact of Enhancing Prenatal Healthcare Services: The BC Experience with Publicly-funded...</i>

12:30 PM - 1:30 PM	Lunch & Poster Viewing
1:30 PM - 3:00 PM	Concurrent Sessions D (Page 13)

D1i <i>Place of Birth: Examining Interprofessional Conflict vs Effective Collaboration Controversy among ...</i>	D2i (45 Minute Session) <i>Engaging with the Truth and Reconciliation Commission Call to Action #33: Dialogue on FASD...</i>	D3i <i>Applying an Adverse Childhood Experience (ACE) Lens to the Postpartum Population</i>	D4i <i>Motherwise Fills Gaps for Moms at Risk</i>
D1ii <i>Reduced Prevalence of Small-for-Gestational-Age Birth For Vulnerable Women: A Study of Midwifery versus...</i>	D2ii (45 Minute Session) <i>Support in the Perinatal Period for Women Struggling with Addiction: A Trauma Informed Approach</i>	D3ii <i>The BC Healthy Connections Project (BCHCP): A Scientific Evaluation of Nurse-Family Partnership in Canada</i>	D4ii <i>Childbirth Education: Building Women's Capacity</i>
D1iii <i>Barriers to Addressing Perinatal Mental Health Issues in Midwifery Settings</i>		D3iii <i>The Childbirth Fear Questionnaire (CFQ): A New Measure of Fear of Childbirth</i>	D4iii <i>Stakeholder Consultation: Quality Process in the Production of Quality Improvement Maternity Education...</i>

3:00 PM - 3:30 PM	Break - Exhibits Open, Poster Viewing
3:30 PM - 4:30 PM	Plenary Session by Louis Francescutti
4:30 PM - 5:00 PM	Closing Remarks, Door Prizes and Evaluation

Plenary Improvisation and the Art of Medicine: Adaptable Skills for an Uncertain World

Belinda Fu

Learning Objectives:

1. Define medical improvisation and its relevance to medical practice and education
2. Describe the core skills of medical improvisation
3. Explain the relevance of improvisation to wellness and resilience

Abstract

The practice of medicine is unpredictable. Every day, clinicians must communicate with an ever-changing cast of patients and colleagues, in ever-changing environments and circumstances. To practice compassionate, collaborative medicine in this environment, clinicians must constantly think on their feet in order to navigate difficult situations, and care for others while caring for themselves. In other words, clinicians must improvise. Improvisation is the expertise of adaptation, a cultivated intuition that guides spontaneity. Medical improvisation is the adaptation of improvisational theatre training methods to the healthcare context, promoting collaborative patient care through improved communication, cognition, and wellbeing. In this session, Dr. Belinda Fu describes her experiences with Medical Improv as a physician, patient, and educator, and explains its power to improve communication skills through experiential learning. With compelling stories and interactive exercises, she explores how improvisation can increase awareness of emotional cues, create rapport through affirmation, and improve one's ability to thrive in unpredictability. Belinda shares personal examples of how improv skills can deeply connect clinicians to the humanity of others during the complex communication challenges that pervade the practice of medicine.

Resources

Core Principles of Improv (selected)

- You don't have to be "original", "creative", or "impressive".
- You have & know everything you need.
- Support each other; make each other look good.
- There are no mistakes, only gifts and opportunities.
- "Yes, and"

References / Suggested Reading

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Speaker Information

Belinda Fu, M.D. is a Clinical Assistant Professor in the Department of Family Medicine at the University of Washington, Residency Faculty at Swedish Family Medicine–First Hill, and founder of The Mayutica Institute, an educational training company. She received her BA at Stanford University, her MD from the University of California, San Francisco, and completed her residency and faculty development fellowship at the University of Washington. Dr. Fu is a professional actor, and a Theatresports™ ensemble member and improv instructor at Seattle’s Unexpected Productions. She speaks and teaches about medical improv, physician communication, and clinical teaching at regional and national events. Dr. Fu co-organized the first Annual International Medical Improv Train-the-Trainer Workshops, and is a cornerstone of the international medical improvisation community.

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A1i Improving the Health Care Response to Gender-based Violence

Presenters: Ann Pederson, Stephanie Bouris, Nancy Delgado, Kate Rossiter

Learning Objectives:

1. Describe the responsibility of the health sector with respect to IPV in the perinatal period
2. Identify some of the key signs of gender-based violence
3. Understand the LIVES approach as a tool for engaging with women who may have experiences of or be experiencing IPV

Synopsis

Panelists from the Ministry of Health, Population Health Promotion at BC Women's, and Interior Health's Maternal Child Health program will speak about the design, content, and implementation of a new online course to support maternity health care providers working with women who are experiencing or have survived gender-based violence.

Abstract

Background

Globally, it is estimated that the lifetime prevalence of intimate partner violence (IPV) is 30 percent while two-thirds of Canadians report knowing someone who has experienced IPV. IPV against women is associated with short- and long-term physical and psychological harms to both women and their children. Women are at increased risk of IPV during pregnancy, making it imperative that health care providers are aware of the signs of this and other forms of gender-based violence and are able to respond appropriately.

Methods

This panel presentation will report on a knowledge translation project to create an online course to improve the health sector's response to gender-based violence.

Results

Women have reported being willing to disclose gender-based violence to health care providers but not being asked. The LIVES approach, developed by the World Health Organization, offers a systematic, woman-centered model to guide health care providers to support women who are pregnant or mothering and have had experiences of or are experiencing gender-based violence.

Conclusion

The health sector is an important resource for pregnant women and mothers who have experiences of gender-based violence.

Impact on Patients

As health care providers learn about how to identify and respond to gender-based violence, there is the potential to reduce the harms to women and their children and possibly prevent future violence.

A1ii Cultivating Resilience: Maternity Care Providers Mitigate Intergenerational Impacts of ACEs

Presenters: Roxanne Blemings, Theresa Killam, Jan Ference

Authors:

Christina Southey

Learning Objectives:

1. Recognize how attention to adverse childhood experiences (ACEs) in maternity care strengthens health outcomes for multiple generations
2. Reflect on the practical application of ACEs history taking through case examples and dialogue with peers
3. Devise an action plan to integrate ACEs history taking and attention to resilience into local inter-disciplinary maternity practice

Synopsis

Expanding on what we know about the power of early intervention and the connection between ACEs and social determinants of health, we will explore the how, the who, the what and the then what of applying the ACEs questionnaire into maternity care practices.

Abstract

Emerging research continues to highlight the two-generation, cyclical effect of Adverse Childhood Experiences (ACEs). Women who experienced multiple ACEs have an increased risk of adverse events during pregnancy, and infants of parents/caregivers who experienced childhood adversity are at heightened risk of poor health and social outcomes. As strategies to counter these risk factors through resilience advance, maternity care providers have an opportunity to play an instrumental role in the trajectory of intergenerational trauma and overall population health outcomes.

Expanding on what we know about the power of early intervention and the connection between ACEs and the social determinants of health, we will explore the how, the who, the what and the then what of embedding the ACEs questionnaire into maternity care practices.

This conversation will build on legacies of the Child and Youth Mental Health and Substance Use (CYMHSU) Collaborative (June 2013-December 2017) and Adverse Childhood Experiences: BC & Beyond (November 2017). Work to date has been focused on building a community of practice aimed at mitigating the effect of ACEs in the perinatal period. Experiences of applying interdisciplinary, trauma informed, patient-centered/family-focused practices will also be shared. Furthermore, we hope to emphasize the value of practitioners being attentive to and validating patient experiences of adversity in childhood.

A2i First Nation Families and Health Care Providers: Walking the Perinatal Journey Together

Presenters: Barbara Webster, Lucy Barney

Learning Objectives:

1. Recognize the need to provide culturally based, trauma informed and relational practice care.
2. Discuss ways to provide holistic care to First Nation women and families
3. Learn what FNHA resources are available for clients and care providers.

Synopsis

Understanding the history and background of First Nations people is vital in providing cultural safe care to childbearing families. This presentation will briefly discuss the history of Indigenous people and how their history impacts on their lives today. We will use a case study to emphasize the need for relational practice, trauma informed care and cultural safe practices with First Nation women and families as they prepare for and live the experience of pregnancy, childbirth and parenthood.

Abstract

Providing care to families from pre-conception thru pregnancy, birth and postpartum needs to be culturally relevant, trauma informed and relational. As health care providers it is easy to see pregnancy about letters and numbers: LMP, EDC, GTPAL, BP, Wt, Hgb, Apgars. While families see pregnancy, childbirth and parenthood as: new beginnings; a time for growth and development; changing roles, as well as learning to cope, handle stress, emotions, anxiety and excitement. Ours goals are similar: families want to be healthy and we want the families we care for to be healthy, but often the paths we take are in opposite directions. What can we do so our paths are similar? During this presentation we will discuss holistic care in relation to this population; discuss the successes and challenges identified by health care professionals during community engagement sessions with 2 health authorities; reflect on standard practices that potentially create barriers to holistic care; engage participants in self-reflection of their own practices; and provide examples of FNHA resources developed with a cultural, holistic lens. First Nations people are reliant, vibrant, healthy people; let's work together to ensure pregnancies, and new parents remain strong and healthy.

A2ii Building Blocks for Sustainable Rural Maternity Care

Presenters: Jude Kornelsen, Kira Barwich

Learning Objectives:

1. Report findings from a feasibility analysis of system supports to sustain rural maternity care on the North Island
2. Discuss relevance of findings to other rural communities in BC
3. Formulate actionable recommendations for system change to sustain rural maternity care moving forward

Synopsis

We will present the results of a community-driven feasibility analysis of the building blocks for sustainable rural maternity care and the evidence-based strategy for supporting local services. We will also discuss the applicability to the other low-resource rural maternity services in BC and the adaptations necessary for other local contexts.

Abstract:

We are currently witnessing closures and downgrading of rural maternity services in British Columbia, Canada and Internationally and concomitant health, psycho-social and cultural effects including poorer maternal-newborn health outcomes and social challenges due to dissociation from family ties and larger community social supports. Women often have to leave home several weeks before their babies are due, and are away from home for a substantial period of time while they wait to have their babies.

A gap exists between system imperatives of birth 'closer to home' and service supports that enable such care. With funding from the Joint Standing Committee on Rural Issues, we are systematically examining the 'building blocks' of sustainable rural maternity care through a feasibility analysis of local application in North Vancouver Island. The community-derived building blocks include:

1. The need for increased provider confidence through ongoing continuing nursing, medical and midwifery education applicable to a low-resource (no local surgery) environment;
2. Timely and reliable patient transport for women in labour;
3. Expanded inclusion criteria for low-risk deliveries determined based on existing guidelines and current evidence applied to the local context and provider group;
4. Virtual technology link with referral centre specialists, and
5. Inter-professional care teams.

A3i**SmartMom: Texting for Prenatal Education**

Presenter: Patricia Janssen

Learning Objectives:

1. Understand the components of SmartMom
2. Understand what SmartMom offers beyond traditional phone “apps”
3. Understand how texting has the potential to change behaviour
4. Learn findings of formative and process outcomes

Synopsis

SmartMom is a prenatal education program delivered by texting messaging. Less than 30% of pregnant women attend prenatal classes in Canada. Smart Mom is Canada’s first evidence-informed prenatal texting program, developed in partnership with Optimal Birth BC, the Ministry of Health, and the Northern Health Authority. SmartMom launched throughout the NHA in April, 2017. Women enrol at their first prenatal visit, with a primary care nurse.

Abstract:*Methods*

Women complete socio-demographic questionnaires, a knowledge quiz and standardized measures of childbirth fear in early pregnancy; and again in the last month of pregnancy.

Results

During the first four months approximately 18% of pregnant women in the NHA have enrolled in SmartMom. Among 92 respondents in our initial evaluation, 59% were nulliparous, 12% were single parents, 14% were of indigenous ancestry and 88% were under the age of 25. Approximately 25% had no post-secondary education. Access to evidence – based information and tips and the convenience of receiving weekly messages were the strongest incentives to sign up. On the knowledge quiz out of 10, 44.3% had a score of 7 or lower. Questions most often answered incorrectly were in relation to the safety of a flu shot during pregnancy, management of labour pain, and safety of vaginal vs. cesarean birth. On the fear of childbirth measure with a maximum possible fear score of 60, the mean was 30.9. Through links embedded in the messages, women most often sought additional information on nausea and vomiting, genetic testing and other screening tests, doulas, signs and symptoms of preterm labour, and diet. In our supplemental streams, women most often requested additional messages related to alcohol, domestic violence, pregnancy >35 years, weight gain, and smoking cessation, in that order.

Conclusions

SmartMom is being rapidly adopted by women in the NHA. Initial surveys reveal gaps in knowledge and fears around childbirth that can be addressed through a texting education program.

A3ii Is Your Prenatal Ultrasound Department FamilyCentred? Why You Should Care and What You Can Do

Presenters: Suzanne Moccia, Leandro Nosal, Meggie Ross, Bernd Wittmann

Learning Objectives:

1. Recognize the profound impact this exclusionary policy has on the experience for both the patient and their family/support person
2. Explore the rationale for current policy from a medical imaging perspective, how a family-centred care framework supports a change in practice, and benchmark examples within the province
3. Discuss how a quality improvement framework can be used to guide practice change

Synopsis

Most BC Medical Imaging departments continue to exclude family and support persons from being present during the exam – restricting them to a ‘show and tell’ at the end. This has been a largely unrecognized gap in our continuum of family-centred perinatal care. This discussion will explore one family’s journey to change this practice, a facility’s engagement in a quality improvement process, and why you should consider the same.

A3iii Developing Provincial and National Breastfeeding Protocols: A Cross-Organizational, Cross-Provincial Initiative

Presenters: Sonya Boersma, Lea Geiger

Learning Objectives:

1. Examine the methodology and tools used to create high-quality, evidence-informed breastfeeding protocols for health care providers
2. Describe the lessons learned and opportunities of using a crossorganizational and multi-provincial approach to develop a resource that is applicable and transferable across provinces
3. Familiarize participants with the revised protocols while explaining the importance of having access to current, consistent, evidence-informed, and BFI-aligned information when counselling clients with breastfeeding

Synopsis

Evidence-based breastfeeding protocols are in development cross-organizationally and cross-provincially. Learn about the collaborative approach, rigorous methodology, and how these will help your work with clients or patients and your work implementing the Baby-Friendly Initiative.

Abstract:

In the health system, health care providers influence and support feeding decisions at key moments before and after birth. They continue to provide advice and support including if there are challenges to maintaining exclusive and continued breastfeeding. The Toronto Public Health Breastfeeding Protocols are widely used in Ontario and across Canada, but needed to be updated and better referenced. A survey was disseminated within Ontario and nationally via the BCC to determine needs and interest in updating existing breastfeeding protocols. The BFI Strategy for Ontario, in partnership with multiple health units and Perinatal Services BC, agreed on a process. An Evidence Tool was adapted to allow tracking of search terms, suggest databases, track abstracts and article/guideline appraisals, and develop a literature review matrix. The result is the re-development of seven evidence-based protocols for health care professionals of all backgrounds. The original protocols were already widely used in Ontario and some other provinces. The revised protocols are available for use with patients in any part of Canada or for online users anywhere, allowing for improved continuity of care. Plans are to further revise and develop additional protocols.

A4i Newborn Sepsis: Who Needs Treatment?

Presenter: Pascal Lavoie

Learning Objectives:

1. Review the epidemiology of neonatal death from infections locally in BC, but also globally
2. Identify clinical signs that most reliably indicate infection of bacterial causes that require immediate antibiotic treatment
3. Describe new technologies that can help with diagnosis

Synopsis

Infections in newborns can progress fast and are difficult to diagnose. Doctors depend on clinical experience and blood tests to determine when to treat, but these tests are imperfect. This presentation is about the latest research on new technologies to assist healthcare workers in accurately identifying which babies require treatments.

Abstract:

In newborns and young babies, bacterial infections cause severe illness and are often life-threatening. To avoid a catastrophic outcome, doctors depend on their experience and blood tests to determine the type of infection, whether it is from a bacteria or not. This information is important to be able to decide when and how to treat the baby. However, in babies, diagnosing an infection can be tricky and the blood test results can be misleading. Here, we will present the results of a systematic review of clinical signs predictive of mortality from a bacterial infection in young infants, discussing how expert knowledge and smart technologies available anywhere in the world at low cost can assist in helping doctors make the right treatment decisions in babies with infections, both promptly and while avoiding diagnostic errors.

A4ii Sudden Unexpected Postnatal Collapse

Presenters: Lani Wittmann, Kaylee Larocque, Samantha Buchanan, Kate McKinnon, Jessica Peattie

Authors:

Robert Everett, Lisa Kearns

Learning Objectives:

1. Define Sudden Unexpected Postnatal Collapse
2. Identify risk factors for Sudden Unexpected Postnatal Collapse
3. Discuss current recommendations for providing safe skin-to-skin care while at the same time ensuring the appropriate degree of surveillance for the prevention of Sudden Unexpected Postnatal Collapse

Synopsis

Sudden Unexpected Postnatal Collapse is a rare but catastrophic event. Some countries have noted an increase in its occurrence associated with the promotion of skin-to-skin contact and breastfeeding. We will present data and recommendations for the appropriate monitoring and surveillance of mothers and newborns during the first hours after birth.

