

THE ROLE OF CHILD CUSTODY LOSS TO CHILD PROTECTIVE SERVICES IN
SHAPING HEALTH AND WELLBEING AMONG WOMEN WHO DO SEX WORK
IN VANCOUVER, CANADA.

Kathleen S. Kenny

A dissertation submitted to the faculty at the University of North Carolina at Chapel Hill
in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the
Department of Maternal and Child Health in the Gillings School of Global Public Health.

Chapel Hill
2018

Approved by

Sherry L. Green

Clare Barrington

Carolyn T. Halpern

Brian W. Pence

Kavita Singh Ongechi

Kate Shannon

ProQuest Number: 10982190

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



ProQuest 10982190

Published by ProQuest LLC (2019). Copyright of the Dissertation is held by the Author.

All rights reserved.

This work is protected against unauthorized copying under Title 17, United States Code
Microform Edition © ProQuest LLC.

ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 – 1346

© 2018
Kathleen S. Kenny
ALL RIGHTS RESERVED

ABSTRACT

Kathleen S. Kenny: The role of child custody loss to child protective services in shaping health and wellbeing among women who do sex work in Vancouver, Canada.
(Under the direction of Sherri L. Green)

The child protection system can be a highly consequential social institution for mothers who do sex work, yet the health impacts of its policies on this already disadvantaged population remain under-examined. This dissertation aims to understand how child custody loss through this system shapes the health and wellbeing of women sex workers in Vancouver (Canada), a high proportion of whom are Indigenous women.

Two studies were conducted with the Evaluation of Sex Workers' Health Access (AESHA) prospective cohort study. In the first study, analyses drew on longitudinal data from 2010-2015 in a subsample of women sex workers (n=466) who ever had a live birth and examined the association between involuntary child removal by the child protection system and self-rated health, as well as joint effects on health when child removal spanned two generations (themselves as children and their own children). Results showed child removal was associated with poorer self-rated health among sex workers that was further worsened when family separation spanned two generations; an intergenerational consequence that disproportionately affected Indigenous women.

In the second study, drawing on data from in-depth, semi-structured qualitative interviews with a subsample of AESHA participants (n=31), analyses identified three interconnected trajectories linking child custody loss to deteriorating health. First, events of child

custody loss were described as leading to a proliferation of stress, most evident in mental distress, including suicidality and grief, and increased use of drugs/alcohol. Second, women experienced increased poverty following losses that was more severe among Indigenous women, and also contributed to worsening health during this period. Third, women faced increased social displacement in aftermath, undermining access to social relationships and support as resources for health.

Overall findings suggest that child custody loss has consequences for health beyond the single mechanism of mental distress and related poor health, to further alter sex workers' social conditions, leading to an accumulation of socioeconomic disadvantage that also had implications for health. Sex worker and Indigenous-led family support and preservation services are needed to help keep families intact, along with post-separation supports to address the health and social needs of mothers not living with their children.

To my parents,
Edward and Valerie Kenny,
for your beyondness of generosity and
for setting me on this path.

ACKNOWLEDGEMENTS

This has been a collective project, and there are many, many people who have supported me in making this happen. First, my deepest gratitude to the women in the AESHA Cohort Study who participated in this research and were open to sharing their experiences. Your stories have left a profound influence on my thinking and my commitment to the bigger goals of this work. Sincere thanks to my dissertation committee for thinking through this project with me: Sherri Green (chair), for your unwavering belief in the importance of this research topic since before the PhD journey began; Clare Barrington (minor chair), for your thought-provoking engagement with me throughout and your mentorship in qualitative methods; Carolyn Halpern, for your help in more clearly articulating and positioning this research within public health; Kavita Singh Ongechi, for your careful critiques and your openness to joining my committee at a late stage; Brian Pence, for your epidemiological guidance with all my quantitative questions; and Kate Shannon (University of British Columbia), for your support of my mixed methods ambitions and your trust in letting me work with women in the AESHA Cohort.

This study took place in Vancouver on unceded West Coast Salish Territory of the x^wməθkwəy̓əm (Musqueam), Sk̓w̓x̓wú7mesh (Squamish), and Səlilwətaʔ/Selilwitulh (Tsleil-Waututh) nations. Enormous thanks to all my Vancouver collaborators there who made this work possible. Thanks especially to Flo Ranville, for working closely with me to conduct interviews and for taking time to explain so much. I am also extremely grateful to Andrea Krüsi, for your instrumental role in the planning of fieldwork and for your thoughtful comments on all

