

Changing Childbirth in British Columbia (CCinBC): Speaking of autonomy and respect, and choice in maternity care

Presented By: Jasmina Geldman, MSc
Research Coordinator
UBC Faculty of Medicine (Birth Place Lab)

Saraswathi Vedam, RM FACNM SciD (hc) (Principal Investigator)
Professor, UBC Midwifery, Faculty of Medicine
Principal, Birth Place Lab

Ganga Jolicoeur (Community Lead)
CEO, Midwives Association of British Columbia

Kathrin Stoll, PhD (Co-Investigator, Analyst)
Research Associate, UBC Birth Place Lab

Stéphanie Black, MEd (Analyst)
PhD Student, UBC Faculty of Education

Lynsey Hamilton, MSc
KT Specialist
UBC Faculty of Medicine (Birth Place Lab)

Disclosure Statement

- I have no affiliation (financial or otherwise) with a pharmaceutical, medical device or communications organization.

Background

- Respectful Maternity Care is a **GLOBAL** priority
- In 2016, the World Health Organization (WHO) published **eight standards** for quality of maternal and newborn care
 - Four of the standards prioritize **respect, dignity, emotional support, and patient-led, informed decision-making.**
- **Research in Canada on interventions:**
 - In 2009, the **Canadian Maternity Experiences Survey (MES)** showed higher use of obstetric interventions than evidence-based recommendations, *especially among socially disadvantaged women.*
- Unclear how British Columbia meets these standards on decision making, respectful treatment and overall access to high quality care, especially among the most vulnerable

Changing Childbirth in British Columbia

Community-based participatory design

Consultation with 1333 women to identify issues

Community Partners:

BC Women's Foundation

Women in 2 Healing

Midwives Association of BC

Immigrant Services Society

UBC Family Medicine & Midwifery

UBC School of Population and Public Health

Women's Health Research Institute

Strathcona Midwifery Collective

Four working groups:

Clients who had recent pregnancies

Women who have been in prison

Recent Immigrants and refugees

Women who have experienced homelessness, poverty and/or other barriers

They Decided How to Collect Data: **Mixed Methods**



Online quantitative survey (130 items)

Developed and content validated by the community

Informed by the literature

Print survey in group settings as needed (8-10 women)

Focus groups (20) and key interviews

Honoraria childcare & meals provided (vulnerable)

Consent forms in lay language

Regional Facilitators training and support

Community Members chose the topics

Access to care

Preferences for care

Experiences with maternity care

Decision-making

Respect, Autonomy

Consent & Refusal

Knowledge of Models of Care

Changing Childbirth in BC:

Scale Development

- Community wanted to explore factors potentially associated with **Autonomy** and **Respect** in provider relationships
- The results were the Mother's Autonomy in Decision Making (MADM) and Mothers on Respect Index (MORi) Scales
- Used as key outcome measures in this study to assess quality, safety and person-centered maternity care

Mothers Autonomy in Decision-Making (MADM) Scale (Scores 7-42)



Please describe your experiences with decision making during your pregnancy, labor, and/or birth.

My doctor or midwife asked me how involved in decision making I wanted to be

My doctor or midwife told me that there are different options for my maternity care

My doctor or midwife explained the advantages/disadvantages of the maternity care options

My doctor or midwife helped me understand all the information

I was given enough time to thoroughly consider the different care options

I was able to choose what I considered to be the best care options

My doctor or midwife respected my choices

The Mothers On Respect (MOR) index

Vedam et al., SSM Population Health 2017

A: Overall while making decisions about my pregnancy or birth care: (select or circle one answer for each statement)						
	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
I felt comfortable asking questions	1	2	3	4	5	6
I felt comfortable declining care that was offered	1	2	3	4	5	6
I felt comfortable accepting the options for care that my doctor or midwife recommended	1	2	3	4	5	6
I felt pushed into accepting the options my doctor or midwife suggested	6	5	4	3	2	1
I chose the care options that I received	1	2	3	4	5	6
My personal preferences were respected	1	2	3	4	5	6
My cultural preferences were respected	1	2	3	4	5	6
SECTION A TOTAL SCORE:						
B: During my pregnancy I felt that I was treated poorly by my doctor or midwife because of: (select or circle one answer for each statement)						
	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
My race, ethnicity, cultural background or language*	6	5	4	3	2	1
My sexual orientation and / or gender identity*	6	5	4	3	2	1
My type of health insurance or lack of insurance*	6	5	4	3	2	1
A difference of opinion with my caregivers about the right care for myself or my baby*	6	5	4	3	2	1
SECTION B TOTAL SCORE:						
C: During my pregnancy I held back from asking questions or discussing my concerns because: (select or circle one answer for each statement)						
	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
My doctor or midwife seemed rushed*	6	5	4	3	2	1
I wanted maternity care that differed from what my doctor or midwife recommended*	6	5	4	3	2	1
I thought my doctor or midwife might think I was being difficult*	6	5	4	3	2	1
SECTION C TOTAL SCORE:						