Abstract:

Background/Rationale

BC Women's Hospital recently underwent Baby-Friendly Hospital Re-Designation. During that process the practice of facilitating immediate and uninterrupted skin-to-skin contact at the time of caesarean delivery was reviewed. It became apparent that there needed to be closer scrutiny of how mothers and their partners were supported in providing safe skin-to-skin contact during a period of time that is high risk for Sudden Unexpected Postnatal Collapse (SUPC).

Methods

SUPC is fortunately a relatively rare event, though some countries have associated an increase in its occurrence with implementation of the Baby-Friendly Hospital Initiative and practice changes supporting skin-to-skin contact. We conducted a literature review, and undertook a review of births at our facility in order to identify the incidence. Clinical practice recommendations for the prevention of SUPC were identified.

Results

We will present a guideline and recommendations on the appropriate surveillance and monitoring of newborns immediately after birth to prevent SUPC while at the same time promoting optimal transition, including safe skin-to-skin contact and breastfeeding support.

Conclusion

SUPC is a rare but catastrophic event. Ensuring safe skin-to-skin practices and that mothers and newborns are provided the appropriate degree of nursing surveillance during transition is critical.

A4iii Shaping Health Equity Practice: A Review of Key Perinatal Documents in British Columbia (2002-2017)

Presenter: Megan Black

Authors:

Sana Shahram, Lenora Marcellus, Bernie Pauly

Learning Objectives:

1. Appraise the documents that are informing perinatal public health practice in BC
2. Describe the influence of these documents on health equity work in perinatal public health services in BC over the last 15 years
3. Identify opportunities for prioritizing health equity in perinatal public health practice

Synopsis

A review of key documents shaping perinatal public health practice over the last 15 years was conducted to explore how they influence the prioritizing (or not) of health equity. Recommendations for creating a supportive context for health equity promotion within perinatal public health programs and services in BC are offered.

Abstract

Documents are essential tools that guide thinking and action in relation to perinatal public health programs and service delivery in British Columbia (BC). In BC, a substantial amount of work is completed to influence regional perinatal programs, practice and attitudes through health documents, including through the Ministry and Perinatal Services BC. A scoping review of key perinatal documents in BC (2002-2017) was conducted to understand the context within which attitudes concerning the role of health equity in supporting pregnant and parenting women and their families are formed. Grey literature was searched to identify key documents from 2002 to 2017 influencing perinatal public health practice in BC. The review identified several documents, including ministry reports and policy research papers that influenced perinatal service delivery in BC. The focus was on foundational perinatal systems documents and their supporting collaborative models related to substance use and mental health. Based on a previously conducted qualitative analysis, dominant values, discourses and discursive dynamics that influence the prioritizing (or not) of health equity in perinatal public health services and programs are explored. This analysis will be the first review of its kind to explore the context within which perinatal public health services and programs are delivered, with a focus on promoting and supporting health equity. The review will make clear the conflicts and convergences between key guiding documents in terms of supporting health equity work, while also identifying opportunities and recommendations for creating a context for health equity promotion within perinatal public health programs and services in BC.

B1i Immigrant Women and Reproductive Mental Health Care Access: An Environmental Scan

Presenters: Joyce O'Mahony, Nancy Clark, Joanne Smrek

Learning Objectives:

1. Recognize what barriers and facilitators may influence immigrant women's help seeking behavior for postpartum mental health
2. Describe what factors can facilitate capacity building for immigrant women's postpartum care
3. Plan strategies that will contribute to culturally appropriate healthcare programs and policies that address reproductive care among immigrant women

Synopsis

An environmental scan was conducted to increase understanding of immigrant women's reproductive mental healthcare services within the Interior Health communities of British Columbia. Based on the study's findings, key recommendations and implications for policy and practice are presented to assist with reproductive mental health care services for immigrant women.

Abstract

Background

New immigrant mothers may be particularly vulnerable to less than optimal health outcomes following childbirth given the cultural isolation, socioeconomic factors and language difficulties that influence their postpartum experiences. Some of the barriers to receiving optimal health may be related to accessible health services and supports. The purpose of this environmental scan was to increase understanding of immigrant women's reproductive mental health care services within the Interior Health communities of British Columbia (BC).

Methods

Data collection methods included a document analysis of hospital and community profiles, ten key informant interviews, and a fluid survey of one hundred healthcare professionals. Participants were a diverse sample of mental health, community/public health practitioners, immigrant outreach, managers, and policy expert.

Findings

Four broad themes emerged: i) community capacity building to support immigrant women's mental health, ii) facilitators of mental health support and care, iii) barriers of mental health promotion and support, iv) public policy and postpartum depression. Based on the study's findings, key recommendations and implications for policy and practice are presented to assist with reproductive mental health care services for immigrant women in BC.

Conclusion

Knowledge gained from this study contributes to the development of equitable and culturally appropriate healthcare services that address the mental health and well-being among immigrant women during postpartum. Ensuring better public policy includes accessible, integrated healthcare services and language resources in a timely manner. More research is needed to guide the development and evaluation of policy and programs designed to improve culturally appropriate healthcare for immigrant women.

B1ii Interventions That Improve Maternity Care for Immigrant Women in England: A Narrative Synthesis Systematic Review

Presenter: Gina Awoko Higginbottom

Authors:

Myfanwy Morgan, Catrin Evans, Kuldip Bharj

Learning Objectives:

1. Orientate participants to the methodology of narrative synthesis review
2. Sensitive participants to the experience of immigrant women in maternity services
3. Enable insights into international comparisons of the experience of immigrant women in maternity care services

Synopsis

The session explores the experience of immigrant women in maternity care services. A narrative synthesis approach to systematic review was used to identify research studies both qualitative and quantitative. In addition to findings we will share aspects of the methodology of narrative synthesis systematic review, quality appraisal and synthesis.

Abstract

Understanding the ethnocultural orientation of immigrant women in maternity is critical for their successful integration and for social cohesion, significantly the health of mother and infant.

Purpose/Objective

Funded by National Institute for Health Research (NIHR) and partnering with key stakeholders to ensure topic relevancy, we conducted a narrative synthesis systematic review of quantitative and qualitative primary research (Popay et al, 2006) to answer the research question: What interventions exist that are specifically focused on improving maternity care for immigrant women in the UK?

- Accessibility and acceptability, as an important dimension of access, to maternity care services as perceived and experienced by immigrant women, and
- Birth and postnatal outcomes

Methodology

Guidelines for systematic and grey literature review were followed to identify and select literature. Methodological quality was appraised using tools developed by the Centre for Evidence Based Management. The narrative synthesis methodology relied primarily on text to summarize and explain findings, using four elements: a) developing a theory of why and for whom, b) developing a preliminary synthesis, c) exploring relationships in the data, and d) assessing the robustness of the synthesis.

Strategy for data synthesis

Patterns emerging from the textual descriptions and cross-literature comparisons enabled us to identify the factors that affect maternity interventions and the implementation of maternity services. These factors are synthesized into major themes regarding barriers and enablers that shape interventions related to immigrant women and maternity care services. We used conceptual and thematic analysis using a range of clustering/networking tools and ATLAS.ti software.

B1iii**MotherFirst: Maternal Mental Health Strategy for Saskatchewan**Presenter: Angela Bowen

Learning Objectives:

1. Cite the rationale for a maternal mental health strategy
2. Contrast the differences in Saskatchewan approach and those used in their own jurisdiction
3. Discuss a national approach to improve maternal mental health

Synopsis

The MotherFirst Maternal Mental Health Strategy includes recommendations to increase awareness, screening, and services in Saskatchewan. The presentation will summarize the process of developing the recommendations, the implementation to date, and future trends. We will discuss a national maternal mental health coalition and World Maternal Mental Health Day.

Abstract:

Maternal Mental Health: Anxiety and depression are serious problems for up to 20% of pregnant and postpartum women with potentially serious effects for mother and her entire family.

The MotherFirst Strategy for Maternal Mental Health was developed by a provincial working group of health care professionals and public representatives to address the gaps in education, screening, and services in Saskatchewan. The strategy was endorsed by the Minister of Health in 2010, since that time a number of initiatives have been implemented to improve maternal mental health.

This presentation will inform participants of the MotherFirst initiatives and the process undertaken to implement. This will include the Maternal Mental Health Toolkit resource, depression and anxiety screening in pregnancy and postpartum, and intervention options available.

The presentation will also include a discussion of a national approach to improve maternal mental health, including World Maternal Mental Health Day.

B2i **Pasteurized Donor Human Milk: When Do We Use and When Do We Abuse?**

Presenter: Frances Jones

Learning Objectives:

1. Increase awareness of availability of donor milk in BC
2. Outline why donor milk is “second best”
3. Describe what actions must take place before giving a baby PDHM

Synopsis

The BC Women’s Provincial Milk Bank has a unique model of cost sharing with all the provincial health authorities in order to provide ized donor milk at no charge. This session discusses what is happening in BC with a focus on what criteria should be used for ethical distribution.

Abstract:

Background and rationale

BC Women’s Provincial Milk Bank was given funding in 2013 to expand to meet provincial needs. By 2016 four out of five health authorities had signed a Memorandum of Understanding (MOU) with BC Women’s. Under the MOU, the health authorities encourage milk donation and operate depots and the BC Women’s Provincial Milk Bank screens all donors and screens and processes milk sending pasteurized donor human milk (PDHM) back to the health authorities as needed.

Methods

This presentation outlines a brief history of donor milk in BC, briefly describe current global state of milk banking, and outline the current state of the various health authorities depots, the use of human donor milk provincially , the current criteria for use of donor milk in BC and the challenge of not side stepping breastfeeding support by using PDHM. What criteria should be used in BC which would provide ethical distribution of PDHM?

Results

Some facilities already have an overuse problem and raising awareness of the need to ensure staff awareness about effective support of breastfeeding and use of mother’s own milk whenever possible is key.

Conclusion

BC has an enviable milk banking structure involving cost sharing and cooperation throughout the province. Provincial strategies to ensure appropriate use of PDHM is important.

B2ii**Domperidone for Breastfeeding: What Does the Evidence Tell Us?**

Presenter: Lorri Puil

Authors:

Barbara Mintzes, Timothy Oberlander, Saraswathi Vedam, Tracy Monk, Derelie Mangin, Penny Van Esterik

Learning Objectives:

1. Describe the key evidence on benefits and harms of domperidone use in new mothers and their infants
2. Consider patterns and drivers of postpartum domperidone use in BC
3. Describe what actions must take place before giving a baby PDHM

Synopsis

Domperidone is widely used “off-label” to stimulate milk supply and has been subject to cardiac safety advisories. Our team conducted a systematic review of domperidone for breastfeeding. Based on randomized controlled trials, overall, benefits fail to outweigh harm. Limited observational data suggest potential cardiac harms extend to women of reproductive age.

Abstract:*Background*

Domperidone is frequently used “off-label” to stimulate postpartum milk supply. In 2011, 19% of new BC mothers were prescribed domperidone, most after full-term births. Domperidone can cause QT prolongation, cardiac arrhythmia and sudden death, but controversy surrounds the relevance of such risks to women of reproductive age.

Methods

We conducted a systematic review on the benefits and harms of domperidone for lactation. For efficacy and frequent harms, we included randomized, controlled trials (RCTs) comparing domperidone to placebo or other treatments following pre-term or full-term births. For cardiac harms, RCTs and observational studies were eligible if they included women of reproductive age and/or infants up to two years.

Results

12 efficacy RCTs were identified, 8 pre-term. There is a modest (76 ml/day) increase in milk production over placebo after pre-term birth but no evidence of infant or maternal health benefits or improved breastfeeding rates. No RCT evidence supports domperidone use following full-term births. Based on observational studies, risk of arrhythmia extends to women of reproductive age.

Conclusion

The BC experience highlights the need to avoid use among women at increased cardiac risk, and the need for evidence-informed decision-making.

B2iii Baby-Friendly Re-Designation: Not All Sunny Ways and Sunny Days!

Presenters: Frances Jones, Lani Wittmann

Learning Objectives:

1. Outline 3 key BFI issues that were particularly challenging
2. Describe two approaches taken at BC Women's to change habitual practices
3. Identify three successful outcomes that reflected BFI standards

Synopsis

BC Women's Hospital was originally BFI designated in 2008 and nationally is one of only 6 hospitals to earn this award. Being the largest maternity facility in Canada serving the province's highest risk mothers and babies presented unique challenges. This presentation describes the strategies undertaken to achieve re-designation in 2017.

Abstract:

Background/ Rationale

Designated in 2008 as a Baby-Friendly Hospital, BC Women's is one of only 6 hospitals to be designated across Canada, and the 4th to receive re-designation. As the largest maternity facility in the country with 7,000 births annually, and as a teaching hospital with a mandate to provide care to the province's highest risk mothers and babies, it has many competing organizational priorities. Trying to ensure that the best evidenced informed care and good breastfeeding support is provided in all areas is a challenge at the best of times, and while BFI re-designation was a priority, in 2016-2017 BC Women's also underwent hospital accreditation, significant leadership changes, and built and moved into the new TECK Acute Care Center in the fall of 2017.

Methods

This presentation outlines current evidence to support practice changes, strategies that were undertaken, and challenges faced. Issues such as preventing interruption in skin-to-skin during the first hour, facilitating skin-to-skin in the OR, maintaining skin-to-skin on transfer, oral immune therapy, avoidance of swaddling, comfort measures for painful procedures, and BFI in the NICU were all tackled.

Results

We implemented a number of successful strategies which resulted in our achieving BFI re-designation in September 2017.

Conclusion

Practice change is not all about "sunny ways and sunny days" and though we breathed a brief momentary sigh of relief, we know Baby-Friendly will never "be done". We have learned a great deal about effective change management and have plans in place to ensure we can achieve re-designation in 2022!

B3i Informed Decision Making for Next Birth after Caesarean Section

Presenters: Sarah Kaufman, Stephanie Bouris, Leisha Murphy

Additional Author:

Sarah Munro

Learning Objectives:

1. Summarize the barriers and facilitators to women's informed decision-making for next birth after C-section in BC.
2. Discuss resources including a debriefing pamphlet for post-emergency C-section and the My Next Birth interactive patient decision aid.

Synopsis

A panel discussion of barriers and facilitators to women's informed decision making for choice of next birth after a Caesarean section, and introduction to resources developed for women to make informed decisions for mode of delivery.

Abstract:

Background

At 34%, BC has the highest Caesarean section (C-section) in Canada while the internationally estimated rate for optimal maternal-infant outcomes is around 19%. The primary contributor to this rate is elective repeat C-section. Although 80% of women who previously delivered by C-section are eligible for a vaginal birth after Caesarean (VBAC), only 30% attempt trial of labour. This trend is due largely to patterns in patient and provider decision-making, making it imperative to have public-facing resources for women's informed decision making for next birth after C-section.

Methods

This panel will present patient, policy and clinician perspectives on VBAC and evidence-based resources for informed decision making for next birth after Caesarean section.

Results

Women form an early preference for mode of next birth soon after the primary C-section, based on their experience of the delivery. Care providers in large hospitals experience medico-legal and surgical-access concerns that influence their willingness to provide VBAC. Two resources are being tested to address these factors: 1) A pamphlet to provide socio-emotional support immediately post-emergency C-Section; 2) My Next Birth, an interactive, online patient decision aid.

Conclusion

Women require early and ongoing evidence-informed resources to de-brief after an emergency C-section and support informed decision making about subsequent mode of delivery after a previous C-section.

B3ii Forceps, Vacuum, or Cesarean? Evaluating Mode of Delivery Options Following an Arrest in Labour

Presenter: Giulia Muraca

Learning Objectives:

1. Define temporal trends in operative vaginal delivery, obstetric trauma and birth trauma in Canada
2. Quantify rates of severe perinatal and maternal morbidity and mortality associated with operative vaginal delivery compared with cesarean delivery
3. Characterize the individual-level and population-level associations between operative vaginal delivery, obstetric trauma and birth traumas

Synopsis

The increased use of operative vaginal delivery (forceps- and vacuum-assisted delivery) has been recommended as a strategy to reduce the rate of cesarean delivery; however, the relative safety of these interventions is unclear. This session will include information on absolute and relative estimates of perinatal and maternal outcomes in operative vaginal and cesarean deliveries in Canada as well as population-level estimates of the associations between operative vaginal delivery, obstetric trauma and birth trauma.

B4i Legalization of Cannabis: Implications for Maternal and Infant Health in BC and Emerging Best Practice for Response

Presenters: Sabrina Luke, Nancy Poole

Learning Objectives:

1. Educate stakeholders, partners, providers and the public about the trends and risks associated with cannabis use in pregnancy among women in BC
2. Highlight best practices for prevention and harm reduction, trauma informed interventions and potential implications for providers and pregnant women in BC
3. Review recent research on the mechanisms of action of cannabis on fetal development and pregnancy outcomes.