qualitative outputs. To Jennifer Morris and Brittney Udall, I also owe deep thanks, both for introducing me first-hand to the above and beyond work of AESHA's street outreach team in June 2014 and for opening many doors to ensure the success of the study's qualitative component. Special thanks also to Putu Duff and Meaghan Thumath, for your stores of knowledge and research in this area, and to Melissa Braschel, for assisting with many AESHA data-related queries. Thanks also to all the front-line and research staff at the Centre for Gender and Sexual Health Equity, who accepted my presence and questions during my many trips to Vancouver. Much gratitude also to family physician Ron Abrahams at BC Women's Fir Square Combined Unit and staff at Sheway, for your tremendous work every day and for providing valuable comments at different stages of this research. While in Vancouver, I worked in the Downtown Eastside, an extremely poor and incredibly vibrant neighborhood with a rich history in social justice organizing on issues of violence, poverty, and the rights of people who use drugs. It is also a neighborhood that has been increasingly under siege by the Drug War and over the course of my fieldwork experienced staggering losses of lives to overdose. These deaths personally touched me and many of the participants and staff involved in this project, leaving an indelible mark on my life and my strength to keep fighting this war.

At the University of North Carolina, my sincere gratitude to staff and scholars in the Departments of Maternal and Child Health, Health Behavior, Epidemiology, and Anthropology, for pushing me to deepen and expand engagement with this work from an interdisciplinary perspective. Ellen Chetwynd, Shane Khan, Kaitlin Kelly-Reif, Cara Person, and Laura Villa Torres also deserve special mention for the many ways you supported and housed me along the way. I have also benefitted greatly from research funding through the University, including the

Dissertation Completion Fellowship, Off-Campus Dissertation Fellowship, Summer Research Fellowship, Cynthia H. Cassell Dissertation Award, and Jean T. Lassiter Award.

In Toronto, I want to acknowledge, with indebted gratitude, the mothers I have worked and organized with who have experienced the separation of their families through the child protection system, both at COUNTERfit Harm Reduction Program and Community Action for Families. You started me down this path 10 years ago and are a key inspiration for this project. Thanks especially to Sheryl Jarvis, for your leadership and for always widening my scope of thinking on these issues. This research has also been nurtured by a fierce community of harm reduction friends and colleagues, particularly those I worked with closely at COUNTERfit, like Molly Bannerman, Zoë Dodd, and the late Raffi Balian. Raffi, we all learned so much from you. How to think better. How to fight better. How to be better people. You were extraordinary.

I am also lucky to have had immense support from close friends and family. My heartfelt thanks to Susan Mazza, the Ouellette-Schmidt family, and Suzanne Roberts Smith, for your friendship through many walks of life. Deep gratitude also to Karen Ouellet and Murray Kennedy, for your generous hospitality in hosting me so many times in your mountain refuge in North Vancouver. Special thanks also to Anthony Davidson, for the gift of a laptop for the PhD to write this dissertation, and to Marigold Maher, for your support of journeys off the beaten path and all your love since the beginning.

I owe a great deal to my family (the Kennys and the Thirlwalls) who took care of the baby while I worked and have been most present on this journey in making sure I felt loved, supported, and fed. Special thanks to my sisters, Geneviève, Agnes and Ciara, for the years of love and support, to my Dad, for your care and many visits to North Carolina, and to my Mum, for your life-long dedication to supporting families that has helped me to be here.

Finally, deepest gratitude to my partner Nic, a source of incredible love and creativity. Your support made this possible. Thank you for your patience, generosity, and exquisite ease in pulling together a meal for any number of people arriving at our home on any given day of the week. And to my son Jonah, the namer of birds and my greatest teacher, who was born while I was doing this research, may you see my love for you, and all the mamas and their babies, sewn into the goals of this work.

TABLE OF CONTENTS

LIST OF TABLES	xiv
LIST OF FIGURES	xvi
LIST OF ABBREVIATIONS.....	xvii
CHAPTER 1: INTRODUCTION	1
Introduction	1
Sex Work, Motherhood, and Family Separation	2
Health Vulnerabilities of Sex Workers	2
Sex Work and Motherhood	4
Family Separation Among Sex Workers	5
Family Separation and Sex Workers' Health	7
Family Separation Through Child Protective Services and Health	8
Family Separation and Women's Health	9
Intergeneration Family Separation and Health	11
Study Aims and Overview.....	13
CHAPTER 2: THEORETICAL FRAMEWORK	17
Life Course Theory	17
Postcolonial Theory	18
Intersectionality Theory	19
Trauma	20

CHAPTER 3: FAMILY SEPARATION AND NEGATIVE SELF-RATED HEALTH: EVIDENCE FROM A PROSPECTIVE COHORT OF MARGINALIZED MOTHERS IN A CANADIAN SETTING	22
Background	22
Methods	25
Study Sample	25
Measures	26
Statistical Analyses	28
Results	30
Discussion	31
Limitations	33
Conclusion	34
 CHAPTER 4: HEALTH CONSEQUENCES OF MOTHER- CHILD SEPARATION AMONG MARGINALIZED WOMEN SEX WORKERS: CONSIDERING TRAJECTORIES, MECHANISMS, AND RESILIENCIES	38
Background	38
Methods.....	42
Theoretical Framework	42
Recruitment and Sample	43
Data Collection and Analysis	44
Results	47
Mental Distress	49
Intensifying Poverty	53
Social Displacement.....	56