- Decision making
 - Asking questions

- Discrimination

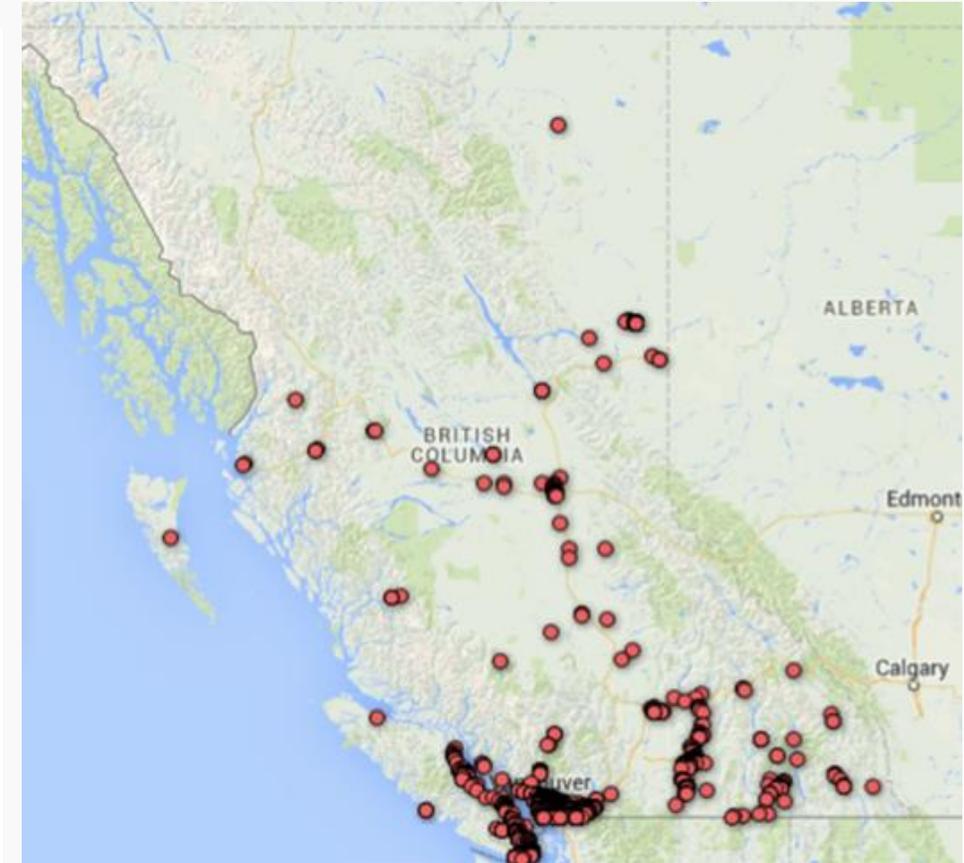