Synopsis

Data from BC's Perinatal Data Registry will be introduced as a source for understanding the impact of cannabis use on maternal and child health. The association between cannabis use in pregnancy and perinatal outcomes will be presented and policy and best practices for prevention and harm reduction will be discussed.

Abstract:

Cannabis use among pregnant women in BC has increased over the past decade. With the impending legalization of cannabis in BC, the implications for maternal and child health will be explored and policy and best practices for prevention and harm reduction will be discussed. Data from the BC Perinatal Data Registry will be introduced as a source for understanding the impact of cannabis use on maternal and child health. The association between cannabis use in pregnancy and perinatal outcomes will be discussed. Cannabis use is more prevalent among women with lower socio-economic status, who are younger than 25 years old and have a history of mental illness. Tobacco, alcohol and other substance use is strongly associated with cannabis use in pregnancy. BC data also suggests an association between cannabis use and stillbirth, even after adjusting for maternal characteristics. Further research is needed to understand the risks associated with cannabis use in pregnancy on maternal and child health. After reviewing BC data, the session will present recent "made in Canada" evidence-based public health messaging on cannabis, pregnancy and parenting, as well as highlight progress towards development and implementation of integrated, trauma-informed brief interventions on cannabis, alcohol, tobacco and prescription opioids, delivered by both health and social care providers, with women in the preconception and perinatal period.

B4ii Are We Over-Treating Infants with Neonatal Abstinence Syndrome?

Presenter: Lenora Marcellus

Learning Objectives:

1. Discuss the history of the development of current clinical practices related to the care of infants with NAS
2. Apply an ecological model to examine factors that influence current clinical practices
3. Discuss emerging models of evidence-informed care related to supporting infants experiencing withdrawal, their mothers and families

Synopsis

Overdiagnosis and overtreatment have gained attention as challenges for health systems. Neonatal Abstinence Syndrome (NAS) may be overdiagnosed with standardized assessment protocols and overtreated with current NICU-based models of care. Clinical approaches have not significantly changed for 40 years and there is interest, spurred by the current opioid crisis, in revisiting long-standing routine practices.

Abstract:

Background

Over diagnosis and overtreatment have gained attention as challenges for health systems. Neonatal Abstinence Syndrome (NAS) may be overdiagnosed with standardized assessment protocols and may be overtreated with current NICU-based models of care. Clinical approaches have not significantly changed for forty years and there is growing interest, spurred by the current opioid crisis, in revisiting long-standing routine practices.

Conclusion

Significant shifts in practice in fields such as family centered care, patient engagement, early childhood brain science, and addiction and recovery treatment provide new opportunities to consider which NAS practices may be considered high or low value, from the perspectives of families, health care providers, health systems and communities. Emerging best practices hold potential for reducing the overuse of NICU resources and investing in high value integrated community based prenatal and early childhood services.

How this will impact patients

It is important to consider that clinicians and families may view the benefits and harms of treatment differently. Emerging models of care for infants with NAS are inclusive of families and more connected closely to community partners, creating caregiving contexts that are more respectful and less stigmatizing, hopefully contributing to improve health and social outcomes for infants, mothers and families.

B4iii**Clinical Management of Opioid Use Disorder in Pregnant Women**

Presenters: Cheyenne Johnson, Jola Berkman

Learning Objectives:

1. Introduce the BCCSU Guideline Supplement for the Clinical Management of Opioid Use Disorder in Pregnant Women
2. Provide an overview of care principles and treatment options for opioid use disorder during pregnancy
3. Promote care that is centered on enhancing social determinants of health in order to improve long-term health outcomes for the women with opioid use disorder and substance exposed newborn
4. Highlight the importance of incorporating trauma-informed care while treating pregnant women with substance use disorders
5. Recognize the importance of rooming in and encouraging skin to skin contact, breast feeding, and other non-pharmacological strategies to mitigate symptoms of withdrawal in the substance-exposed newborn
6. Discuss barriers and enablers that will influence implementation of this model of care for pregnant women with opioid use disorder and opioidexposed newborn

Synopsis

This session will introduce and provide an overview to the newly released BC Centre on Substance Use and Perinatal Services BC Guidelines Supplement for the Clinical Management of Opioid Use Disorder in Pregnant Women.

Abstract:

Care principles for the mother and newborn focus on rooming in, skin to skin, breastfeeding and other non-pharmacological strategies to mitigate the symptoms of neonatal opioid withdrawal. These care principles and the use of a standardized functional assessment tool to evaluate the withdrawal symptoms in the newborn will decrease the need for opioid management and consequently decrease length of hospital stay, improve maternal-infant bonding and attachment as well as maternal mental health.

Provincial implementation by PSBC of these care principals and treatment options will focus on the development of a cost effective evidenced based model of care. The Knowledge-to-Action Process (Graham, et al., 2006) will be employed to assess potential barriers to knowledge and implementation of best practices; allow for adaptation to local context; implement guidelines and finally monitor and evaluate effect of new guidelines.

References

Graham, I. D. et al., 2006. Lost in Knowledge Translation:Time for a Map?. The Journal of Continuing Education in the Health Professions, Volume 26, pp. 13 - 24.

Plenary

Vaginal Seeding and Placentophagy: Understanding the Controversy

Chelsea Elwood

UBC

Vaginal Seeding and Placentophagy

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UBC WOMEN'S HEALTH RESEARCH INSTITUTE AT BC WOMEN'S

Disclosures

- ▶ None

the CTN
Canadian HIV Trials Network

The Allen-Carey Award of Excellence in Women's Health

The Microbiome

Oral

Skin

Urogenital

Nasal

Gastrointestinal

Culture Independent Investigations

- ▶ Large scale 16SrRNA-based studies in healthy, asymptomatic women (Zhou 2007, Zhou 2009, Ravel 2011, Gajer 2012, Drell 2013)
- ▶ Clusters of 4-7 defined as community state types (CST) distinguished by dominant bacterial taxa
- ▶ Most prevalent and dominant- *Lactobacillus (L) iners*, followed by *L. crispatus*, *L. gasseri*, *L. jensenii*
- ▶ Suggestion that non-lactobacillus dominant communities may be "healthy" in some women

WOMEN'S HEALTH RESEARCH INSTITUTE AT BC WOMEN'S

A CLINICIANS GUIDE TO THE MICROBIOME

Community state type

Diversity

Operational Taxonomic Unit

Microbiome -not the only 'ome'

```

    graph LR
      subgraph Microbiome
        Fungome
        Virome
      end
      Host
      transcriptome
      Proteome
      metabolome
      Phenotype

      Microbiome --> transcriptome
      Microbiome --> Proteome
      Microbiome --> metabolome
      Host --> transcriptome
      Host --> Proteome
      Host --> metabolome
      transcriptome --> Phenotype
      Proteome --> Phenotype
      metabolome --> Phenotype
  
```

Caesarean Delivery and Chronic Disease

- ▶ Observational Evidence
 - ▶ Type 1 DM
 - ▶ Asthma
 - ▶ Obesity
 - ▶ But the absolute rates of the increases low
 - ▶ Eg Asthma for SVD 7.9% vs 9.5% C/S
 - ▶ Multiple attempts to manage confounders
 - ▶ Non-twin sibling studies
 - ▶ Don't show the same association
 - ▶ Term Breech Trial one of the few randomized trials
 - ▶ More "medical problems", 20.8 vs 14.8% at 2 years
 - ▶ upper respiratory, gastrointestinal, ear, skin, allergic, or other problems by parental report
- Busteijn et al, Arrieta et al, Rushing et al, Stinson et al

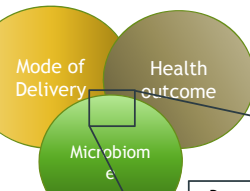
Does the microbiome influence long term outcomes?

Children with Atopy and wheeze had lower abundances of the genera *Faecalibacterium*, *Lochnospira*, *Rothia*, and *Weillonella*, exclusively at 3 months

- ▶ Show that infants at risk of asthma exhibited transient gut microbial dysbiosis during the first 100 days of life
- ▶ Association of antibiotic use with atopy and wheeze, but no association with Caesarean birth or formula feeding

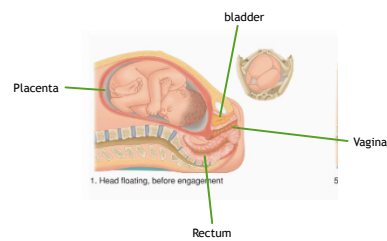
ASTHMA
Early infancy microbial and metabolic alterations affect risk of childhood asthma

Marie-Claire Arrieta,^{1,2} Leah T. Stieman,^{3,4} Pedro A. Dimitriu,¹ Lisa Thorsen,¹ Shreeram Basavaraj,⁵ Sophie Parent-Ducrocq,⁶ Boris Kuznetsov,⁷ Matthew J. Gidycz,⁸ Heidi M. Britton,⁹ Diana L. Leffler,¹⁰ Paulina Schwaninger,¹¹ Paul M. Hershfield,¹² Allen Becker,¹³ Kelly M. McHugh,¹⁴ Malcolm E. Salek,¹⁵ Tobias Kohler,¹⁶ The CHILD Study Investigators,¹⁷ William W. Martin,¹⁸ Stuart E. Turvey,^{19,20} B. Brett Finlay^{21,22}



- Does mode of delivery affect health outcomes?
- Is the microbiome related to health outcomes?
- Does mode of delivery influence infant microbiomes?
- What if anything can and should be done about this?

Does mode of delivery influence microbiomes?



Maturation of the infant microbiome community structure and function across multiple body sites and in relation to mode of delivery

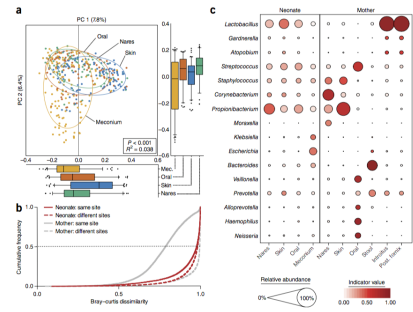
Derrick M. Chew,¹ Jun Ma,¹ Amanda L. Prince,¹ Kathleen M. Antony,¹ Maxim D. Selcovic,¹ & Kirsti M. Ajakaiye^{1*}

PROSPECTIVE COHORT Study N=82 plus
Second cross-sectional cohort were enrolled to detect difference by mode of delivery at time of delivery n=82

- Powered to a 32% CIS rate to detect a difference in the taxonomic composition by mode of delivery at 6 weeks

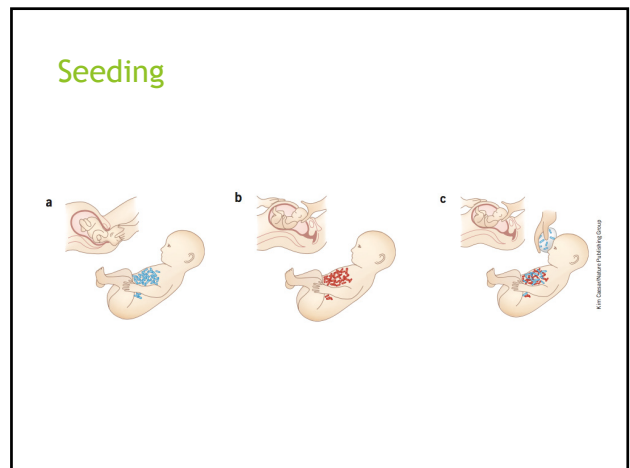
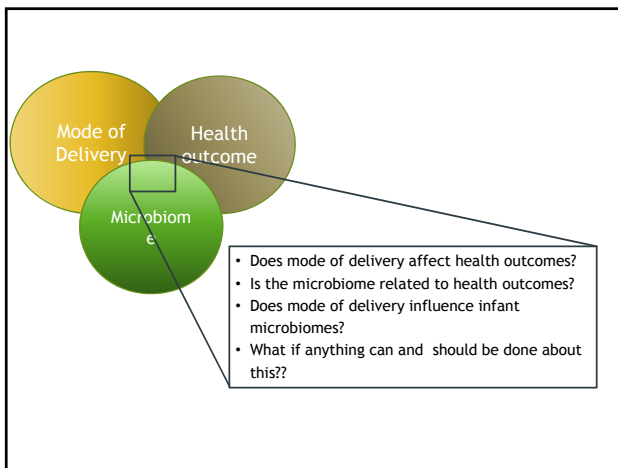
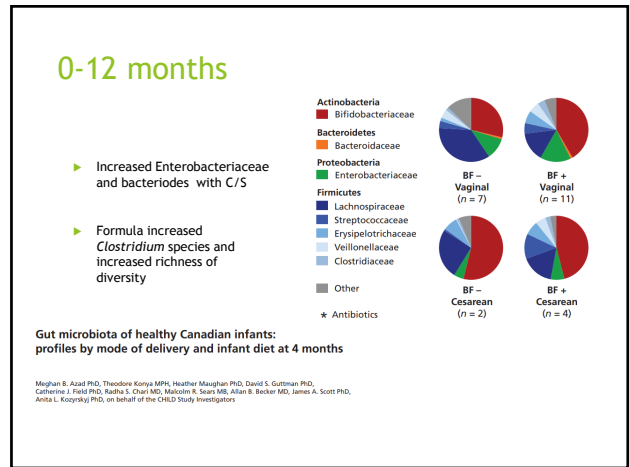
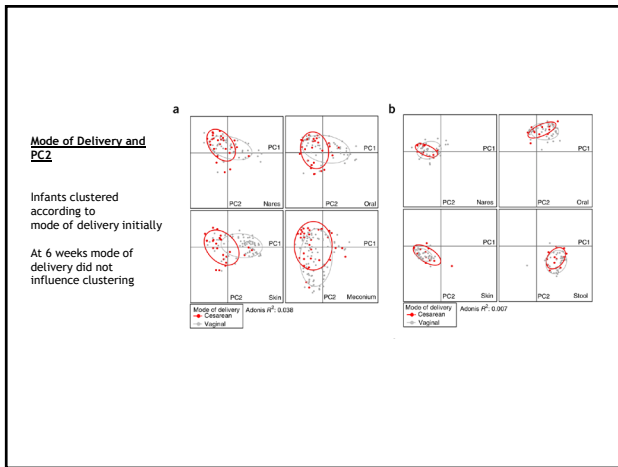
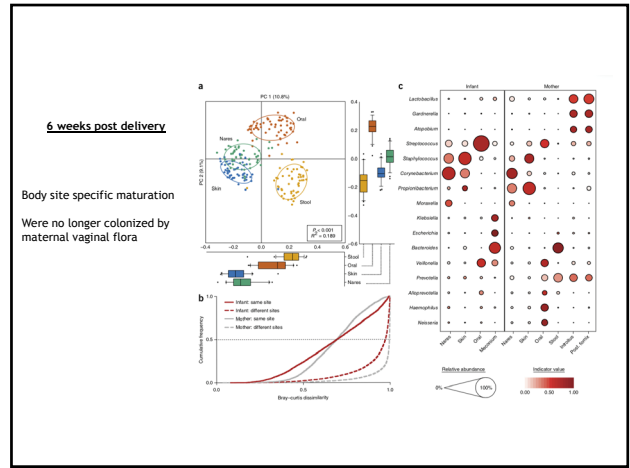
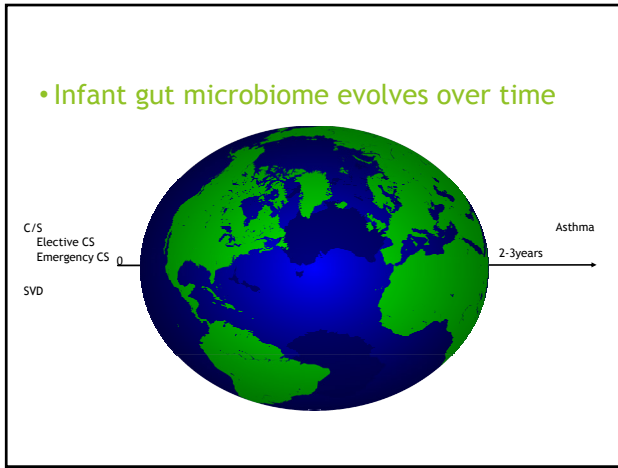
Eligibility
-age >18
-28w G.A.

Exclusion
HSV or hepatitis C infection, known immunosuppressive disease, known use of cytokines or immunosuppressive agents within the last 6 months, a history of cancer (except for squamous or basal cell carcinoma of the skin that could be managed by local excision), treatment of suspicion of ever having had toxic shock syndrome, major surgery of the gastro-intestinal tract (except for cholecystectomy or appendectomy) in the past 5 years.