Caretaking and Family Regeneration	58
Discussion	62
Limitations	65
Conclusion	65
CHAPTER 5: CONCLUSIONS AND IMPLICATIONS FOR PUBLIC HEALTH	67
Family Separation and Maternal Health.....	67
Overview of Findings	68
Research, Policy and Intervention Implications of Key Findings	71
Future Research Directions.....	71
Policy and Intervention Implications.....	73
APPENDIX A: CHILD PROTECTION SYSTEM HISTORIES - AESHA COHORT	77
APPENDIX B: CHILD CAREGIVING ARRANGEMENTS - AESHA COHORT	78
APPENDIX C: CHARACTERISTICS OF MOTHERS OF CHILDREN ADOPTED OR IN FOSTER CARE – AESHA COHORT	79
APPENDIX D: SENSITIVITY ANALYSES WITH IMPUTATIONS FOR CHILDHOOD TRAUMA – AESHA COHORT	80
APPENDIX E: SENSITIVITY ANALYSES WITH EXPOSURE OF CHILD REMOVAL – AESHA COHORT	81
APPENDIX F: MODEL OF INTERSECTION OF INDIGENOUS IDENTITY AND INVOLUNTARY CHILD REMOVAL – AESHA COHORT	82
APPENDIX G: BIVARIABLE ASSOCIATIONS OF CONFOUNDERS WITH OUTCOME OF POOR/FAIR SELF-RATED HEALTH – AESHA COHORT.....	83
APPENDIX H: CONCEPTUAL MODEL FOR SELF-RATED HEALTH ANALYSIS.....	84

APPENDIX I: SEMI-STRUCTURED, IN DEPTH QUALITATIVE INTERVIEW GUIDE	85
APPENDIX J: VISUAL QUESTIONS IN QUALITATIVE INTERVIEW GUIDE.....	94
APPENDIX K: SOCIO-DEMOGRAPHIC CHARACTERISTICS FOR QUALITATIVE SAMPLE.....	96
APPENDIX L: BROAD CODES FOR QUALITATIVE ANALYSIS.....	97
APPENDIX M: OUPUT FROM QUALITATIVE ANALYSIS DEPICTING CASCADE OF NEGATIVE SOCIAL CONSEQUENCES FOR SEX WORKERS IN AFTERMATH OF CHILD CUSTODY LOSS.....	102
REFERENCES.....	103

LIST OF TABLES

Table 1 - Study sample characteristics of women sex workers who reported having a live birth at baseline interview, stratified by ever having child(ren) removed by Child Protective Services and Indigenous Identity, AESHA Cohort Study 2010-2015, Vancouver, Canada.....	35
Table 2 - Odds ratios for association of involuntary child removal with current poor/fair self-rated health among women sex workers in AESHA Cohort Study, 2010-2015.....	36
Table 3 - Odds ratios (OR) for joint effect of having involuntary child removal and childhood history of removal from parents on current poor/fair self-rated health among women sex workers, AESHA Cohort Study, 2010-2015.....	37
Table 4 – Child protection system histories, stratified by Indigenous Identity, among women sex workers, AESHA Cohort Study 2010-2015, Vancouver, Canada.....	77
Table 5 – Child caregiving arrangements, stratified by Indigenous Identity, AESHA Cohort Study 2010-2015, Vancouver, Canada	78
Table 6 – Child protection histories of mothers with children currently adopted or in foster care, AESHA Cohort Study 2010-2015, Vancouver, Canada	79
Table 7 – Comparison of odds ratios (OR) of involuntary child removal on current poor/fair self-rated health, with imputed values for childhood trauma, AESHA Cohort Study, 2010-2015	80
Table 8 – Sensitivity analyses of odds ratios (OR) of involuntary child removal on current poor/fair self-rated health, assessing role of the exposure per child removal and per number of removals, AESHA Cohort Study, 2010-2015	81
Table 9 – Odds ratios (OR) for effect of intersection of Indigenous identity and involuntary child removal on current poor/fair self-rated health among women sex workers, AESHA Cohort Study, 2010-2015	82
Table 10 – Odds ratios (OR) for bivariable associations of confounders with outcome of poor/fair self-rated health among women sex workers, AESHA Cohort Study, 2010-2015.....	83

Table 11 – Socio-demographic characteristics for qualitative interview sample96

LIST OF FIGURES

Figure 1 – Conceptual model for relationship between involuntary removal and self-rated health	84
Figure 2 – Visual prompt 1 used in qualitative interview guide.....	94
Figure 3 – Visual prompt 2 used in qualitative interview guide.....	95
Figure 5 - Depiction of cascade of negative social consequences for sex workers in aftermath of child custody loss	102