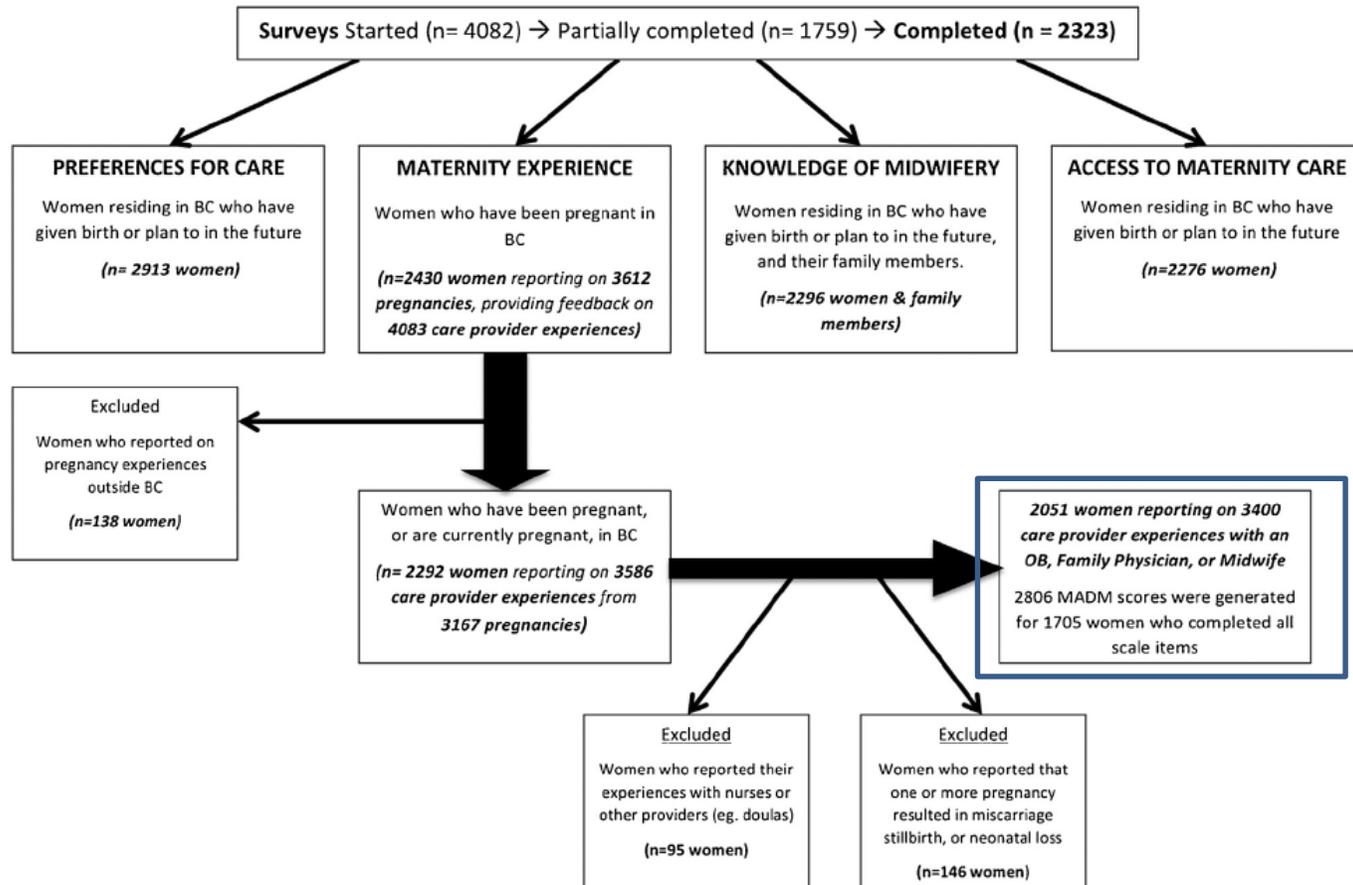
- Held back from asking questions