Maturation of the infant microbiome community structure and function across multiple body sites and in relation to mode of delivery

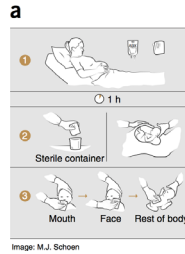
Delivery mode shapes the acquisition and structure of the infant microbiota across multiple body habitats in newborns



Partial restoration of the microbiota of cesarean-born infants via vaginal microbial transfer

María G Domínguez-Bello^{1,2}, Kassandra M De Juan-Laboy², Nan Shen³, Laura M Cox³, Annon Anni⁴, Antonio Gonzalez⁴, Nicholas A Bokulich⁵, Se-Il Song⁶, Martin Hoesli⁶, Juana I Rivera-Villar⁷, Keimari Mendez¹, Rob Knight^{4,8} & Jose C Clemente^{1,9}

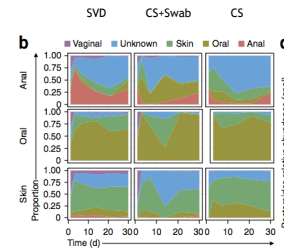
- ▶ Sterile gauze is placed in the vagina for 1h
- ▶ Infant is swabbed immediately after delivery on the mouth, face and body



Partial restoration of the microbiota of cesarean-born infants via vaginal microbial transfer

María G Domínguez-Bello^{1,2}, Kassandra M De Juan-Laboy², Nan Shen³, Laura M Cox³, Annon Anni⁴, Antonio Gonzalez⁴, Nicholas A Bokulich⁵, Se-Il Song⁶, Martin Hoesli⁶, Juana I Rivera-Villar⁷, Keimari Mendez¹, Rob Knight^{4,8} & Jose C Clemente^{1,9}

- ▶ Similarities between the CS swabbed infants and the Vaginally delivered infants
- ▶ ?source tracking at the swab for the source of the gut microbiome



Vaginal Seeding: What are the assumptions

- ▶ Maternal vaginal microbiome directly seeds the infant gut
- ▶ Vaginal microbiome is THE microbiome that influences outcomes
- ▶ This seeding is longitudinal and not transient
- ▶ Other factors play a lesser role
 - ▶ Antibiotics
 - ▶ Breast feeding

What are some of the remaining questions?

- ▶ Can the microbiome be transferred from mom to baby via a vaginal swab?
- ▶ The assumption is that we are transferring the correct microbiome...which microbiome???
- ▶ Is microbiome as a whole is required or single species?
 - ▶ Lack of CST data
 - ▶ Most of the data focuses on specific species or changes in diversity
- ▶ Does this artificial transfer result in a sustainable change that is appropriate?

Are there risks?

- ▶ Undetected pathogens
- ▶ HSV, GBS, HCV, HPV and others that we cannot detect are being directly inoculated into the infant mouth
- ▶ No clear direct evidence of benefit

Practice Advisory: Vaginal Seeding

November 8, 2016

J van Schalkwyk, Z Piskaud, D Mincey
NOV 8, 2016

WOMEN'S HEALTH RESEARCH INSTITUTE AT RWJHOUSTON

Nonoral oropharyngeal colonization with maternal vaginal discharge following Cesarean delivery

Estimate:
"Vaginal seeding" of infants born by cesarean section
doi:10.1136/bmj-2016-020001
http://dx.doi.org/10.1136/bmj-2016-020001
Copyright © 2016 BMJ Publishing Group

"VAGINAL SEEDING" AFTER CAESARIAN SECTION
Offering women safer options than "vaginal seeding" for infants born by caesarean section
Clare Banda consultant paediatrician and senior lecturer



Placentophagy

<http://www.easttennesseplacentamedicine.com/Services---Pricing.htm>

A quick word on Placentophagy

- ▶ “Traditional Chinese encapsulation process”
- ▶ natural, nutrient-rich organ into a simple pill to support your postpartum recovery



What and the why?

What is in the Placenta and How Does it Benefit Me?

- **Oxytocin:** promotes lactation
- **Oxidation:** for pain relief and bonding of mother and infant
- **Cortisol:** combats stress and unlocks energy stores
- **Interferon:** stimulates the immune system to protect against infections
- **Prostaglandins:** anti-inflammatory
- **Hemoglobin:** replenishes iron deficiency and anemia
- **Serumalbumin:** immune booster that helps protect against infections
- **Thyroid stimulating hormone:** boosts energy and aids in recovery from stressful events
- **Gonadotropin:** the precursor to estrogen, progesterone and testosterone
- **Glucocorticoid inhibiting factor and factor XIII:** stops bleeding and enhances wound healing
- **Human Placental Lactogen (HPL):** stimulates mammary gland function and milk production
- **Placental Opioid-Enhancing Factor (POEF):** stimulates the production of your body's natural opioids, including endorphins, reduces pain, increases well-being

What are the Benefits of Placentophagy?

- Increased energy levels
- Re-balancing of hormones
- Replenishes depleted iron levels
- Reduces post-natal bleeding (lochia)
- Assists with involution of the uterus
- Enhances healing
- Increases milk production
- Rich nutritional source
- Lower rates of 'baby blues'
- Reduced risk of postpartum depression
- Faster recovery
- Decreased anemia
- Decreased fatigue
- An increased sense of well-being
- A more enjoyable post-natal experience

Methods of Encapsulation:

	RAW	TCM	COMBINATION
Placenta Steamed?	No	Yes	Yes
Capsule Yield	Most	Least	Moderate
Dehydration	160°F for 2 hours* 115°F for 16-22 hours	140°F for 2 hours 125°F for 10-12 hours	160°F for 2 hours 115°F for 16-20 hours
Time to Dehydrate	18-24 hours	12-14 hours	18-22 hours
Other Considerations	Retains the highest concentration of hormones, vitamins and minerals. Best done within the first 48 hours postpartum.	Steaming with ginger and myrrh infuses warmth and creates a milder capsule.	Perfect combination to infuse some warmth without losing a lot of nutrients.

*Dehydration at 160°F for 2 hours is to meet Food Safety Standards. If you prefer your placenta only be dehydrated at 115°F please let me know.

Is there a biologically plausible mechanism?

Presence and concentration of 17 hormones in human placenta processed for encapsulation and consumption

Sharon M. Young^{1,2}, Laura K. Gryder^{1,3}, David Zava^{1,3}, David W. Kimball¹, Daniel C. Benyshek⁴

What is in the Placenta and How Does it Benefit Me?

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- **Placental Opioid-Enhancing Factor (POEF):** stimulates the production of your body's natural opioids, including endorphins, reduces pain, increases well-being

11-Deoxycorticoid	28
17-OHprogesterone	28
17-Ketotestosterone	28
Androstenedione	28
Androstenediol	28
Cortisol	28
Corticosterone	28
Dehydroepiandrosterone	28
Dehydroepiandrosterone sulfate	28
Estradiol ^{17β}	28
Estrone	28
Testosterone ^{17β}	28
Testosterone	28

estradiol, progesterone, and allopregnanolone could theoretically reach physiologic thresholds

What is the evidence?

Table 1. Key to evidence statements and grading of recommendations, using the ranking of the Canadian Task Force on Preventive Health Care

Quality of evidence assessment*	Classification of recommendations†
I: Evidence obtained from at least one properly randomized controlled trial	A: There is good evidence to recommend the clinical preventive action
II-1: Evidence from well-designed controlled trials without randomization	B: There is fair evidence to recommend the clinical preventive action
II-2: Evidence from well-designed cohort (prospective or retrospective) or case-control studies, preferably from more than one centre or research group	C: The existing evidence is conflicting and does not allow to make a recommendation for or against use of the clinical preventive action; however, other factors may influence decision-making
II-3: Evidence obtained from comparisons between times or places with or without the intervention. Dramatic results in uncontrolled experiments (such as the results of treatment with penicillin in the 1940s) could also be included in this category	D: There is fair evidence to recommend against the clinical preventive action
III: Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees	E: There is good evidence to recommend against the clinical preventive action
	L: There is insufficient evidence (in quantity or quality) to make a recommendation; however, other factors may influence decision-making

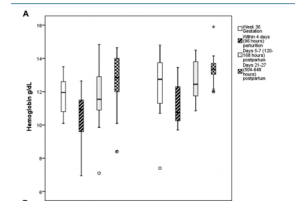
*The quality of evidence reported in these guidelines has been adapted from The Evaluation of Evidence criteria described in the Canadian Task Force on Preventive Health Care.¹¹
†Recommendations included in these guidelines have been adapted from the Classification of Recommendations criteria described in the Canadian Task Force on Preventive Health Care.¹¹

Effects of Human Maternal Placentophagy on Maternal Postpartum Iron Status: A Randomized, Double-Blind, Placebo-Controlled Pilot Study

Grade 1 Evidence

Laura K. Gryder, MA, Sharon M. Young, PhD, David Zava, PhD, Wendy Norris, BS, Chad L. Cross, PhD, PStar(R), Daniel C. Benyshek, PhD

- ▶ N=23
- ▶ Double blind randomized placebo controlled trial
- ▶ Encapsulated placenta vs dehydrate beef
- ▶ No difference was shown



CONFLICT OF INTEREST

This study was made possible, in part, by the collaboration between the study authors and Placenta Benefits LTD, a bu-

Human Maternal Placentophagy: A Survey of Self-Reported Motivations and Experiences Associated with Placenta Consumption

Jodi Selander, Allison Cantor, Sharon M. Young & Daniel C. Benyshek

Grade ??

Motivations and Experiences with Maternal Placentophagy

- ▶ 189 women were recruited via Facebook, twitter or online messaging boards
- ▶ surveyed who consumed their placenta after the birth of at least one child
- ▶ No controls
- ▶ Questionnaire was not validated

FIGURE 2 Motivation for engaging in placentophagy.

FIGURE 4 Reported positive effects of placentophagy.

FIGURE 5 Reported negative effects of placentophagy.

Human placentophagy: a review

Alex Farr, MD, PhD; Frank A. Chervenak, MD; Laurence B. McCullough, PhD; Rebecca N. Baergen, MD; Amos Grunebaum, MD

- ▶ “To date, there is no scientific evidence for any clinical benefit of human placentophagy. Positive influences on mood, iron status, lactation, and general energy that have been claimed by the supporters of placentophagy have never been proven in clinical studies”

Harm

- ▶ GBS BC positive sepsis shortly after birth
 - ▶ Treated with 11d of ampicillin
- ▶ Returned 5 days later with BC positive GBS sepsis
- ▶ Blood culture isolate and placental capsule isolate were identical
 - ▶ Samestrain on pulse field gel electrophoresis and whole genome sequencing

Buser GL, Mató S, Zhang AY, Metcalf BJ, Beall B, Thomas AR. *Notes from the Field: Late-Onset Infant Group B Streptococcus Infection Associated with Maternal Consumption of Capsules Containing Dehydrated Placenta—Oregon, 2016.* MMWR Morb Mortal Wkly Rep 2017;66:677–678. DOI: <http://dx.doi.org/10.15585/mmwr.mm6625a4>.

PHAC

- ▶ December 6th 2017
- ▶ Health Canada advises that placenta encapsulation services are in fact regulated, at the federal level. They fit the definition of a drug and the process is considered to be manufacturing.
- ▶ Therefore, claims that the ingestion of these products can prevent a disease or abnormal physical state (such as postpartum depression) or modify organic functions (such as the increased production of breast milk) would be grounds for regulation as a biologic drug under the Food and Drug Regulations, subject to Divisions 1, 1A, 2, 4, 5, and 8.

Conclusions vaginal seeding and placentophagy

- ▶ There is a profound knowledge gap between evidence and implementation of a clinical practice in both cases
- ▶ Further study is required before an evidence based practice can be recommended for vaginal seeding or placentophagy

Connect With Us!

Are you... pregnant? Registered with BC Women's Hospital for Hospital or home delivery? Between 19 & 44 years of age? Interested in participating in research?

Maternal Microbiome Legacy Project

Connect & Participate:
 Ways to reach us:
 604-875-2000 ext 6379
 MaternalLegacy@cw.bc.ca

Scan here to have us contact you:
 More ways to connect:
 whri.org/maternal-microbiome-legacy-project/
 @MaternalLegacy

Follow us:
 @MaternalLegacy

Study Coordinator:
 Zahra Pakzad
 zahra.pakzad@cw.bc.ca

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BCWH Statement on Placentophagy

There exists a growing trend to ingest one's placenta after birth, a practice known as placentophagy. Placentas are consumed raw, cooked, or desiccated and placed in pill form. Placentophagy has a variety of perceived health benefits including minimizing post-partum depression, increasing energy, increasing breast milk production, and helping with overall postpartum recovery including helping to facilitate uterine contraction and decreasing postnatal bleeding and pain [1,2]. There are claims that it is the hormones and nutrients within placental tissue that can enhance post-partum recovery. These include estrogen, progesterone, lactogen, beta-endorphins, iron and oxytocin [2-4]. What is unclear however is whether ingested tissue, particularly that which is processed, continues to possess these substances, and whether they indeed have any biologic effect. To date, such studies have not been conducted.

A meta-analysis of ten animal and six human studies of placentophagy has recently been published [5]. Almost all mammals consume their placentas, therefore most of the knowledge on the effects of placentophagy has come from animal research, particularly on rats. The most comprehensive studies have been on the potential analgesic effects of placentophagy, thought to arise from the ingestion of a substance in placenta and amniotic fluid that has been termed placental opioid-enhancing factor (POEF). Kristal et al. [6] provide evidence that ingestion of POEF via placentophagy during labour and delivery in rats may enhance opioid-mediated pain relief. Placentophagy in rats has also been linked to adaptive maternal behaviour and facilitation of maternal-foster pup contact [6]. A more dated study also examined the effects of placentophagy on lactation by measuring serum prolactin and progesterone levels in rats [7]. While the authors found some differences in these hormone levels between rats who consumed their placenta versus rats which did not, the differences were small and study limitations make it difficult to determine any significant effects on long-term lactation. In general, findings from animal studies do not necessarily provide evidence to support placentophagy in humans and caution is needed before generalizing these findings from animals to humans. While animal evidence may support a reduction in pain with placentophagy, this effect and other often cited benefits of placentophagy still need to be studied in humans.

The most often cited human studies on placentophagy include two papers providing a description of beliefs around placentophagy [2,8]. Selander et al. [2] conducted an internet survey on the motivations and experiences of 189 women who had ingested their placenta. The demographics of these women were 93% Caucasian, with an average age of 31 years, on average having 2.2 children, the majority living in North America (91% USA, 7% Canada), and 58% having a family income over \$50,000. In terms of motivations for placentophagy the most common response was to improve mood (34%), followed by general but unspecified benefits (12%), recommendation by a placentophagy supporter (10%), restore hormones/nutrients (8%), improve lactation (7%), and aid in general postpartum recovery (7%). 50% of

the women had reported having experienced postnatal mood disorder at least once, most commonly depression (47%), “baby blues” (24%), and anxiety (19%). In terms of perceived benefits from placentophagy, the most commonly reported positive effect was improved mood (40%), followed by increased energy/decreased fatigue (26%), and improved lactation (15%). 69% of the women reported no negative effects, and 98% reported they would engage in placentophagy again. While it appears that overall the survey participants had a positive experience with placentophagy, study limitations should be kept in mind while interpreting these results. The study is based on a non-representative, relatively homogenous sample, and as it was an internet-based survey there was a high probability of self-selection bias. In addition, this was not a clinical trial and there was no control group to compare to, meaning findings are limited only to participant perceptions. It is also worthy to note that the lead author may have some bias as a supporter of placentophagy, having founded a placenta encapsulation service (Placenta Benefits LTD). However the authors do address these various limitations and the need for more research, specifically studies employing placebo-controlled double blind clinical trial research design [2].

The second study describing the beliefs around placentophagy is another online survey. Authors Cremers and Low [8] surveyed 215 participants on their attitudes and knowledge of placentophagy. The cohort was 78.7% female, 60.7% between the ages of 18-22 years (range 18-68, mean age of 29.5 years), and the majority identified as white/Caucasian (82.4%). Only 7 (3.3%) had consumed placental tissue (6 female, 1 male), and in terms of motivations for doing so most indicated non-specific health or nutritional benefits, or because a midwife had suggested it [8]. 26.8% of the participants indicated they would consider eating placenta if it might have health benefits. Similar to the study by Selander et al. [2], limitations of this study include the use of convenience sampling and that that it may reflect views of individuals who were particularly interested in placentophagy. Most importantly, both of these studies represent only the beliefs and motivations of potentially non-representative cohorts and should not be interpreted as objective evidence of the benefits of placentophagy.

Another article on human placentophagy is an anthropological study that describes the absence of a cultural link to placentophagy [9]. Young and Benyshek investigated the cultural placental beliefs and practices of 179 societies, and concluded that there is no anthropological support of human placentophagy [9].

The only study attempting to conduct a clinical trial is a dated observational study that assessed breast milk production following maternal ingestion of desiccated placenta [10]. However, no meaningful conclusions can be drawn from this study due to its poor study design. The study included 210 women who were fed freeze-dried placenta supplements, but had only 27 women in a control group. The researchers were also not blinded, increasing the risk for bias. The parameters measured were also subjective, including breast size and tenderness, the milk flowing by itself, and the participants self-reporting “good” or “very good” increases

in milk production [4]. The study also did not control for confounding factors such as natural variations in milk production postpartum and placebo effects [5].