LIST OF ABBREVIATIONS

AESHA	An Evaluation of Sex Workers Health Access
GEE	Generalized estimating equations
HCV	Hepatitis C virus
HIV	Human Immunodeficiency virus
RJ	Reproductive Justice

CHAPTER 1: INTRODUCTION AND BACKGROUND

Introduction

It is undisputed that disadvantaged parents are at greatest risk of experiencing the child protection system, with interventions occurring along a continuum, from family support services and referrals, to home monitoring, to, at its most consequential, temporary or permanent separation of children from parents.(1,2) As a unique state structure with dual responsibilities of child protection and social control, the system provides services to children and families to reduce events of severe child abuse and neglect, while also defining bounds of acceptable parenting, and disciplining parents classified as unfit.(1) Research on why and how families experience this institution demonstrate this to be a socially patterned phenomena where poor parents, particularly those who are Indigenous or Black,(3–5) or were themselves involved in the system as children, are more likely to encounter the system, have children removed, and endure lower rates of reunification.(6–8) While placement of a child in foster care, even for short periods, is a recognized factor influencing children’s health and social trajectories,(9–11) an understanding of the health consequences for birth parents, particularly mothers, who are most often primary caregivers at the time of out-of-home placement, remains limited.(12) This knowledge gap is of considerable importance to public health because these mothers are very often from populations cited in health literature as structurally vulnerable to poor physical and mental health, and thus already face a health disadvantage prior to losing their children.(13–15) Further, since a majority of children formally reunify or reestablish ties later in life with their

mothers,(16,17) recognizing and addressing the health impacts of custody loss on this population of mothers is a crucial step in supporting family reunification and preventing successive losses of children,(18), and further, constitutes an underexplored area of health disparities research.

Among structurally disadvantaged populations of longstanding interest to public health, sex workers - those who exchange sex for money - experience disproportionately high levels of intervention by the child protection system, largely influenced by the ways that poverty, racism, colonialism, the sex work legal environment, and stigma intersect in their lives.(19–26) In these contexts, women sex workers can face barriers to raising their children, as well as formidable fear of losing parental rights, which introduce additional challenges to accessing needed health, social, and legal services for themselves and their children.(20,24,27) Though studies in industrialized country settings suggest a high percentage of sex workers are not living with their children.(19,21,28–30), scant attention has been paid to understanding the precise role that events of mother-child separation may play in the lives and health of women in this population.

Sex Work, Motherhood, and Family Separation

Literature shows that sex workers face heightened health vulnerabilities, including a disproportionately high burden of HIV infection and high rates of physical and sexual violence.(31–33) While an established body of research on contextual factors such as sex work legal frameworks, stigma, economic inequities, and work environments point to their critical role in shaping health and HIV risk in this population,(31,32,34–36) little to date has accounted for how these intersect with mothering, including the potential unique structural influence of the child protection system on their health status.

Health Vulnerabilities of Sex Workers

Sex workers comprise one of the oldest labor forces in the world, and one that continues

to flourish in many jurisdictions despite widespread criminalization of all or many of its activities and participants.(37) Most recent estimates suggest there are as many as 40 million people working as sex workers worldwide, though the often clandestine nature of this occupation presents challenges in quantifying populations in many developed and developing countries, including Canada.(38) Sex workers represent a diverse population, working in different contexts with varying ecologies of risk.(33,39,40) The hidden spheres characterizing many sex work contexts, and the social, economic, physical, and policy forces colluding in this invisibility, have resulted in the frequent relegation of sex workers to unsafe work environments. Unsafe work environments are often characterized by reduced power to negotiate sexual risk reduction, and are well established as strongly associated with negative health outcomes, including increased HIV and sexually transmitted infections.(41–48) In calls to improve workplace safety and reduce health harms in this population, international policy bodies, such as the World Health Organization, have petitioned for the full decriminalization of activities relating to consensual sex work for both sellers and purchasers.(49) While policy-legal frameworks in several jurisdictions (i.e., Sweden, Norway, Canada, France, Northern Ireland) have changed over the past twenty years from criminalizing sex workers toward criminalizing buyers,(35) New Zealand has been the only jurisdiction where full decriminalization has been fully implemented, and where empirical evidence has shown improvements to sex workers' health and safety.(50–53)

Sex workers, as well as their clients and intimate partners, are a key population at risk for HIV infection. UNAIDS indicates that HIV prevalence among sex workers is 12 times greater than among the general population.(54) In aiming to move away from individual-level explanations for this disproportionality, studies in the past decade have broadened considerably to refocus on contextual factors, such as gender, cultural, and economic inequities, as well as

government policy, institutionalized racism, poverty, and stigma. Through this lens, research has pointed to the centrality of structural factors in influencing sex workers' health, including sex work environments,(32,55–57) systemic stigma,(58) housing status,(59) and the sex work sociolegal landscape.(32,35,60) As many sex workers have historically been and continue to be from marginalized populations, this emphasis has also directed new attention to the different social positionalities shaping sex workers' lives, and the usefulness of intersectional frameworks to examine the different experiences of sex workers, including those who are street-based, as well as those who are transgender, Indigenous, migrants, and drug using.(34,36,61)