Objectives

- *To evaluate women's experiences and preferences for care, access to care and their knowledge of maternity care options and*
- *To explore whether these experiences differ by socio-cultural factors, comorbid conditions, providers, place of birth or other factors*

Survey Recruitment and Responses

2014



Geographically representative sample

Focus Group Discussion

May-July 2014



Recruitment and Delivery

- Over 33 community members, healthcare providers and researchers were trained to lead 20 focus groups in rural and urban locations across BC

Topics/Prompts

Access to care

Preferences for care

Experiences with maternity care

Decision-making

Knowledge of midwifery

Focus Group Summary	# of Focus Groups	Location(s)	# of Participants	Range Per Group
Currently pregnant, or trying to become pregnant	11	Vancouver, Surrey, North Vancouver, Victoria, Nelson, Fort St. John, Williams Lake, Nanaimo, Comox	75	5-9
Immigrant or refugee participants	5	Vancouver	29	3-8
Previously incarcerated participants	2	Vancouver, Kelowna	13	5,8
Low income participants	2	Victoria, Prince George	16	5,11

Total 133 participants across 20 groups

Descriptive Findings (Survey)



Sample characteristics (n = 2051).

	n (%)
Vulnerable status	135 (8.2)
Family income < 30 k	119 (7.7)
Women of colour	119 (7.4)
No postsecondary education	163 (9.9)
Expecting twins	37 (1.8)
One or more medical/psycho-social risk factor during pregnancy	277 (13.5)
Number of providers during pregnancy	
Single provider	1672 (81.5)
Two or more provider	379 (18.5)
Woman was pregnant at time of data collection	303 (14.8)
MADM scale filled out in reference to:	
A midwife	2071 experiences
A family physician	772 experiences
An obstetrician	557 experiences
Place of birth	
Planned hospital birth and gave birth at hospital	1209 (69.8)
Planned home birth but was transferred to hospital for birth	140 (8.1)
Planned home birth and gave birth at home	337 (19.4)
Unplanned home birth	28 (1.6)
Other (e.g. woman gave birth in health center or en route to hospital etc.)	19 (0.9)
Held back questions more than once during prenatal visits because provider seemed rushed	181 (9.1)
Held back questions more than once during prenatal visits because wanted different care for self or baby	112 (5.6)
Held back questions more than once during prenatal visits because was worried about being difficult	126 (6.3)
Treated poorly because of race/ethnicity	18 (1.0)
Induction No/Pressure Yes	98 (5.6)
Induction Yes/Pressure Yes	179 (10.1)
Induction Yes/Pressure No	152 (8.6)
CS No/Pressure Yes	53 (3.0)
CS Yes/Pressure Yes	141 (8.0)
CS Yes/Pressure No	225 (12.7)

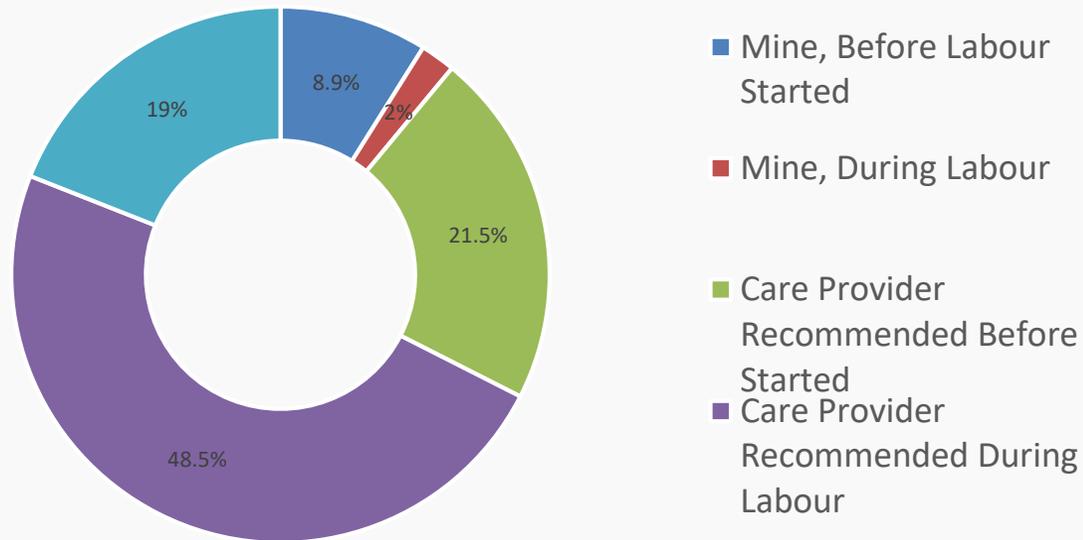
Summary

- Average age was 32.8 years
- Ethnicity:
 - Asian only (3.4%)
 - First Nations, Inuit, or Metis (1.4%)
 - White only (90.9%)
 - Other/biracial (4.3%)
- 8.2% (135) belonged to a historically and/or socially vulnerable group
 - One of immigrant or refugee, history of incarceration, homelessness, or substance use or self-identified as First Nations, Inuit or Metis
- 7.7% had family incomes of less than \$30,000 gross and 9.9% had no post-secondary training

Preferences for Care-Leading Decisions

95.2% (n=1952) said that it is very important or important that I lead the decisions about my pregnancy, birth and baby care

Whose Idea Was it for You to Have a Cesarean? (n=664)