In summary, there exists a large gap in the literature on the actual effects of maternal placentophagy, and recommendations from placentophagy supporters to engage in the practice are currently not based on well-controlled scientific evidence. Further study is needed to define the health benefits and risks of placentophagy. In their review, Marraccini and Gorman [1] point out some important problems and recommendations that would need to be taken into consideration for future research on the effects of placentophagy. A main consideration is that the nutrition content and any effects from placentophagy would be influenced by the preparation of the placenta, the timing of administration and dosage [1]. The reported effects of placentophagy may also be in part a result of the placebo effect, which would need to be taken into account through a randomized placebo-controlled clinical trial. Research would also need to examine the effects of placentophagy on health conditions, such as postpartum depression, using reliable measure [5], as well as justify why consumption of placenta would be more beneficial than supplemented nutrients or hormones, for example iron supplementation [1].

In addition, the potential harms and contraindications of placentophagy need to be studied. Regardless of mode of delivery, the placenta is not sterile. Placental tissue has been found to contain selenium, cadmium, mercury, lead, bacteria and viruses [11-15]. Any of these substances may pose potential harm to those who ingest it, and to a nursing infant. Other potential negative effects include meconium-stained placenta, chorioamnionitis, delayed cord clamping, smoking [1].

In spite of the lack of evidence around the benefits or harms of placentophagy, the trend of placenta consumption appears to be growing, particularly among middle-class, Caucasian women in North America and Europe. Over twenty advertised websites offering preparation for placenta ingestion exist within British Columbia. These are typically done in private homes with no standard protocol or public health safety standards to adhere by. Microbial contamination during the birth process, further contamination with improper handling and storage of human tissue and incomplete processing pose considerable concern that harm may exist.

In conclusion, there is a lack of empirical evidence at this time to support any benefits of placentophagy, and potential side effects and contraindications remain unknown. Until such time that scientifically sound studies reveal that placentophagy is both beneficial and safe, British Columbia Women's Hospital, Perinatal Services BC, BCCDC and Vancouver Coastal Public Health do not support placentophagy.

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Plenary

BC Success Stories Panel: Shaping Practice to Promote Vaginal Birth in BC

Presenters: Patricia Janssen, Glen Hamill, Erin O'Sullivan, Erica Phelps, Jacobus Strydom, Brenda Wagner

This session brings together clinical leaders who have demonstrated their ability to increase or maintain high rates of vaginal birth in their organization compared to other hospitals of similar size and acuity. They will share their knowledge of clinical practices and policies that have made this possible and arrive at a common understanding of promising practices that have potential to increase rates of vaginal birth in other BC hospitals.

Learning Objectives:

1. Hear from representatives of BC Hospitals that have had the highest vaginal birth rate, what they believe to be their successful practice strategies
2. Prioritize these strategies for dissemination throughout BC Health Authorities
3. Plan initiatives to incorporate these strategies into clinical pathways, policy change and research objectives

Plenary

Mental Health Across the Perinatal Period

Presenter: Cindy-Lee Dennis

Learning Objectives:

1. Increase understanding of prevention and treatment strategies to address perinatal mental health problems
2. Become aware of current research initiatives to improve the management of perinatal mental health problems

Synopsis

This session will examine perinatal mental health problems including depression, anxiety and co-morbidity. Prevalence, risk factors, and clinical implications will be explored with a focus on prevention, collaborative care, and migrant women. The importance of preconception health and the role of technology will also be outlined.

C1i Healthy & Home: A Program for New Mothers

Presenters: Tonia N. Olson, Julie Smith-Fehr

Additional Author:

Angela Bowen

Learning Objectives:

1. Describe an early discharge maternity program
2. Assess the evaluation methods and findings
3. Discuss recommendations for forming similar programs

Synopsis

We describe a postpartum community nursing support program, Healthy & Home, begun 25 years to bridge the gap between acute hospital care and community including home visitation, clinic care, a Breastfeeding Centre and Café, a Postpartum Anxiety & Depression Support Group and involvement in a Baby-Friendly Coalition.

Abstract:*Background*

Postpartum mothers and their newborns require careful community follow-up for healthcare assessments after hospital discharge. The vast amount of information given during the initial postpartum period can be overwhelming and new parents often need considerable support to understand the nuances of newborn care including norms for newborn feeding. As health care providers, our role is to ensure that there are systems in place to provide a seamless continuum of care to support, empower, and educate new mothers and their families

Methods

This presentation describes how a postpartum community nursing support program, Healthy & Home, has evolved over 25 years and has strived to bridge the gap between acute hospital care and community and summarizes a recent program evaluation by 429 women.

Results

The program has evolved to include home visitation, clinic care, a Breastfeeding Centre, a Breastfeeding Café, a Postpartum Anxiety & Depression Support Group and involvement in a Baby-Friendly Coalition within one program. Mothers overwhelmingly said the program met their needs, answered their questions, and left them feeling comfortable to care for their baby.

Conclusions

A continuum of services within one program can meet the needs of new mothers and their babies. Recommendations for forming similar programs will be discussed.

C1ii Smoothing the Transition from Hospital to Home - Innovative Strategies to Prepare for Parenting... Before Baby's Arrival

Presenter: Christina Cantin

Learning Objectives:

1. Describe a regional initiative intended to capture the current state of postnatal hospital discharge
2. Describe the development of a 'Postnatal Planning' tool to enhance transition to parenthood and the importance of collaborating with new and expectant parents in the development of tools for their use
3. Discuss the importance of collaboration between hospital and community perinatal care providers and new and expectant parents to optimize transition to home following birth

Synopsis

The length of postnatal hospital stay continues to decrease across Ontario. This has created a challenge for health care providers to ensure that families have the necessary knowledge to safely care for themselves and their babies, and to ensure that there are no gaps in service in the early postnatal period. The process of co-designing a postnatal planning tool for expectant parents will be described and the results of a pilot study will be discussed.

C1iii

Can the “ABC’s for New Parents” Book, Developed through an Interprofessional Collaboration, Change the Health Outcomes for Children, Families and Society?

Presenters: Estelle Paget, Andrew Macnab

Learning Objectives:

1. Use the ABCs book and discuss its relevance to their specific contexts
2. Learn and discuss the findings from the pilot studies
3. Discuss when this resource would be most valuable to new parents

Synopsis

Can the “ABC’s for New Parents” book inform about social and emotional development and inspire new parents to apply the practical tips included in the book? What will be the outcome for the child, the family and society if more infants are nurtured from the start of life?

Abstract:

Study after study shows that social and emotional development is foundational for the life-long mental, physical and emotional health of a child. It is critically important throughout the perinatal period.

Most new parents, quite naturally, are focused on the practical aspects of caring for their infant and may be unaware of social and emotional health or how to develop it.

Island Health asked KIDCARECANADA to develop a resource that would inform all new parents about social and emotional health and lead them to additional trustworthy resources.

The result is a little book, the ABC’s for New Parents, written in collaboration with early childhood specialists in health, education, research, mental health and Indigenous family culture. It presents the essential science and practical strategies in an appealing format that resembles a children’s story book. Each page includes QR codes that enable readers with smart phones to access additional resources, including KIDCARECANADA videos.

Pilot studies using the book have taken place in a wide variety of contexts to learn if new parents:

1. Feel informed about what they can do to raise their children to be socially and emotionally healthy
2. Change behaviours because of the book
3. Feel more confident and relaxed as parents if they are already doing what is suggested in the ABC’s book
4. Show the ABC’s to their babies (a way to introduce early literacy)
5. Use the QR codes to access videos and other resources

Can this little book change the outcome for children, families and society?

C2i **Shifting the Public Health Nursing Care Paradigm in Island Health: The Mother's Story**

Presenters: Erin O'Sullivan, Liz McKay, Jan Tatlock

Learning Objectives:

1. Provide an implementation status summary as follow up from 2016
2. Describe the learning gleaned from implementation and current practice evaluation
3. Highlight the significance of the continued partnership with the Nuuchahnulth Nursing Program
4. Outline evaluation and next steps.

Synopsis

The purpose of this presentation is to continue sharing our learning about implementing the Mother's Story Approach; Public Health Nursing practice focused on perinatal women. This year's lecture will focus on implementation structure and support that enables the leadership perseverance required to shift a practice paradigm.

Abstract:

Public Health Nursing is positioned to offer universal health promotion, education, referral, and intervention with a practice focused on inviting women with heightened exposure to risks due to social vulnerabilities into a care relationship. Thus, influencing the health outcomes of perinatal women, their children and the practice quality of the nurses. In 2014, Island Health adopted and began implementing the Mother's Story—the Nuuchahnulth Nursing Program's (NNP) approach of providing culturally safe, trauma-informed, relational, and reflective practice care to perinatal women. This approach is based on a positive and caring relationship between the mother/family and the nurse; supporting PHNS to meet provincial expectations, as well as nursing's professional moral and ethical obligations. This presentation will emphasize the saliency and value of strengths-based leadership, action plans, and evaluation processes when implementing the Mother's Story approach to care in a practice environment outside of the NNP and community. Island Health recognizes that strengths-based leaders are integral to role-modeling change and in mentoring nurses to practice. Island Health has developed a focused component of the implementation plan that develops nursing leader's capacity and desire to evolve their nursing teams' practice. Areas of examination include transitioning from previous ways of practicing and awareness of returning to habitual practice, accounting for and working through resistance, developing supportive environments for nurses to successfully practice in a relational and respectful way and structuring evaluation from a quality improvement lens. The presentation will include time for dialogue on the experiences of engaging in this paradigm shift in practice

C2ii Walking Together: A Participatory Action Research Approach to Developing Physical Activity Programming for Aboriginal Women in the Downtown Eastside?

Presenters: Jessica Webb, Francine Darroch, Robyn Fabiosa

Learning Objectives:

1. Use the ABCs book and discuss its relevance to their specific contexts
2. Learn and discuss the findings from the pilot studies
3. Discuss when this resource would be most valuable to new parents

Synopsis

This presentation will focus on the development of a weekly walking program from the perspective of the Aboriginal Infant Development Program at Crabtree; an inclusive walking program was designed to address the specific needs of women on the DTES with a focus on social inclusion.

Abstract:

Pregnant and/or parenting women who are marginalized by poverty, racism, substance use, and trauma are at an elevated risk of negative health outcomes in pregnancy and postpartum. Physical activity (PA) is especially important for these women, who are known to have a greater risk of the intersecting issues of overweight/obesity, anxiety, depression, low self-esteem, and social isolation. Through participatory action research in partnership between YWCA Crabtree Corner and the University of British Columbia, we conducted key informant interviews and focus groups to address the barriers/facilitators of PA and desired programs for pregnant/parenting women on the Downtown Eastside of Vancouver. We conducted thematic analysis on the data, supported by NVivo10 qualitative software. We found there is a major gap in existing PA programming for this population on the Downtown Eastside. One key theme identified in the data was social isolation – and a desire to interact and engage in PA with women that have similar life experiences. This presentation will focus on the development of a weekly walking program from the perspective of the Aboriginal Infant Development Program at Crabtree; an inclusive walking program was designed to address the specific needs of women on the DTES with a focus on social inclusion. We argue that in order to adequately address health inequities, PA programming must respect the complex lives of these women and their families, be accessible to clients, meet community identified needs, and be culturally safe and trauma informed.

C2iii MOREOB in BC: Improving Outcomes During Large Scale Change

Presenters: Sheri DeMeester, Svjetlana Korch, Maria Mascher, Nancy Humber, Megan Delf, Ruth Johnson, Vanessa Salmons

Learning Objectives:

1. Understand the impact of front line ownership in system change
2. Analyze the elements critical in building engagement in team members
3. Discuss key elements in how to sustain a culture of safety and focus on quality improvements

Synopsis

Learn about the impact that the MOREOB Program has had in a remote rural site and within 2 Health Authorities within BC. Stories will be shared of how the MOREOB Program has impacted patient safety and built relationships within sites and across regions. They will also share their experiences in sustaining progress and quality improvement initiatives.

C3i Rolling into Parenthood: Key Physical, Mental Health and Breastfeeding Considerations When Working with Pregnant and New Parents with Physical Disabilities

Presenters: Karen Hodge, Melanie Basso, Amanda Lee

Learning Objectives:

1. Cite current evidence to help dispel myths and misconceptions about pregnancy and parenting with a disability
2. Identify key needs regarding parent and infant mental health and adaptations to the physical environment across care continuums (prenatal, antepartum, postpartum - home, hospital, community) when supporting parents with physical disabilities and their young children and summarize new research findings related to lactation and women with spinal cord injuries and the clinical implications
3. Examine screening tools, evidence based interventions and key community resources to support parents with physical disabilities, their children, and their health care team throughout preconception, pregnancy and early parenthood

Synopsis

Through personal stories, videos and evidence from the literature, Karen, Melanie and Amanda will highlight the unique physical, mental health and breastfeeding considerations for parents with physical disabilities. This includes discussion of helpful screening tools, evidence-based interventions and key community resources to support parents with physical disabilities and their children.

Abstract:

As societal views of disability evolve and physical barriers are removed, more individuals with physical disabilities are choosing to become caring, engaged and active parents. However, many health care professionals have little education or experience working with parents with physical disabilities and have minimal understanding of their unique physical, mental health and breastfeeding needs during pregnancy and postpartum.

We will share current evidence to help dispel myths and misconceptions about pregnancy and parenting with a disability. We will explore key concepts of mental health and physical environment needs (accessible rooms, adapted cribs, carriers) that occur across care continuums (prenatal planning, antepartum, postpartum - home, hospital, community) when supporting parents with physical disabilities and their children. We will also use recent and ongoing studies to discuss lactation and breastfeeding difficulties associated with spinal cord injury.

We will use personal stories, videos, case examples and evidence from the literature to help the audience take the initial steps needed to gain knowledge and skills to enhance their clinical work with parents with disabilities and their young children. We will conclude the session by highlighting screening tools, evidence-based interventions and key community resources to support parents, their children, their loved ones and their health care team throughout pregnancy and early parenthood.

Parents and their young children will benefit greatly from health care professionals' increased awareness and understanding of their unique physical, mental health and breastfeeding needs and the community resources available to facilitate positive experiences for parents and professionals during pregnancy and early parenthood.

C3ii

Benefits of Kangaroo Care: Patient and Provider Perspectives

Presenters: Michelle Peltier, Horatio Osiovich

Learning Objectives:

- 1. Understand how KC promotes parent and patient-centered care • Increase knowledge and awareness of the benefits of skin-to-skin and kangaroo care for premature/low-birth weight babies
- 2. Identify strategies to overcome barriers to intermittent and continuous KC in their setting

Synopsis

Kangaroo Care (KC) improves physical and mental health for preterm infants and parents. During 2018, the Provincial Health Services Authority will be working with health care providers, administrators and parents across the province to strengthen KC practice. This session will provide a patient and a provider perspective on the benefits of KC.

Abstract:

Kangaroo Care (KC) is a term used in to describe a well-established intervention for preterm/low birth weight babies. The gold standard is 24/7 skin-to-skin care (SSC) using a wrap that keeps mothers (or other caregivers) and infants skin-to-skin. 40 years of research on the positive effects of KC shows that children have improved physical well-being (reduced mortality and morbidity), improved breastfeeding and family attachment, better mental health and cognitive development, and long-term, improved employment outcomes. Parents experience prevention or reduction of postpartum depression and anxiety and better parent-child interactions. Continuous and intermittent KC is widely practiced in low and middle-income countries (for example Colombia, South Africa, India) as well as in high income countries such as Sweden and some jurisdictions in the United States. Intermittent KC is also practice in BC. During 2018 the Provincial Health Services Authority (BC Women’s Hospital and Health Centre, Perinatal Services BC and the Women’s Health Research Institute) will be working with health care providers and administrators from all Regional Health Authorities and parents from across the province to strengthen and evaluate KC practice. This session will provide a patient and a provider perspective on the benefits of KC and an opportunity for the participants to discuss strategies for overcoming practice and institutional barriers to KC in the BC context.

C4i

HerWay Home: Lessons Learned and Promising Practices for Supporting Perinatal Substance Using Women in Community

Presenters: Amanda Seymour, Deborah Rutman

Learning Objectives:

- 1. Share HerWay Home evaluation highlights
- 2. Facilitate reflection about emerging practice issues
- 3. Identify promising approaches working in community with women who are pregnant/parenting and have substance use issues

Synopsis

HerWay Home (HWH) offers a multi-service drop-in and outreach program for pregnant women and new mothers affected by substance use. This presentation will share highlights of HerWay Home's outcomes, and will facilitate reflection about emerging practice issues and promising approaches to working with this population.

C4ii Mobile Maternity (MoM): A New Kind of Telehealth

Presenters: Mona Mattei, Jude Kornelsen, Shiraz Moola

Learning Objectives:

1. Practical details on setting up a mobile telehealth program with scale and spread experiences
2. Clinical experience from patient, OB/GYN and primary care provider perspectives
3. Research data on results to date

Synopsis

Mobile Maternity offers real-time obstetrical consults for elective and emergent conditions through secure mobile devices, and support for precipitous deliveries in remote sites. Learn from the team's experiences providing clinical care, managing change in clinical settings, and the importance of sustaining isolated rural practices within the context of other systems.