Notably, the predominant public health focus on understanding and preventing infectious disease transmission in this population has also corresponded to a neglect of other health and social needs, including mental health and trauma.(62) For example, despite overall high levels of psychological distress in this population, studies examining mental health outcomes remain rare,(32,59,63–66) and few have documented mechanisms through which mental health may influence or be influenced by other facets of sex workers' health.(36) Further, while evidence identifies higher levels of trauma among sex workers, including childhood trauma (67,68) and adult sexual/physical violence (31,69–71), to be associated to with increased HIV risk behaviors,(45,48,57,63) there has yet to be clear understanding of how trauma may also relate to other physical health sequelae.

Sex Work and Motherhood

Despite the majority of sex workers being of reproductive age and having children,(62) their reproductive health and parenting experiences are seldom examined in health research,(30) and there is limited understanding of the ways these experiences interact with policy institutions, such as the child protection system. This inattention has also obscured the conflicts that sex

workers can encounter within norms of mothering, and socio-legal and moral framings of their profession as fundamentally risky and dangerous to their children.(23,72) In industrialized country contexts, research points to poverty as a main reason for doing sex work while raising children.(24,73), and while evidence cites the benefits of job flexibility and economic empowerment as supportive to caring and providing a certain standard of living for children,(20,36,74) research also points to risks of sex work environments to the safety of mothers and children, citing the potential for violence and exposure of children to clients, drugs, or drug paraphernalia.(22,30,73,75) Studies further report that mothers who are sex workers face significant stigmatization as they contend with “society’s diametrically opposed perceptions of sex worker and ‘good mother’ (Dodsworth, 2012, p.1)”;(20) ‘dual identities’; barriers shown to be especially hard to navigate when women are working out of economic necessity.(23,76) Stigma is also compounded by the criminalization of sex work, the dominant public policy approach in the sex industry, which for mothers confers additional risks of being “discovered” as a sex worker, potentially limiting their mothers’ access to health, social and legal services for themselves and their children.(20,73,77) For sex workers, these challenges of mothering are also made more onerous by structural and interpersonal inequalities that can also limit parenting abilities, including poverty, low social support, housing instability, unemployment, racism, classism, and colonialism.(23,25,77) Facing these intersecting barriers, mothers who are sex workers frequently contend with a formidable fear of losing custody of their children, as well as higher rates of family separation.(20,24,79).

Family Separation among Sex Workers

Evidence from studies in industrialized country contexts suggests a high percentage of sex workers are mothers and a majority are not living with their children.(19,21,28–30) In the largest

study to date of 1,963 street-based sex workers in New York (US), 69% of women had children and 80% of children did not live with their mothers.(29) In a more recent study of 333 sex workers in the UK, 50% of women were parents, and children were nearly twice as likely to be living away from their mothers as with them.(21) In a study of pregnancy outcomes of 176 women sex workers in Vancouver (Canada), over half of women reported having little or no contact with their children due to their children being involuntarily removed by the child protection system (32%), adopted (19%), or placed with other family members (28%).(28) A second larger study of 350 mothers in the same study population in Vancouver showed higher levels of involuntary child removal, reporting that 134 (38%) women experienced forced separation from their children, among which 79 (59%) were Indigenous women.(19)

In addition to being separated from their own children, there is also evidence that sex workers face a higher prevalence of intergenerational family separation through the child protection system.(19) In a study of street-involved sex workers, Dewey et al. (2018) contextualize this phenomenon as a consequence of intergenerational poverty, noting how the ‘shared precarities’ both prevalent in the lives of mothers and their biological families, substantially increase challenges encountered in the child protection system, elevating likelihood of child removal and of long term separation.(23) In a study by Duff et al. (2014), sex workers who had themselves been removed from parents by child protection showed a 48% elevated likelihood in also having their own children removed. Also notable in this study was the markedly higher intergenerational family separation among Indigenous sex workers, a phenomenon widely recognized as linked to ongoing colonial policies, including the continuity of systematic state-sanctioned child removals (occurring since the 1600s in North America),(80) which have also been linked to the overrepresentation of Indigenous women in street-based sex

work.(81,82)