Mixed Effects Models



MADM

Co-Variates	n Individual models	Incident Rate Ratios and 95% Confidence Intervals (IRR) Individual models	p Individual models	All variables in model (n=1934)
Vulnerable status	2766	1.00 (0.98-1.03)	0.826	IRR= 1.04 (1.01-1.08)
Family income < 30 k	2260	1.00 (0.97-1.03)	0.820	Not significant
Women of colour	2352	1.00 (0.98-1.03)	0.718	Not significant
No post-secondary education	2384	0.95 (0.93-0.97)	< 0.001	Not significant
Expecting twins	2778	0.93 (0.88-0.97)	0.002	Not significant
One or more medical or social risk factor during pregnancy	2778	0.96 (0.94-0.98)	< 0.001	Not significant
GP experience compared to MW-planned hospital birth	2778	0.73 (0.71-0.74)	< 0.001	IRR=0.82 (0.80-0.84)
OB experience compared to compared to MW-planned hospital birth	2778	0.74 (0.73-0.76)	< 0.001	IRR = 0.83 (0.81-0.85)
MW-planned home birth compared to MW-planned hospital birth	2778	1.00 (0.99-1.02)	0.374	Not significant
Held back questions more than once during prenatal visits because provider seemed rushed	2750	0.56 (0.55-0.58)	< 0.001	IRR= 0.76 (0.73-0.78)
Held back questions more than once during prenatal visits because wanted different care for self or baby	2739	0.52 (0.51-0.54)	< 0.001	IRR=0.81 (0.77-0.85)
Held back questions more than once during prenatal visits because was worried about being difficult	2752	0.56 (0.55-0.58)	< 0.001	IRR=0.85 (0.81-0.89)
Treated poorly because of race/ethnicity	2511	0.54 (0.50-0.59)	< 0.001	IRR=0.84 (0.77-0.93)
Induction No/Pressure Yes	2525	0.82 (0.80-0.85)	< 0.001	IRR = 0.92 (0.93-0.98)
Induction Yes/Pressure Yes	2541	0.86 (0.84-0.88)	< 0.001	IRR = 0.95 (0.93-0.98)
Induction Yes/Pressure No	2533	1.05 (1.03-1.07)	< 0.001	Not significant
CS No/Pressure Yes	2524	0.82 (0.79-0.86)	< 0.001	IRR= 0.94 (0.89-0.98)
CS Yes/Pressure Yes	2538	0.87 (0.85-0.89)	< 0.001	Not significant
CS Yes/Pressure No	2535	1.06 (1.04-1.08)	< 0.001	IRR = 1.06 (1.03-1.09)

Vulnerable Status: One of immigrant or refugee, history of incarceration, homelessness, or substance us or self-identified as First Nations, Inuit or Metis

Key Findings

- Identifying with a **vulnerable status** increased the probability of lower **autonomy**
 - Reporting **being treated poorly because of race/ethnicity** associated with lower autonomy
- Lower scores on **autonomy** were more likely with those who **experienced GP or OB care compared to Midwifery planned hospital births**
- Participants, on average had **24%** lower scores on **autonomy** if they also felt that **they held back questions** because the provider seemed rushed
- Lower scores on **autonomy** were also associated with participants who **reported being pressured to induce or undergo a C-section** and going through the procedure

Mixed Effects Models



MORI

Co-Variates	n	Incident Rate Ratios (IRR)	p	p < 0.01 when all covariates in model (n=2077)
Vulnerable status	1761	0.95	0.248	No
Women of colour	1493	1.00	0.986	No
Expecting twins	1761	0.94	0.349	No
No post secondary education	1514	0.91	0.009	No
One or more medical or social risk factor during pregnancy	1761	0.92	0.001	No
One or more newborn health problem	1626	0.92	0.30	No
GP experience compared to MW-planned hospital birth	1761	0.88	< 0.001	Yes: IRR:0.90 p=0.001
OB experience compared to compared to MW-planned hospital birth	1761	0.85	< 0.001	Yes: IRR: 0.86 p< 0.001
MW-planned home birth compared to MW-planned hospital birth	1761	0.99	0.730	No
Induction No/Pressure Yes	1598	0.83	< 0.001	Yes: IRR:0.86
Induction Yes/Pressure Yes	1607	0.86	< 0.001	Yes: IRR:0.89 p=0.004
Induction Yes/Pressure No	1599	1.03	0.360	No
CS No/Pressure Yes	1594	0.91	0.085	No
CS Yes/Pressure Yes	1606	0.81	< 0.001	Yes: IRR: 0.86 p=0.002
CS yes/Pressure No	1603	1.04	0.239	No