Abstract:

Research documents social morbidities for parturient women, and families that result from the challenges faced by rural and remote residents for women with high risk pregnancies who must travel to receive specialist care. (Kornelsen, J. & Grzybowski, S. 2008, Grzybowski et al 2015). Mobile Maternity (MoM), is led by Dr. Shiraz Moola and Jude Kornelsen of the Center for Rural Health Research. Initiated as both a new type of telehealth program and a research project to document impacts of care provided closer to home, MoM is demonstrating that a collaborative model of care impacts patients' outcomes .

MoM offers real-time obstetrical consults for elective and emergent conditions through secure mobile devices, and support for precipitous deliveries in remote sites. The consults differ from traditional linear communication between patient and specialist, to tripartite (PCP, patient and specialist) patient care planning.

Mobile Maternity is offered in two regions with very distinct patient populations – Kootenay Boundary in the interior of BC and North Vancouver Island. The details of results from research data collection demonstrate key contrasts, successes and challenges encountered.

“The ability for women to stay in town to deliver is very important. When we have a consult conversation through telehealth, women feel like they can stay in their hometown and know that we have support,” Leah Barlow, midwife in Creston, B.C.

D1i Whose Agenda and Whose Destiny? Multi-Stakeholder Design of an Online Toolkit to Improve Collaboration in Maternity Care

Presenter: Saraswathi Vedam

Learning Objectives:

1. Demonstrate principles and process of shared decision making across health professionals and with patients to achieve patient/family and community goals
2. Enable service users to design and implement their own care plans
3. Describe the respective roles of relevant health professions within the broader healthcare system
4. Demonstrate communication with other health professionals and patients/clients in a collaborative, respectful, responsive, and responsible manner

Synopsis

Dialogue and Shared Decisions is an online, flexible course on personcentered maternity care which teaches, through case-based modules, key interprofessional competencies that support effective communication, conflict transformation, and collaborative leadership.

Abstract:

Methods

We conducted a systematic review on the benefits and harms of domperidone for lactation. For efficacy and frequent harms, we included randomized, controlled trials (RCTs) comparing domperidone to placebo or other treatments following pre-term or full-term births. For cardiac harms, RCTs and observational studies were eligible if they included women of reproductive age and/or infants up to two years.

Results

12 efficacy RCTs were identified, 8 pre-term. There is a modest (76 ml/day) increase in milk production over placebo after pre-term birth but no evidence of infant or maternal health benefits or improved breastfeeding rates. No RCT evidence supports domperidone use following full-term births. Based on observational studies, risk of arrhythmia extends to women of reproductive age.

Conclusion

The BC experience highlights the need to avoid use among women at increased cardiac risk, and the need for evidence-informed decision-making.

D1ii Reduced Prevalence of Small-for-Gestational Age Birth For Vulnerable Women: A Study of Midwifery versus Physician-Led Care

Presenter: Daphne McRae

Learning Objectives:

1. State the statistical association between antenatal models of care and small-for-gestational-age birth and preterm birth for B.C. women of low socioeconomic position
2. Identify maternal behaviours and conditions which modify the associations
3. Name three possible mechanisms responsible for improving infant birth outcomes for midwifery patients

Synopsis

This presentation will highlight results from a BC, population level, retrospective cohort study (n=57,872) examining the association between antenatal midwifery care and odds of small-for-gestational-age or preterm birth, compared to general practitioner or obstetrician-led care for women of low socioeconomic position with low to moderate medical/obstetric risk.

Abstract:

Background

The literature investigating the association between midwifery versus physician-led antenatal care and infant birth outcomes for women of low socioeconomic position (SEP) is limited by methodological weaknesses, including failure to control for pre-existing medical/obstetric risk, non-representative samples, and low study power. In response, we conducted a population level, retrospective cohort study examining the association between antenatal midwifery care and odds of small-for-gestational-age (SGA), or preterm birth (PTB), compared to general practitioner (GP) or obstetrician (OB) care for women of low SEP with low to moderate medical/obstetric risk.

Methods

Women were included if they resided in B.C. (2005-2012); had a singleton birth; < 2 provider-types involved in care; and received medical insurance premium assistance (n=57,872). Generalized estimating equation logistic regression was used to control for confounding.

Results

Odds of SGA birth were lower for women receiving antenatal midwifery vs. GP (OR 0.73, 95% CI: 0.63-0.84) or OB care (OR 0.60, 95% CI: 0.51-0.70). Odds of PTB were lower for midwifery vs. GP (OR 0.74, 95% CI: 0.63-0.86) or OB patients (OR 0.53, 95% CI: 0.45-0.62). Antenatal midwifery care was associated with reduced odds of SGA and PTB compared to GP and/or OB care for substance using women, and/or substance using women with mental illness.

Conclusions

Women of low SEP receiving antenatal midwifery care had lower odds of SGA and PTB compared to GP or OB patients of similar perinatal risk. Midwifery care should be available and accessible to all women, using intensive outreach for women of low SEP when necessary.

D1iii Barriers to Addressing Perinatal Mental Health Issues in Midwifery Settings

Presenter: Hamideh Bayrampour

Learning Objectives:

1. Recognize the provider-level and system-level barriers to screening, referral and management of perinatal mental health issues
2. Identify that the process of screening and management may be overwhelming for some providers
3. Distinguish central elements for successful integration of perinatal mental health care into midwifery practice

Synopsis

This presentation starts with a description of practice pattern of various maternity care providers, particularly midwives, around perinatal mental health issues. Then, findings of our recent review on perceived barriers to the screening, referral, and management of perinatal mental health issues in midwifery settings will be presented.

Abstract:

Pregnancy specific anxiety (PSA) is defined as nervousness and fear about the baby’s health, mother’s health and appearance, health care system and social and financial issues in the context of pregnancy, childbirth, and parenting accompanied by excessive worry and somatic symptoms. The DSM-V recognizes various categories of anxiety disorders, each with different clinical presentations. There is evidence that a considerable amount of variation in anxiety during pregnancy cannot be explained with other types of anxiety or comorbidity with depression. The reliability and validity of general measures to use with pregnant population has been criticized due to their reliance on somatic symptoms of excessive anxiety that may overlap with physiological changes of pregnancy, resulting in inflated scores. PSA is significant because it has a stronger association with maternal and child adverse outcomes and can predict these outcomes more accurately than general anxiety or depression. Few scales have been developed to measure PSA. However, narrow scope, missing important dimensions, and lack of indicators of severity of PSA calling into question their psychometric properties and clinical utilities. The goal of this ongoing project is to develop a clinically valid and reliable tool-- the Pregnancy Specific Anxiety Scale (PSAS) to address this need. In this presentation, we will describe various developmental phases of the scale including item generation and face and content validity. Considering its prevalence, identifying and managing PSA can be an effective strategy to improve maternal and child outcomes, particularly given the effectiveness of non-pharmacologic options during pregnancy.

D2i Engaging with the Truth and Reconciliation Commission Call to Action #33: Dialogue on FASD Prevention

Presenters: Lenora Marcellus, Nancy Poole, Hanna Scrivens

Learning Objectives:

1. Briefly summarize available evidence on FASD prevention within the ontext of Aboriginal women and communities
2. Describe how the consensus statement was developed
3. Describe the eight tenets in the consensus statement for enacting the call to action
4. Discuss how these tenets can be enacted within your work place

Synopsis

It is important for FASD prevention efforts to be tailored to diverse communities. Participants will be introduced to the Consensus Statement: 8 Tenets for Enacting the TRC Call to Action #33 (developing culturally appropriate FASD programs) and dialogue held on the possibilities of enacting these tenets in your workplace.

Abstract:

Background/ Rationale

Fetal Alcohol Spectrum Disorder (FASD) is the leading cause of developmental disability in Canada and FASD prevention is a priority for communities, and health providers across the country. The Truth and Reconciliation Commission (TRC) of Canada has called on governments to recognize the need to address and prevent FASD, and to develop, in collaboration with Aboriginal people, FASD preventive programs that can be delivered in a culturally appropriate manner (Action #33). In May 2017 a Dialogue to Action on the Prevention of FASD was held in Vancouver. During this event, a Consensus Statement was developed that was informed by the principles of reconciliation as outlined by the TRC.

How this will impact patients

Messaging around preventing FASD has often been constructed as clear, uncomplicated public health messages. However, evidence shows that FASD prevention efforts are more effective when they address the complex issues that face women at risk for alcohol-exposed pregnancies. Because Aboriginal women have been stigmatized related to alcohol use and FASD, culturally relevant approaches that are strengths based and holistic are required.

D2ii Support in the Perinatal Period for Women Struggling with Addiction: A Trauma Informed Approach

Presenter: Jan Ference

Learning Objectives:

1. Recognize the unique characteristics of this trauma-informed approach to working with addicted women in the perinatal period
2. Identify the correlation between early childhood trauma or adversity and addiction
3. Give an opportunity to reflect on how this kind of model might support their practice

Synopsis

Pathways to Healing is currently offering a unique trauma-informed approach to working with addicted women and their babies. Anchored in the latest neuroscience, this program aims to support the attachment relationship between caregivers and their infants. This session will offer an overview of this program; the successes and challenges.

Abstract:

Pathways to Healing, a Vancouver Island demonstration project, is an early intervention program for children and their caregivers who have suffered chronic trauma, adversity and/or neglect. More than half of our caseload is working with women with addiction histories who are at risk of having their babies apprehended. This is a common response to this population, and we are attempting to change the way the system looks at these vulnerable women by providing education to the professionals, and intensive support to the mother, her baby and any other family she has.

The program's theoretical, assessment and treatment is based on Dr. Bruce Perry's Neurosequential Model of Therapeutics (NMT) as well as having Dr. T. Brazelton's Touchpoints, as a way of maintaining reflective and relational practice.

When working with the vulnerable dyads, we work tirelessly to support the attachment relationship, even if that baby has to be apprehended, because we know the risk of relapse is high when or if the baby is completely removed. The increased risk for relapse is related to post-natal hormones, loss of hope, shame, and the physiological need to seek reward and soothing, biochemically. The birth of a baby is an opportunity to change this pattern. With support many of these women are capable of parenting. A clear description of the methods and logistics of how we conduct our work will be provided.

This break out session will also highlight the results of our evaluation, and offer specific trauma-informed response to addiction, attachment, and caregiving.

D3i Applying an Adverse Childhood Experience (ACE) Lens to the Postpartum Population

Presenters: Sara Cave, Riffaat Mamdani

Learning Objectives:

1. Demonstrate the potential of the HBHC Screen to identify, in the newborn population, risk factors that behave like the Adverse Childhood Experiences (ACE)
2. Illustrate the potential socio-demographic trends that can support surveillance and system improvements
3. Describe the impact of ACE exposures to child development, and discuss the benefits of early intervention

Synopsis

This presentation will demonstrate the use of an Adverse Childhood Experience (ACE) lens on the data from the Ontario's postpartum home visiting program, Healthy Babies Healthy Children (HBHC). The results indicate an opportunity for both policy and program level explorations.

Abstract:

Background/Rationale

Researchers associated with the Centre for Disease Control and Prevention identified 10 Adverse Childhood Experiences (ACE) that were highly correlated with poor adult outcomes such as addiction and chronic disease. Early identification of families with risk factors that could result in compromised child development and impact long-term adult health are of interest from both a policy and program perspective. There are several interventions, including home visiting, with strong bodies of supporting research, that can be used to support families who are identified with ACE-like factors.

Healthy Babies Healthy Children (HBHC) is an Ontario program designed to identify and support families with vulnerabilities that could compromise healthy child development. It includes universal postpartum screening, which is meant to comprehensively identify risks to healthy child development. Applying the ACE lens with data resulting from screening confirms that the HBHC Screen from Ontario is sensitive to identifying newborns and their families with existing ACE-like factors directly after birth.

Methods

For the purposes of this research, the ACE Factors were aligned to risk factors on the HBHC Screen that best fit to explore the HBHC Screens sensitivity to ACE-like factors. A series of statistical methods were used to assess the mapping. Additional analysis was completed to identify trends.

Results/Conclusions

Accuracy of the mapping was confirmed statistically. Additionally, socio-demographic trends suggest there may be some targeted populations to consider in the postpartum period for early intervention.

D3ii The BC Healthy Connections Project (BCHCP): A scientific evaluation of Nurse-Family Partnership in Canada

Presenters: Nicole Catharine, Donna Jepsen

Learning Objectives:

1. Identify the rigorous scientific methodology of a BC-wide public health intervention involving a randomized controlled trial design
2. Recognize the innovative aspects of the BCHCP, in particular how formal policy, academic, provider, and community collaboration was built into this provincial initiative
3. Explore how unacceptable pockets of deep socioeconomic disadvantage exist for BC girls and young women who are preparing to parent for the first time

Synopsis

The BC Healthy Connections Project involves a randomized controlled trial investigating the effectiveness of the Nurse-Family Partnership program compared to existing BC services in reducing child maltreatment and improving child and maternal health. Data show that unacceptable pockets of concentrated disadvantage exist in this population of pregnant young women.

Abstract:

Background

The BCHCP involves a randomized controlled trial (RCT) investigating the effectiveness of the Nurse Family Partnership (NFP) program compared to existing BC services in improving child and maternal health (2012-2021). NFP is a public health nurse-home visitation program for young pregnant women experiencing socioeconomic disadvantage that begins early in pregnancy and continues until children are two years old. The BCHCP involves a unique policy-practice-research collaboration with the Ministries of Health and Children and Family Development and with Fraser, Interior, Island, Northern and Vancouver Coastal Health Authorities and a team of international investigators.

Methods

More than 70 BC public health nurses have now provided NFP to over 900 women and their children. The BCHCP RCT enrolled 739 pregnant women who have given birth to 744 children. Research data are being collected at regular intervals during pregnancy and until children reach age two years.

Results

Baseline descriptive data are now available on participants when they first entered the trial early in pregnancy, prior to randomization (to existing services or NFP). These data show that unacceptable pockets of concentrated disadvantage exist in this population of pregnant girls and young women.

Conclusions

These findings confirm that we are reaching the population that NFP is intended to support.

D3iii The Childbirth Fear Questionnaire (CFQ): A New Measure of Fear of Childbirth

Presenter: Nichole Fairbrother

Learning Objectives:

1. Identify and define the scope of women's childbirth fears
2. Compare and contrast the CFQ against other measures of fear of childbirth
3. Estimate and appreciate the importance of screening for fear of childbirth using the CFQ

Synopsis

The Childbirth Fear Questionnaire (CFQ) is the most comprehensive measure of fear of childbirth currently available. The CFQ has demonstrated good reliability and validity, and can be used to: screen for fear of childbirth, identify targets for treatment, and track progress in treatment.

Abstract:

Background

Fear of childbirth affects up to 20% of women, and has been associated with a number of negative outcomes (e.g., increased pain during childbirth, postpartum mental health difficulties). Currently available measures of fear of childbirth fail to fully capture women's childbirth-related fears. The purpose of this research was to develop a new measure of fear of childbirth (the Childbirth Fear Questionnaire; CFQ) that would address the limitations of existing measures.

Methods

Participants were two samples of 643 pregnant women residing in English speaking countries, and were recruited in person and via online forums. Participants completed a set of questionnaires, including the CFQ, via an online survey.

Results

Analysis of the CFQ resulted in 9 factorially-derived subscales, and an Interference scale. CFQ subscales represent fear of: (1) pain from a vaginal birth, (2) embarrassment, (3) medical interventions, (4) insufficient pain medication, (5) cesarean birth, (6) harm to one's infant, (7) the mother or infant dying, (8) body damage, and (9) negative changes to one's appearance and sexual functioning. The CFQ demonstrates good psychometric properties.

Conclusion:

The CFQ represents the most comprehensive measure of fear of childbirth currently available.

D4i Motherwise Fills Gaps for Moms at Risk

Presenters: Mona Mattei, Tanya Momtazian, Sheena Albrecht

Learning Objectives:

1. Tips and tools for collaboratively developing group sessions for moms experiencing depression and anxiety in the perinatal period
2. Understanding the details of how the groups functioned
3. Impact of facilitated peer support groups for new mom

Synopsis

Motherwise peer support groups piloted in the Kootenay Boundary region to fill gaps in care for moms experiencing mental health challenges supported over 60 moms in the first year. Explore the experience of moms and providers using this collaborative model, and get the details to spread to your community.

Abstract:

The Kootenay Boundary Regional Perinatal Advisory Committee received funding in 2015 from Shared Care to address gaps in care for moms experiencing mental health challenges. Patient advocacy was a key driver in the creation of the project. Pregnant and post-partum women in the region who experience depression and anxiety often find themselves in a frustrating cycle of care without a clear service path and long referral wait times.