Family Separation and Sex Workers' Health

The body of literature reporting on experiences of child custody loss among sex workers in industrialized country contexts is limited to a few qualitative and ethnographic studies, which broadly point to events of mother-child separation as contributing to elevated mental distress, drug and alcohol use, street-involvement, and social exclusion.(20,22–24,78,83) In one qualitative study of 68 sex workers undertaken in Canada (where most participants had children), separation from children, whether instigated by the parent or involuntary, was described as resulting in profound mental distress.(24) Findings of mental distress were also reported by McClelland & Newell (2008) who conducted focus groups with 20 women sex workers who use drugs in the UK and described the aftermath of separation from children as marked by a subsequent increase in sex work as a mechanism to support their elevated use of drugs and alcohol.(22) Looking at other consequences, Dewey et al.'s (2018) study of 43 street-based sex workers in two North American cities, reported that participants defined a causal effect between child custody loss and their increased drug use and street-involvement.(23) Also, ethnographic findings by Knight (2015) on the institutional challenges faced by street-involved women in the perinatal period, show how time-sensitive windows imposed by institutions during this period can pose additional barriers and sources of mental distress for street-involved women who are trying to keep their families together.(78)

Taken as a whole, this literature highlights the important role of social and structural factors in shaping sex workers' health, as well as the unique challenges faced by mothers in this population. While to date, sex workers' experiences with the child protection system have received very limited focus in the health literature, several questions remain about what influence

events of mother-child separation through this system may have on the health status of this key population, including attention on how this added health burden may intersect with the economic, social and health disadvantages many sex workers already face.

Family Separation through the Child Protection System and Health

The often sudden, forcible separation of children from mothers through the child protection system can be highly traumatic events, very often occurring in the hidden domestic spaces of marginalized families unseen by broader society and rarely captured or described in research or popular media. For children, the rupture of bonds to their primary attachment figures, are well-documented as disrupting brain architecture and triggering a proliferation of toxic stress, which evidence suggests can have acute and long-term adverse health effects.(84) While no known study has undertaken an analysis of the health of sex workers' children placed in foster care, findings on the effect of foster care for children in the general population are mixed, with some studies identifying health benefits to children,(85,86) and a more substantial body of evidence pointing to health harms.(10,11,87–89) Additional evidence suggests that children with a history of foster care have a higher likelihood of adverse social outcomes across the life course, including unintended pregnancy, homelessness, mental health problems, suicidality, substance use, and involvement with the criminal justice system.(10,90–92) Findings of mixed effects of foster care on children are also evident in results generated by four prominent causal studies on foster care.(88,93–95) In one of the most powerfully designed of these four studies, Doyle's (2008) robust comparison between foster children and 'marginal' children – who would be placed in foster care by some caseworkers and left in the home by others - found that even within homes facing significant adversity, children remaining with their families had a tendency for better social outcomes than those placed in foster care.(94) Though improved better

understanding of foster care effects on children are critical, also vital is understanding and addressing its consequences for birth mothers, including effects on the broader organization of their health and lives, which is central in determining how women can productively engage with the system to achieve reunification, and be better positioned to maintain ties to children.

Family Separation and Women's Health

While early quantitative work by Jenkins and Norman (1972) was the first to systematically document the painful “filial deprivation” and suffering experienced by birth parents following court-ordered removal of their children by the child protection system,(96) the field of study examining effects on parents has been relatively small. Limited qualitative research examining impacts of child custody loss through child protection on mothers describes this form of loss to be a unique type of adversity with potential long-term implications for women's well-being, described in a range of both individual-level outcomes, including grief, depression, anxiety, suicidality, and social-structural adversities, including residential instability, social isolation, stigma, intimate partner violence, and economic disconnection.(99–104) Among studies examining women's mental health during this period, this type of loss is put forward as a form of institutional trauma, which may exacerbate or lead to the development of posttraumatic stress, as well as contribute to other incidence or worsening of mental health issues, including depression and anxiety.(97,99,100) In my own qualitative research in this area with mothers who use drugs,(99,103) women described the aftermath of separation from their children in persistent symptoms of post-traumatic stress, as well as anxiety, and depression, and increased substance use, which was complicated by panic and worry about their children's state of well-being in foster care. Though not expansively examined, some women also pointed to worsening social-structural conditions, evident in cases of housing instability, intimate partner violence, and

initiation/reinitiation of injection drug use and sex work. In women's accounts of this period, losses were also describes as deeply stigmatizing, which had wide-ranging consequences, including derailing women's sense of agency in moving forward with life ambitions, including employment, and negatively affecting formation and quality of intimate and social relationships. To this extent, women also articulated an absence of social acknowledgment of their losses; a process of additional "disenfranchisement" recalled as further compounding women's social isolation and psychological distress in a social process similar to that referred to by some scholars as "disenfranchised grief".(97,100,104,105)