Vulnerable Status: One of immigrant or refugee, history of incarceration, homelessness, or substance use or self-identified as First Nations, Inuit or Metis

Key Findings

- Lower scores on **respect** were more likely with those who experienced GP or OB care compared to Midwifery planned hospital births
- Lower scores on **respect** were also associated with participants who reported being pressured to induce or undergo a C-section and going through the procedure

Focus Groups from Currently Pregnant or Trying

Key Themes from 11 Focus Groups

Accessing care

- Friends or family as trusted referral source
- Key Barrier: Provider unavailable/too busy
 - Comparing and contrasting availability with midwifery model of care

Informed Choice and Agency

- Feeling supported with Midwifery/doula care
- Desired level of intervention and model of care

Quality of Relationship as Key Factor

- Knowing the provider
- Building mutual trust

Currently Pregnant or Trying

Informed Choice and Agency: Feeling supported with Midwifery/doula care

*“We rode the middle line again, we, gave birth at [Hospital in Lower Mainland] but with the midwifery team. Which I was very grateful for because **we were overdue and had to go in for the non-stress test and I had two lovely OB/GYN interns basically informing me that I wouldn't be leaving the hospital and we had to induce right away and my midwife just held my hand and said no matter what happens, this is your body and this is your decision.** And then the actual OB/GYN came in and said "It's really not a big deal", I'm like "Ok, good". But just having somebody there who was an advocate for you to remember that no matter what happened, you had to make the decisions not the people giving the care.” -Vancouver*

Quality of the Relationship: Knowing the Provider

Participant: *“**I didn't like the idea of having mystery strangers at my birth,** wherever that was gonna be. That was really important to me...[..]...Just like, comfortable with them, being comfortable just talking about things that I do in my life, in my life in other areas...” - Vancouver Island*

Previously Incarcerated or Low Income Participants

Key Themes from Four Focus Groups

Barriers to accessing care

- Isolation or geography
- Providers unavailable/too busy

Need for extra support

- Provider support
- Postpartum care
- Emotional safety and care
- Lack of information from provider

Feeling judged, pressured, or mistreated

- Judgment from providers
- Pressured to accept interventions
- Not heard or taken seriously
- Feeling disrespected

Previously Incarcerated or Low Income

Feeling judged, pressured, or mistreated: [Judgment from providers](#)

“When I was incarcerated while I had my daughter, I had to go down to ICU in shackles, and it was so humiliating, and everyone looked at me different, especially when I was in ICU with my daughter, everyone, all the nurses, they just looked down on me. And I was so embarrassed, like I was in my greys, I had handcuffs, I just remember thinking: ‘Oh my gosh, this is so embarrassing.’ It was humiliating. It was like the worst thing. I remember talking to work about it and like, being so angry that they do that to me, like who does that to somebody? Like, I never ran away after I had her, I...I did everything ... I don’t know, I just thought was really wrong.”

-Previously Incarcerated participant, Vancouver

Previously Incarcerated or Low Income

Feeling judged, pressured, or mistreated: **Not feeling heard by providers**

“I would work alongside with the midwife to get my wife to do what was best for the childbirth and at the time it was getting an epidural, now she’s got a phobia of needles because she used to have to watch her mom shoot up, so completely understanding as to why she’s got a phobia of needles, and most doctors you know I don’t even think they even consider phobias with certain people, even though we tried telling the anesthesiologist that she had a phobia, he just ‘shoop,’ right over her head, he didn’t care.”

-Low Income participant, Vancouver Island

Focus Groups from Immigrant Participants

Key Themes from Five Focus Groups

Barriers to accessing care

- Providers unavailable/too busy
- Not knowing where to start

Need for extra support

- Emotional safety and care
- Feeling supported in midwifery care
- Postpartum care
- Prenatal or childbirth education

Interpersonal challenges

- Culture
- Language
- Mistreatment
- Lack of agency
- Discrimination

Focus Groups from Immigrant Participants

Barriers to access: Navigating the health care system

*“I have to say, it's really about how much you know about this practitioner. It's about if you have knowledge about how things are done here in BC. **As a newcomer, it's like, you jump into ocean. You don't know where to go; which way to go.** It's, like, you have to really rely on you Google capability; asking friends around. But sometimes, you don't know, you gotta really figure it out. I don't know how-- I would really be happy if when I arrive in Canada, I got it in a package, and in the package there's something about maternity care; I'd be really happy to know. Because there's nothing there. I have no idea.”*