Through collaboration between Interior Health, community service agencies, primary care providers and psychiatrists, the committee created tools and resources, improved networks of care and piloted a collaborative service model for facilitated group sessions for moms experiencing depression and anxiety in four communities.

Over 60 moms participated in the 8-week group sessions. Moms were screened using the Edinburgh Post-Natal Depression Scale (EPDS) and referred to Mental Health and Substance Use as appropriate. Moms

experienced a statistically significant improvement in EPDS in the first set of groups in a paired t-test ($P=0.002928$) and expressed very strong satisfaction, with over 70% indicating that the groups had been very important in their recovery. The groups demonstrate a useful way to address mental health challenges in the perinatal period and lessons learned can assist other regions in establishing similar groups.

D4ii Childbirth Education: Building Women's Capacity

Presenter: Farah Jetha, Amanda Kelloway

Learning Objectives:

1. Tips and tools for collaboratively developing group sessions for moms experiencing depression and anxiety in the perinatal period
2. Understanding the details of how the groups functioned
3. Impact of facilitated peer support groups for new mom

Synopsis

Motherwise peer support groups piloted in the Kootenay Boundary region to fill gaps in care for moms experiencing mental health challenges supported over 60 moms in the first year. Explore the experience of moms and providers using this collaborative model, and get the details to spread to your community.

Abstract:

Prenatal education or formal childbirth education was created in 1960 by Elisabeth Bing and Marjorie Karmel to meet the needs of women who wanted to be more aware and awake for their labour and birth experiences (Lothian, 2008). Bing and Karmel's curriculum became a staple for prenatal education and included information primarily targeting non-pharmacologic methods to support labouring woman. Undoubtedly, formal childbirth education has evolved in its content and delivery since 1960 and is now offered through a wide variety of group/individual formats and delivered via numerous diverse platforms.

This session will focus on three learning objectives. Firstly, provide a literature-review on the benefits and positive impacts of formal childbirth education. Secondly, how and where expectant women and their families access childbirth education locally and globally including the role of social determinants of health. The various delivery platforms and their advantages and challenges will be addressed. Thirdly, incorporate the presenters' knowledge and first-hand experience delivering formal childbirth education along with the current recommendations. Strategies for success and improvements that are needed will also be shared.

The session will be founded on a comprehensive literature review of current national and international research on this topic. A brief review of the methods of included research studies will be provided with a comprehensive presentation of the results and conclusions. The focus of this presentation will be on the evidence-based impact childbirth education can have on pregnant women and their families and the integral role of the healthcare team in advocating for this education.

D4iii Improving Maternity Patient Preparation: Engaging Providers and Patients

Presenter: Lana Sullivan, Ann Pederson, Renee Fernandez

Learning Objectives:

1. Link health promotion with equity and quality improvement
2. Illustrate the advantages of care provider consultation
3. Review the importance of patient engagement

Synopsis

This panel session will demonstrate that the process of developing maternity education resources was equally as important as the products. We will discuss health promotion and equity which ground our direction; describe the engagement of interdisciplinary care providers and inclusion of diverse new parents to ensure that patient experience and quality of care throughout their maternity journey is improved.

Abstract:

Pregnant women and their care providers are challenged to find evidence-based, up-to-date resources to prepare for pregnancy, birth, postpartum and newborn care. In 2015-2016, a lack of preparation prior to birth was identified by patients at BC Women’s Hospital + Health Centre (BCWH) as a gap in care and a suggested area for improvement. Patient engagement in quality improvement is a best practice for health care organizations. Integrating the voices of care providers with the voices of patients in the development of patient education resources required balancing the wisdom of content experts with the lived experiences of patients. This panel session will describe three elements of a project at BCWH with the purpose of developing of resources to improve patients’ preparation for the maternity experience. We will first discuss our theoretical frameworks of health promotion and equity which grounded our purpose and direction. Second, we will outline the process associated with engaging interdisciplinary care providers and discuss the benefits, such as generating grassroots buy-in, and challenges such as meeting fiscal year timelines associated with the process. Third, we will highlight the importance of including diverse new parents in the final production phases of the resources to ensure the resources were practical, understandable, and fit with the lived experience of new parents. Together we will demonstrate that process was of equal value as product in the development of maternity education resources that will improve patient experience and quality of care.

Plenary

Life Is Simple: So Why Do We Screw It Up?

Presenter: Louis Hugo Francescutti

Learning Objectives:

1. What makes us healthy?
2. Why are there so many injuries and so much illness in Canada?
3. What can we do about it?

It is simply insane that provincial governments are approaching spending 50% of their entire annual expenditures on the health portfolio. Health care providers should be trying to put themselves out of a job not building more and more expensive facilities that offer questionable value in terms of improving health.

Our focus on sick care is not working! Never has, never will.

The first eighteen months of a child's life are crucial to their life long health, so why we are continually neglecting those crucial formative years?

Literacy has more impact on your health than any other measure: so why are so many Canadians functionally illiterate? Why is this opportunity lost?

Is there any accountability from either a social or financial perspective for the over \$225 billion we are spending annually on this so-called health care system?

This session will tell it like it is!

If you think we are doing such a great job then don't bother coming. You may be the problem.

There are simple yet very effective things we can be doing to start improving our health and the health of all Canadians.

It is time for all of us to grow up and start doing the right things.

Come help stop this insanity!

P01 **Developing Quality Improvement Indicators for a Patient Safety Program in Obstetrics**

Presenter: Cara Bowman

Authors: Lisa Calder, Qian Yang, Tunde Gondocz, Christina Young, Cathy Zhang, Anna MacIntyre, Sharon Caughey, Peter O'Neill, Charmaine Roye, Guylaine Lefebvre

Abstract

Although the frequency of medico-legal obstetrical cases in Canada is low, the severity of patient harm and subsequent health care costs can be high. To support measurable improvements in care, we developed a set of quality improvement (QI) indicators using internationally recognized healthcare frameworks. We focused on areas of obstetrical practice associated with the highest medico-legal risk that we identified by analyzing data from a national database.

We conducted a literature search for pre-existing QI frameworks, from which we selected relevant indicators that mapped to the identified high risk areas, and developed new potential measures as necessary. To ensure face validity of these measures, we conducted consultations with internal experts and relevant external obstetrical quality organizations.

We identified 5 areas of increased medico-legal risk in obstetrical practice among 686 closed cases (2010-2014). We found 5 published QI frameworks; these focused on clinical and process of care outcomes, but lacked balancing measures. Our final list of indicators included 23 process of care, 14 clinical care, and 3 balancing measures. We identified the following measures: 15 for induction and augmentation of labour; 13 for shoulder dystocia; 16 for assisted vaginal delivery; 10 for delayed decision to C-section; and 8 for collaborative care.

We developed a comprehensive but practical list of quality indicators for 5 areas of increased medico-legal risk in Canadian obstetrical practice.

These indicators can be used to facilitate future quality improvement work in obstetrics, with the promise of enhancing care delivery to mothers and infants and reducing medico-legal risk.

P02 Improving Post-Discharge Surveillance of Surgical Site Infection Following Cesarean Section at BC Women’s Hospital

Presenters: Emma Branch, Selina Suleman

Authors: Edwina Houlihan, Melissa Glen, Kathryn Dewar, Julie van Schalkwyk

Abstract

BC Women’s Hospital (BCWH) handles over 7000 deliveries annually, approximately 30% of which are caesarean sections (CS). Historically, surgical site infection (SSI) rates at BCWH were based on the SSI occurring before hospital discharge or on readmission; and did not account for infections occurring post-discharge, which are diagnosed and treated in the community. The pilot project for this surveillance initiative, in which post-discharge infections were captured, showed an increase in SSI rates from 0.5% to 6%. Given this large discrepancy and rising CS rates, a clear need exists for enhanced SSI surveillance and follow-up.

This quality improvement initiative was launched in April 2016 to monitor rates of CS SSI using patient surveys and provider follow-up. Patients are sent an online survey 30 days post-delivery to assess if they had any symptoms of SSI. Providers are asked to confirm SSI diagnoses for any women reporting symptoms.

There is a high response rate within 4 weeks from both patients completing the online survey (75%) and providers returning completed forms by fax (72%). Of the women who responded, 53% reported one or more symptoms of SSI. To date, providers have confirmed SSI in 6% of women.

SSI is a common problem following CS and accurately capturing the rate of infection is important in a hospital environment. An accurate rate will allow BCWH to monitor whether interventions aimed at reducing CS SSI are successful and will ultimately lead to a reduction in post-surgical infections.

P03 Sharing Postnatal Length of Stay Data to Enhance the Transition to Home Following Birth

Presenter: Christina Cantin

Authors: Lauren Rivard, Marie-Josée Trépanier

Abstract

Background/Rationale

Canadian hospitals are under increasing pressure to decrease the length of stay for new mothers and newborns. This presents unique challenges related to time available for postnatal teaching. Expectant parents' knowledge of what to expect when going home with their baby, with a clear follow-up plan, can contribute to ensuring there are no gaps in the care mothers and newborns receive after being discharged from the hospital.

Methods

We formed a regional workgroup, co-led by a parent, to co-design and pilot an innovative tool designed to help expectant parents be as prepared as possible for parenting. To evaluate this tool, we used a pre and post implementation survey design to determine: 1) satisfaction with the checklist; 2) time spent antenatally learning and getting prepared to care for baby and self; 3) perceptions about their readiness to go home; and 4) knowledge of care for self and baby and follow-up requirements and 5) overall feelings of preparedness and knowledge of community supports.

Results

"Good Parenting Start (GPS): A Roadmap to Getting Ready to Go Home with Baby" was created and piloted in three sites starting August 2017. Results of the pilot phase will be shared.

Conclusions

Feelings of parental preparedness antenatally for the postnatal period may help new families to transition into parenthood more comfortably and with the information needed to ensure safety for the mother and baby. We have identified a promising strategy that may increase expectant parents' awareness of the early follow-up requirements for their newborns and themselves.

P04 Sidestepping the Stigma of PPD/A in a Small Community: Fostering Mothers Wellness Through a Self-care Lens

Presenters: Cali Chang, Anne Desrosiers

Abstract

Background

Over the past 24 months, we have created and implemented a pilot program to address the challenges of accessibility and stigma around women with Perinatal depressive and anxiety symptoms. The participants were all facing limited local resources such as no primary care provider and termination of midwifery services. The program was based on the tenant of self-care as an integral method of support and capacity building in the perinatal period, particularly around access to support

Methods

Addressed accessibility up front. Reframed PPD group as part of a Mother's Wellness Continuum. Facilitated mother's freedom to share experiences, strength, hope and knowledge, coupled with the opportunity to learn new tools and resources.

Results

The feedback from our 3 trials of the program has been overwhelmingly positive. Qualitative data shows families feel better supported and the initiative has been adopted into our regular programming.

Conclusions

Reframing PPD through a wellness continuum has improved accessibility to services and support. We hope our local success can be translated to other communities with similar constraints.

P05 Immunization Before, During and After Pregnancy

Presenter: Katharine Chilton

Abstract

Background/Rationale

Pregnancy is a time when a healthy woman may have more contact with the medical system than at any other time. It is therefore an opportune time to assess her immunization status and administer any appropriate vaccines that will provide protection for both her and her baby.

Methods

A review of the current literature supporting the current Canadian and BC recommendations related to the assessment of a woman's immunization status and subsequent administration of appropriate vaccines in order to provide optimal protection for both mother and baby.

Conclusions

The literature clearly supports the beneficial effects of maternal vaccination for the mother and baby. Maternal vaccination protects the mother from vaccine-preventable diseases as well as the transmission to her fetus or infant. In addition, protective concentrations of maternal antibodies may be transferred to the fetus transplacentally, with the majority of transfer occurring during the third trimester. There are no data to indicate that any of the currently recommended vaccines are teratogenic or embryotoxic, or have resulted in specific adverse pregnancy outcomes.

P06**Better Beginnings: At Risk Moms. What Are We Missing?**

Presenter: Anne Drover

Authors: Allison Lamond**Abstract***Background*

The Perinatal Program NL collects statistics on issues affecting the health of mothers and newborns. The number of infants born to mothers that have used substances has quadrupled. Children exposed to substances during pregnancy may be at an increased risk of behavioral and potentially withdrawal symptoms. Mothers may not disclose substance use due to stigma. Women using substances in pregnancy may also experience increased rates of domestic violence, mental illness and housing and food insecurity. It is felt that these social determinants of health may not be adequately recorded on routine history taking.

Methods

A survey was developed to assess these determinants of health in postpartum mothers. It was created using FluidSurveys and accessed on a smart phone using a QR code. Two hundred mothers completed this anonymous survey.

Results

Rates of Substance use, alcohol use, violence, levels of support, respect, isolation, food and housing insecurity will be reported. The official data showed vast under reporting of all these determinants of health.

Conclusions

This study reveals there is much work to be done when it comes to providing healthy beginnings for mothers and babies. Accurate and thorough information needs to be obtained from mothers in order to provide them with the most appropriate health care and services. Health Professionals must be vigilant in screening for these risky behaviors.

Through multidisciplinary rounds presenting this information, we have already begun a discussion of ways in which we can better gather this information from families. A working group has applied for CIHR funding for projects.

P07 **Determination of Dietary Phenylalanine Requirements During Early and Late Gestation**

Presenter: Madeleine Ennis

Authors: Betina Rasmussen, Glenda Courtney-Martin, Paul Pencharz, Rajavel Elango

Abstract

Background

Phenylalanine (PHE), an essential amino acid, is necessary for protein synthesis and fundamental for proper fetal development. Via the conditionally essential amino acid tyrosine (TYR), PHE is the precursor for neurotransmitters dopamine, norepinephrine and epinephrine. Currently the dietary requirements for PHE during pregnancy are unknown.

Objectives

Our objective was to determine PHE requirements (in the presence of excess TYR) during early and late stages of gestation in healthy women.

Methods

15 women (aged 25-39y) were studied during two phases of pregnancy (13-19wks and 33-39wks). A range of PHE intakes (5.5 to 30.5 mg/kg/d) were provided while using the novel direct amino acid oxidation (DAAO) technique. This minimally invasive stable isotope based method involves the collection of breath samples at baseline and during stable isotopic steady state of orally provided 1-13C-Phenylalanine. Breath samples were analyzed for 13C enrichment using an Isotope Ratio Mass Spectrometer. PHE requirement was determined using a two-phase linear regression crossover model to identify a breakpoint in 13CO2 production (which represents the minimum PHE requirement).

Results

The requirement for PHE is 37% greater in early pregnancy and 81% greater in late pregnancy, when compared to the previously determined PHE requirement in healthy adult men.

Conclusions

Dietary protein and amino acids are essential to ensure optimal fetal growth. Our results indicate that there is an increased requirement for phenylalanine during pregnancy. The results of this study will help to refine nutritional guidelines during pregnancy, which are currently not based on direct studies, but on factorial (mathematical) calculations.

P08 Factors Influencing Screen Time Use in Children Under Two Years of Age

Presenter: Florence Escandor, Annie Lau, Reda Wilkes

Authors: Wendy Hall**Abstract***Background/Rationale*

The Canadian Pediatric Society does not recommend screen time for children under 2 years (June, 2017). This recommendation reflects the negative effects of screen time on language and cognitive development in children less than 2. The Canadian Pediatric Society recommends that health care providers counsel parents of young children on the appropriate use of screen time.

Methods

This quantitative, cross-sectional electronic survey included questions adapted from the Healthy Living Habits in Pre-School Children. 242 parents from six Vancouver public health districts completed the survey.

Results

Parents were mostly well educated (postsecondary, 63.2%) and married (85.5%). Most children were less than one (59%). Parents indicated that 42% of children did not engage in screen time but 46% of parents reported more than 90 minutes per day of screen use. Factors influencing children's screen use included: time for household chores, coping with a busy work day, family bonding time, and calming children at mealtimes. Parent-identified barriers to reducing time included: children's enjoyment and being upset when the screen was removed.

Conclusions

Health care providers can offer support to parents through identifying factors increasing screen time use and providing screen time limiting strategies. Because concerns are growing about effects of increasing screen time on Canadian children, health care providers can suggest alternatives to screen time when parents are busy or to calm children.

CPS position statement

<http://www.cps.ca/en/documents/position/screen-time-and-young-children>

P09

Breastfeeding Art Expo - Influencing Change through Art

Presenter: Karen Graham, Lea Geiger

Abstract

Background

The Breastfeeding Art Expo is a 5-year project led by Interior Health and KCR-Community Resources, and partnered with 35 community organizations, 75 artists, 6 videographers and several hundred community participants. It includes community art, independent art, videos, and a full-colour Art Catalogue and Teacher's Guide

Methods

Community consultation, and arts-and-health research was undertaken. A broad-based Steering Committee was formed and guided the project. A website was created. External and internal funding was obtained. A call was made for artists to participate in community projects. Artists were then linked with community organizations and community participants over a 2 year period. 15 community art pieces (dance, poetry, paintings, sculpture, photography, and Indigenous artwork) and a videos of each project were created. A second call was done for independent artwork, and these artists produced their art. Writing of Art Catalogue and Teacher's Guide. Gallery locations secured, and planning of expo logistics and curation, and promotion. Expo on tour across the region and online Expo launched. Complete evaluations.