While population health literature on health outcomes among mothers following child removal through the child protection system was absent when conceptualizing this project, a recently emergent body of quantitative literature by Wall-Wieler et al. (106–108) lends support to the above qualitative findings, providing evidence of several adverse effects on child custody loss on maternal health. In a first study using administratively linked child protection information, physician claims, hospitalization data, and census data from the province of Manitoba (Canada), Wall-Wieler et al. (2017) conducted a comparison between mothers whose first child were removed by child protection after age 2 (n=1591) to a matched group of women whose children were not removed (n=1591).(108) They identified significantly increased levels of mental illness diagnoses, mental health treatment use, and social marginalization (residential instability, reliance on social assistance) among mothers in the 2 years after child removal compared to the 2 year period before removal. A second study, using the same data and a matched design, showed higher suicide attempts and completions among mothers who had a child removed.(106) A third study, again using the same linked-data source, compared mothers' mental health morbidity among mothers whose children were removed (n=5,792) and mothers

who had lost a child to death (n=1,143), with results again showing significantly higher rates of mental illness diagnoses, including depression and anxiety, as well as increased substance use among women following child removal.(109) Also, a fourth study comparing mortality rates among 3,948 mothers from 1,974 families in which one sister had a child removed by child protection and one did not, showed much higher avoidable and unavoidable cause mortality among mothers who had a child removed compared to referent group of sisters who did not have a child removed.(107) Together, these studies by Wall-Wieler et al. are the first to quantitatively describe health and social outcomes associated with family separation among birth mothers using robust counterfactuals. They are, however, limited in generalizability due mainly to the unique demographics of the study setting, where Indigenous children represent 90% of all children in out-of-home placement through the child protection system.(110) Given this sample composition, and since Indigeneity was not an identifier that could be adjusted for in these analyses, in the majority of these studies it is difficult to disentangle the unique effects of family separation from other adverse social and economic compositional effects in this population that result from racism and ongoing colonialism. Thus, while these studies are foundational in advancing understanding of some of the negative maternal health and social sequelae for women, replication of similar studies is needed in other settings, including in population-specific studies with mothers who are at highest risk of child protection involvement and most in need of tailored preventative interventions. Further, more precise identification in future studies of mechanisms contributing to these health disparities would also be useful in facilitating of intervention relevant information.

Intergenerational Family Separation and Health

In response to evidence that parents placed out-of-home as children are more likely to

have their own children removed (111,112), there is a strong public health rationale to also consider the potential unique implications of intergenerational child protection involvement on health. In a few studies, findings identify post-removal mental health and reunification outcomes to be worse for mothers who themselves were removed from their parents.(113) This includes a recently published Swedish study by Wall-Wieler et al. (2018) where mothers with two generations of involvement in out-of-home placement (themselves as children and their own children) experienced five times greater risk of death by suicide, including more than double the risk of suicide of women with one-generation of involvement. Notably, for fathers in this study, any exposure to out-of-home placement (across one or two generations) did not affect risk of death by suicide. Looking to potential mechanisms that may underlie increased mental health morbidity among intergenerationally involved families, literature suggests the likely roles of family history of mental illness, adverse childhood experiences,(114,115) and accumulated social disadvantage throughout the life course, as equipping some mothers with fewer resources to rely upon when parenting, thereby increasing likelihood of child removal and of long term separation.(112,113) Much in this field of inquiry, however, remains unknown, including attention to the potential roles of worsening poverty and social exclusion that may result from family separation and be carried forward to the next generation, resulting in increased disenfranchisement and renewed involvement in the system.(98)

Intergenerational family separation is particularly important to highlight in this project because of the high proportion of Indigenous women in our study who have experienced multiple generations of family separation.(19,82) This practice, occurring on these lands for the past 400 years, began with the Residential and Boarding School Systems in the early 1600s, forced adoptions in the 1960s, and continues presently in the over representation of Indigenous children

in the foster care system.(80) This systematic disruption of family bonds is widely recognized as a central modality of colonial power,(116,117) and form of systemic dehumanization and genocide.(80,118–121) The cycle of forced family separation is also reinforced by ongoing systemic stigma toward Indigenous mothers, who have been historically constructed as legitimate sites of colonial intervention, blamed and pathologized for their parenting ‘problems’ that are sourced in the effects of colonialism and their marginalized social status.(116,120,122) While the association between attendance at Residential School and poor health has been well documented in health literature, and is also shown to be implicated in health disparities between Indigenous and non-Indigenous people,(80,123,124) fewer health studies have quantitatively examined the association of residential school and the health of subsequent generations,(125,126) and no known health studies have investigated the health impacts of intergenerational family separation through the child protection system. This paucity of health literature, however, should not disregard perspectives of Indigenous leaders and scholars, who have precisely articulated historical and current traumas related to forced separation of families, as well as other losses (e.g., land, cultural traditions, self-determination) as key factors undermining health.(118–121) This includes Indigenous scholars, Brave Heart and DeBruyns (1998), who pioneered the concept of ‘historical trauma’ in psychology literature to capture the burden of cumulative health injury and devastation caused by colonial policies, such as forced family separation, as extending beyond that suffered by direct survivors, to affect their children, grandchildren and future generations.(127)