-Participant, Vancouver

Immigrant Participants

Interpersonal challenges: “They are not from our country”

*“I think that here, if a mom is pregnant, especially immigrant women, maybe the language barrier... because some specialists, they are not from our country or speak our language. And because of communication problems, and because of trust issue, right? We don't understand each other. **If you think, ‘Oh, she speaks my language, she knows my background or culture,’ or whatever, and then I can trust. It's easier to bond, to trust.”***

-Participant, Vancouver

Concluding Remarks

- Significant associations between **provider availability (including length of visits)** and feelings of respect and autonomy in decision making
- **Care provider** (i.e. physician, midwife or doula) linked to the experience of care
 - Higher autonomy scores with midwifery care
- **Feeling pressured** to accept an intervention negatively affected the experience of autonomy and respect
- **Disadvantaged sub-groups** reported lower autonomy, respect, agency and/or emotional safety over the course of childbearing

Thank you!

Women and Families who participated



Birth Place Lab Team

Saraswathi Vedam
Kathrin Stoll
Stéphanie Black
Lynsey Hamilton
Jessie Wang
Sarah Partridge
Barbara Karlen
Jasmina Geldman
Ruth Martin

Granting Agencies

Michael Smith Foundation for Health
Research – HPI Award
Vancouver Foundation
Perinatal Services BC

Community Coders

Pam Young
Raquel Velasquez
Sabrina Afroz
Rina Prahdan
Sara Ortiz
Mo Korchinski

Community Partners

BC Women's Foundation
Women in 2 Healing
Midwives Association of BC
Immigrant Services Society
UBC Family Medicine & Midwifery
School of Population and Public Health
Women's Health Research Institute
Strathcona Midwifery Collective
Access Midwifery
Pomegranate

Focus Group Facilitators

Janelle Boheimer
Cathy Ellis
Anna Tashlykova
Pam Young
Jen Hetherington
Leah Taylor
Sarah Jane Steele
Darryn DiFrancesco
Carmen Nunez
Amanda Emsley
Daphne McRae
Katie McCallum
Tammy Milkovich
Kelsey Martin
Olivia Jaswal



THE UNIVERSITY
OF BRITISH COLUMBIA

vancouver
foundation



The Birth Place Lab



Person-centered outcomes research on high quality pregnancy, birth and newborn care, across birth settings.



Respectful Maternity Care

Research and tools designed to help understand how service users experience care.



Birth Place and Provider

Research on the links between provider, place of birth, and health outcomes, and tools to support collaboration.



Person-Centered Decision Making

Online course for health care providers and tools to support dialogue and decisions.

www.birthplacelab.org

Changing Childbirth in BC

/

Relevant Publications

Vedam S, Stoll K, McRae DN, Korchinski M, Velasquez R, Wang J, Partridge S, McRae L, Martin RE, Jolicoeur G, CCinBC Steering Committee. Patient-led decision making: Measuring autonomy and respect in Canadian maternity care. *Patient education and counseling*. 2019 Mar 1;102(3):586-94.

Vedam S, Stoll K, Rubashkin N, Martin K, Miller-Vedam Z, Hayes-Klein H, Jolicoeur G, the CCinBC Steering Council. The Mothers on Respect (MOR) index: measuring quality, safety, and human rights in childbirth. *Social Science and Medicine: Population Health*, 2017 Jan. <http://dx.doi.org/10.1016/j.ssmph.2017.01.005>

Vedam S, Stoll K, Martin K, Rubashkin N, Partridge S, Thordarson, Jolicoeur G, the CCinBC Steering Council. The Mother's Autonomy in Decision Making (MADM) Scale: patient-led development and psychometric testing of a new instrument to evaluate experience of maternity care. *PLOS ONE*, 2017 Feb 23. <http://dx.doi.org/10.1371/journal.pone.0171804>

Changing Childbirth in British Columbia; Policy Report
<https://www.birthplacelab.org/changing-childbirth-in-british-columbia>



THE UNIVERSITY
OF BRITISH COLUMBIA