Results

15 collaborative art pieces, 65 independent artworks, 20 videos, 128-page full-colour Art Catalogue, 46-page Teacher's Guide, website with social media sites, 6 full tours in 9 gallery location across Interior Health Region, evaluations, and How to Guide (Fall 2018)

Conclusions

A highly successful first in the world large scale art expo on the topic of breastfeeding. How this will impact patients: Provide an innovative vehicle to open discussion, awareness and action towards establishing breastfeeding best practices in hospitals and health centres.

P10**Maternal Decision Making in Regards to Human Milk Donation in BC**

Presenter: Damaris Grunert

Authors: Suzanne Campbell, Susan Dahinten, Lynne Palmer**Abstract**

Human milk donation is becoming more popular globally and within our province, but what do we know about the women who consider donating milk to the provincial milk bank? Little research is available assessing the attitudes, motivations and barriers towards human milk donation within the BC population.

This poster presentation will review the results of a province wide study conducted in the summer of 2017, exploring the attitudes, motivations and barriers of mothers with a child 2 and under, towards milk donation to the provincial milk bank. Following this presentation the learner will be able to:

1. Identify factors that influence women's intention to donate.
2. Describe the self-reported attitudes and subjective norms towards human milk and human milk donation.
3. Identify the set of demographic characteristics, attitudes, subjective norms and barriers that best predict the intention to donate.

Mothers were asked to complete a 74 item survey, based on the theory of planned behaviour. Mothers accessed the survey through in person recruitment at their local public health clinic, posters/ business card recruitment notices, health authority e-newsletter or via internet/social media snowball sampling. Quantitative and qualitative feedback from 755 mothers was gathered. Analysis will be concluded in the fall of 2017.

By better understanding the patient population choosing to donate, health care providers will be better able to support their patients in the decision making process around human milk donation.

P11 Improving Predictability and Structure in Patient Rounds for Integrated Parent Participation

Presenter: Ronnalea Hamman, Sara Walker

Authors: Sandesh Shivananda, Valoria Hait

Abstract

In preparation for a move from a 60 bed open bay design to a 70 single family room design in October 2017, the BCW Neonatal Intensive Care team has done extensive work to design an integrated family-centred model of care where parents are integrated into the 24/7 care of their newborns. Patient rounds are a key communication point for parents and staff, however they were very unpredictable as to when they would arrive at a bedside, took a median time of 225 minutes to complete and have been a source of dissatisfaction for staff and families due to this unpredictability and length.

An interdisciplinary team, including parents, redesigned the rounds process to improve the predictability of rounds with a defined start and end time. Structured reporting was developed with parent input. A rounds tool was developed for parents to aid them in preparing for rounds within the new format. The new rounds were trialed for 3 months with a rounds facilitator to assist with implementation and incorporating feedback to continuously improve the process.

Rounds now start at a predictable time which allows parents to ensure availability increasing their presence. The rounds tool is located in all parent binders and family advisors assist parents in preparing for rounds. The median length of time for rounds was reduced by 55% to 125 minutes and staff/family satisfaction increased.

The impact has improved acceptability by incorporating patients' needs and values establishing more predictable rounds with structured reporting, creating an environment for enhanced participation.

P12**Beck's Substantive Theory of Postpartum Depression: A Theoretical Analysis**Presenter: Megan James

Authors: Elaine Mordoch**Abstract***Background/Rationale*

Postpartum depression (PPD) is a serious illness that affects many women during the postpartum year. Due to a miniscule number of qualitative research studies on PPD, Cheryl Tatano Beck (1993) conducted a grounded theory analysis of a PPD support group resulting in a four-stage theory of PPD entitled, "Teetering on the Edge: A Substantive Theory of Postpartum Depression". This middle-range theory has direct application to nursing practice and is based on an evidence informed perspective. In order to correctly apply a theory to practice, it is crucial that the theory is fully understood.

Methods

The theory was analyzed utilizing Chinn & Kramer's (2015) framework for describing and critically reflecting on an empiric theory.

Results

The theory is clearly and simply written to allow for ease of understanding and application by nurses. The defined concepts are empirically accessible and translatable to further research and practice.

The theory has also undergone two modifications to reflect new research findings (Beck 2007; 2012).

Conclusions

Although not a theory of risk factors or treatment of PPD, this theory allows postpartum, public health, and mental health nurses to understand what women experience in their battles with PPD.

P13 The Frequency of a Nurturant Response to Infant Elimination Needs: Reducing Unexplained Infant Crying with Elimination Communication

Presenter: Geraldine Jordan

Authors: Denise McFarland, Kelly Ireland, Alescia Richardson

Abstract

Background/Rationale

The Normal Crying Curve refers to the peak in infants' unexplained crying at 6 to 8 weeks, and self-resolving by three months. However, it is known that infants signal their need to eliminate (micturate/defecate) through a variety of cues, including fussing and crying. Elimination Communication (EC) refers to a caregiver's nurturant response to infant cues, while also using timing, to gently and non-coercively cradle the infant in a supported, secure squatting position to eliminate. Our objective is to evaluate the relationship between infant crying and the diurnal frequency of EC practice.

Methods

As a pilot study, we collected empirical data from mothers who practiced EC with their infants, tracking crying/fussing at weeks 4, 6, 8 and 12, primarily utilizing a 24-hour Baby's Daily Diary. We also included existing crying data from the literature. We compared EC frequency with crying amounts using statistical analyses.

Results

Results from participants (n=7) plus existing data (n=2) included scatterplots which indicated that average crying duration at 6 weeks was negatively correlated with EC frequency (Pearson's $r=-0.778$; $p=0.014$) as was the average over all weeks ($r=-0.744$, $p=0.022$).

Conclusions

While scatterplot distributions did not indicate a recommended EC opportunity frequency, our results show that more frequent EC opportunities are statistically correlated with less observed crying.

P14 Understanding Experiences of Social Support as a Coping Resource among Immigrant and Refugee Women with Postpartum Depression: An Integrative Literature Review

Presenter: Shahin Kassam

Abstract

Background

Over one-third of Canadian women are immigrants and refugees (Chui, 2013). With numbers climbing at an alarming rate, complex health needs of these women need attention. One complex domain is women's mental health. Within this domain lies a poorly understood population: immigrant and refugee women with postpartum depression (PPD). This integrative literature review explores social support experiences among immigrant and refugee women with PPD through postcolonial feminist (PCF) and coping theory lenses.

Methods

Drawing on Whittmore and Knaf's (2004) methods, search approaches and inclusion/exclusion criteria were applied to studies found in five databases. Eleven primary sources were located. Data extraction focused on methodology, theoretical standing, study setting, participant characteristics, method used, geographical context, cultural context and phenomena of interest.

Results

Themes generated include: maintaining cultural identity, connecting with community and spirit, providing relational space, and seeking and exchanging knowledge. Co-existing influencers revealed through analysis included: experience of poverty, experience of trauma and abuse, and experience of concealing to maintain gender-driven roles.

Conclusions

Guided by PCF, discussion focused on contextual influences and systemic inequities embedded within healthcare provision. Conclusions and recommendations include underpinning research and practice with Hankivsky's (2011) intersectional theory, enhancing relational practice, questioning current processes, and collaborating across disciplines and organizations. This review summarizes current state of knowledge on social support experiences among immigrant and refugee women with PPD through PCF and coping theory lenses. Recommendations for practice will enhance nursing care provision through informing practice and stimulating inquiry into an underexplored population.

**P15 Tongue-tie in Infants and Breastfeeding Challenges in Eastern Newfoundland-
Can an Assessment Tool for Public Health Nurses Improve Their Confidence
in the Referral for Frenotomy?**

Presenter: Allison Kavanagh

Authors: Jessica Bishop, Katherine Stringer

Abstract

The topic of tongue-tie and related breastfeeding difficulties in infants in NL has been a recent topic of discussion in both the health care forum and in the general public. One concern identified is that there is no formal process to assist Public Health Nurses (PHNs), the front line health care providers in helping mothers with breastfeeding, to make appropriate referrals for frenotomy. Frenotomy is a simple surgical procedure that is sometimes recommended for tongue-tied infants to improve function and movement of the tongue for breastfeeding. The objective of the study is to determine whether a Frenotomy Assessment Tool can improve the confidence of PHNs in their ability to appropriately refer infants for frenotomy in Eastern Newfoundland.

This study will measure the confidence of PHNs in making appropriate referrals for frenotomy before and after training in and the use of a Frenotomy Assessment tool. 23 PHNs participants were recruited in the Eastern region. The intervention consisted of a webinar, which was given by Dr. Jessica Bishop, family physician, which served as an introduction to the Frenotomy Assessment Tool and its referral process. The pre-training questionnaires were completed in June 2017 and the post-training questionnaires were completed in January 2018.

This research is in progress however it is anticipated that measures of confidence in appropriate referrals for frenotomy by PHNs will improve from the pre-training to the post-training period.

It is hoped that conclusions from this study may help guide future decisions in Eastern Health regarding appropriate referrals for frenotomy.

P16 A Prospective Cohort Study of UBC Family Practice Resident and New Graduate Attitudes toward Intrapartum Care

Presenter: Lindsay Mackay

Author: Stephanie Stacey

Abstract

Background

There has been a steady decline in the proportion of Canadian Family Physicians who provide intrapartum care over the last three decades despite many documented patient benefits such as lower intervention rates with equivalent maternal and neonatal outcomes. This study explores what proportion of UBC Family Medicine residents intend to provide intrapartum obstetrical care before and after their obstetrical rotation, at graduation, after their first year of practice and the influential factors related to this

Methods

Prospective cohort study that analyzed responses collected by an online survey distributed by email.

Results

We found that the proportion of residents planning to provide intrapartum care decreased over the course of residency and again after a year in practice. The main factors relating to the decline are inadequate training, lack of confidence in their skills, staff interactions, concern over negative outcomes and the possibility of malpractice suits. Factors positively associated with intention to provide intrapartum care included: intention to practice in a rural environment, working with a primary preceptor who provides intrapartum care, following women longitudinally throughout pregnancy and attending a larger number of births.

Conclusions

The influential factors identified relating to the decline in Family Physicians providing intrapartum care after graduation can be then used to advise residency programs and provide support for new Family Physicians in order to increase the proportion that provide intrapartum care.

P17 **Bringing Baby Friendly (BCC, 2017) Guidelines to Faith Communities: An Inspiring Journey**

Presenter: Kate McCulloch

Abstract

The Baby Friendly Hospital Initiative was established in 1991 by the World Health Organization (WHO) and the United Nations Children Fund to address maternal and child health (Breastfeeding Committee of Canada, 2017). Canada adopted this initiative and renamed it the Baby Friendly Initiative (BFI) to reflect inclusion of hospital and community health services (BCC, 2017). Babies and young children have the right to feed whenever and wherever as needed; therefore, community services outside of health care also have a responsibility to create a welcome space for breastfeeding.

Guidelines for protecting, promoting and supporting breastfeeding in faith communities were established and shared among 49 parishes around the province of British Columbia (BC). The BC Synod of the Evangelical Lutheran Church in Canada (ELCIC) supported Baby Friendly (Breastfeeding Committee of Canada, 2016) guidelines that were created to enable places of worship within the BC Synod to welcome mothers to feed their babies and young children whenever and wherever needed. In addition, many of these gathering places welcome community members for daycare, music groups, non-profit groups (e.g. Alcoholics Anonymous) and food pantries, and the guidelines would be displayed for their benefit as well.

Subsequent to the distribution of the guidelines, parishes were contacted to inquire about how the guidelines were received. The conclusion is that while most parishes welcomed and adopted the guidelines, there were some challenges, similar to those in health care settings, encountered.

P18 **Managing Postnatal Depression: Why We Need an Integrated Approach**

Presenters: Christine Ou, Wendy Hall

Abstract*Background*

Feminist researchers have argued that most empirical research on postnatal depression (PND) focuses on identification and treatment of individual dysfunction. A large body of research points to social factors that increase women's risk for PND, such as poverty, violence, rigid gender roles, and poor social support. In this presentation we call for integration of individualistic and social approaches to the study and treatment of PND and articulate our rationale.

Methods

This presentation is based on an integrative review that included 26 papers related to anger and depression in the postnatal timeframe (0-12 months postpartum). We used a narrative approach to summarize major themes from the literature.

Results

We identified that anger can occur concomitantly with depression when women feel powerless or have their expectations of self-expression and motherhood violated, which were closely related to socio-cultural interactions. In addition angry and depressed women often expressed anger towards others close to them.

Conclusions

Framing PND as an individualistic experience detracts from attending to women's social contexts, in particular socio-cultural interactions that contribute to women's PND and anger. Incorporating assessments of and resources to manage women's social contexts will improve their treatment.

P19 Investigating the Predictors of Recovery from Depression and Anxiety in Women: A Longitudinal Study from Childbirth to Six Years

Presenter: Radhika Shankar

Authors: Rinette Badker, Ursula Brain, Tim Oberlander, Shaila Misri

Abstract

Background

This study prospectively examined maternal biopsychosocial predictors of comorbid depression and anxiety from 25 weeks gestation to 6 years post-birth. Specifically, the study investigated the influence of a) maternal factors and b) the child's behaviours and physical health on the course of the mother's depressed mood and anxiety.

Methods

Eighty-six women diagnosed with antenatal depression and anxiety were recruited through the Reproductive Mental Health Program and family practices in Vancouver. Based on the trajectory and status of their symptom remission, participants were categorized into three groups: full recovery, partial recovery and no recovery. These measures were completed over six years: Hamilton Anxiety Rating Scale (HAM-A) and Hamilton Depression Rating Scale (HAM-D) at baseline; Parental Stress Index (PSI) added at 6 months postpartum; Beck Anxiety Inventory (BAI), Beck Depression Inventory (BDI-II) and Child Behaviour Checklist (CBCL) at 3 years post-birth; HAM-A, HAM-D, MacArthur Health and Behaviour Questionnaire (HBQ-P) and PSI at 6 years post-birth.

Results

Factors that predicted full recovery from depression included the absence of maternal health concerns, low total parental stress and few child behavioural issues; whereas low levels of spousal stress was a significant factor in achieving full recovery from anxiety.

Conclusions

A variety of maternal and child-related factors govern full recovery or sustained remission of depression and anxiety in the postpartum up to six years post-birth.

P20 'The Blue Arc of the Rainbow'- Aboriginal Women in the Perinatal Period and eHealth Literacy: A Convergent Parallel Mixed Methods Study

Presenter: Judy Sturm

Abstract

Health disparity research indicates that health illiteracy is associated with poorer health outcomes and greater risk of hospitalization (Collins, Currie, Bakken, Vawdrey & Stone, 2012; Skopelja, Whipple & Richwine, 2013). Health information is increasingly being transitioned to online formats creating a challenge for those healthcare consumers that do not have the ability to access, evaluate and incorporate the large amount of health information available on the Internet (Usher & Skinner, 2010). Achieving a better understanding of the eHealth literacy levels of Aboriginal women and how they use technology to access health information may support better health outcomes in a variety of settings including the perinatal period.

This mixed methods study explored the eHealth literacy knowledge, attitudes and skills of urban Aboriginal women in the perinatal period residing in a small city in British Columbia. A convergent parallel design was used to collect both qualitative and quantitative data from five study participants. Due to the small sample size study findings need to be interpreted with caution. The results may demonstrate that urban Aboriginal women in the perinatal period are comfortable and competent in accessing health information on the Internet. They identified the following as areas for improvement: (1) identifying if the information they retrieve is credible, (2) improving the cultural appropriateness of health information and websites, (3) improving access through continuing to build technology and search skills for Aboriginal women, and (4) supporting better access to the Internet and technology equipment for Aboriginal women affected by the digital divide.

P21 Mothers' Perspectives on Their Technology Use While Breastfeeding in British Columbia

Presenter: Thayanthi Tharmaratnam, Suzanne Hetzel Campbell

Abstract

Background

The increasing ownership of smart phones and the continuous improvements in smart phone software and hardware make them a timely, cost-effective approach to provide breastfeeding information and support to mothers. World Health Organization calls on governments to increase global exclusive breastfeeding rates to 50% by 2025. Smart phones are a novel approach to provide accurate and timely breastfeeding knowledge and support.

Purpose

To conduct a scoping review about breastfeeding knowledge, support and behaviors of women using smart phones to inform their breastfeeding experience and to identify the breadth of peer-reviewed literature, summarize findings and identify gaps.

Methods

The search included four electronic databases: CINAHL, Ovid, Medline and PubMed. Studies in the review focused on publication dates from January 2010 to December 2017. Methods include a thematic categorization of selected articles using an adapted framework from Arksey and O'Malley

Conclusions

The search included four electronic databases: CINAHL, Ovid, Medline and PubMed. Studies in the review focused on publication dates from January 2010 to December 2017. Methods include a thematic categorization of selected articles using an adapted framework from Arksey and O'Malley