Study Aims and Overview

To summarize, while emergent research in the general population suggests a range of negative health consequences of child custody loss to the child protection system on mothers,

health analyses into specific health impacts for sex workers, a disproportionately affected population, are limited. To this extent, it remains unclear how and through what mechanisms this form of loss can exert influence on sex workers' health. More systematic understanding of the nature of these relationships is worthwhile to inform recommendations for policy and programming to improve parenting experiences and family reunification outcomes in this population. This dissertation marks the first in-depth examination of links between child custody loss and the health status of sex workers, and is guided by the following overarching research question: What is the role of child custody loss to Child Protective Services in shaping health and wellbeing among women who do sex work?

To help anchor this dissertation, in **Chapter 2**, I outline various theoretical perspectives to help frame and interpret understanding of the link between child custody loss and maternal health. To answer my research question, quantitative and primary qualitative data (collected over the course of this project) were drawn from An Evaluation of Sex workers' Health Access (AESHA) study, an observational open cohort of 950 sex workers in Vancouver, Canada. Using a convergent parallel mixed-methods design,(128) where there is relative independence of both quantitative and qualitative components, this dissertation explores the following research questions:

Chapter 3. To what extent is prior child custody loss to child protection associated with wellbeing (self-rated health) among women sex workers? Are there differences in the association with wellbeing by characteristics of child protection histories (number of times children were removed, number of children removed, intergenerational family separation) and by race/ethnicity?

Chapter 4. What are the impacts of child custody loss to child protection on women sex

workers' health and wellbeing?

In **Chapter 2**, I outline contributions of various theoretical perspectives that inform and frame understanding of the relationship between child custody loss and women's health. Life course, postcolonial and intersectionality theories, as well as critical perspectives on trauma, represent important theoretical points of departure for this dissertation. Integrating these theoretical positions allows closer examination of historical, structural, social and individual-level explanations of how events of child custody loss impact health.

In **Chapter 3**, using longitudinal AESHA data, I examine the relationship between lifetime events of involuntary child removal reported at baseline and repeated measures of women's subjective wellbeing in follow up. Contributing to a growing literature of life course influences on health, I conceptualize that women's past experiences of child removal are a unique type of traumatic life event leading to a proliferation of stress and deterioration in health.(129) In models, I adjust for confounders selected based on the literature, and adjust for clustering due to repeated observations on individuals over time. In secondary analyses, I investigate potential interaction and effect measure modification by Indigenous ancestry and intergenerational family separation, and further, in sensitivity analyses test the role of the exposure per child removal and per number of removals.

In **Chapter 4**, I conduct a thematic analysis of original data from semi-structured, in-depth interviews with a subsample of women in the AESHA cohort (n=31) and explore women's retrospective accounts of child custody loss to the child protection system and its impact on their trajectories of health and wellbeing. In this approach, I explore how experiences of child custody loss impact on women's health vulnerabilities, including the mechanisms that may underlie these relationships. Additionally, I examine wellness and resistance practices adopted by women to

help regenerate their families and health.

In **Chapter 5**, I provide a summary of central issues motivating this dissertation, the main findings, as well as implication for future research and policy/intervention development.

CHAPTER 2: THEORETICAL FRAMEWORK

In examining the health impacts of the child protection system, a social institution that is associated with racially and historically marginalized families, theory is important in elevating analyses beyond the micro level to an examination of the complex socioeconomic, historical, and political relations in which women's experiences of this system are embedded.(130–132) Life course, postcolonial and intersectionality theories, and critical perspective on trauma are therefore important points of departure informing my dissertation.

Life Course Theory

Life course theory foregrounds the biosocial pathway through which an individual's life course exposure to historical, social and structural conditions, along with biological factors, accumulate over time to shape health.(133) In the example of events of child custody loss and birth mothers' health, life course theory highlights how this unique exposure may activate a plausible process of "stress proliferation".(129) As a key component of life course theory, the concept of stress proliferation provides insight into how events of family separation, whether short or long term, can have reverberating effects for birth mothers' health over the life course. From this perspective, women's health may be affected both via acute and long-term mental distress, as well as chronic stress-related physical health impairment. In understanding the latter's effect on long term health, we draw on the "weathering" hypothesis to account for how chronic stress from child custody loss can get "under the skin," triggering for women a "wearing out" of the body and sustained increases in allostatic load, which over time can lead to

physiological dysregulation, accelerated aging, or premature death.(134) Life course theorists also argue that stress proliferation can alter an individual's social environment, leading to secondary adverse exposures, such as financial hardship or loss of housing, that compound harms to health.(129) "Sensitive periods" or timing of stressors is another useful component of the life course perspective, particularly in interpreting effects of intergenerational family separation on health. For example, when a mother was herself removed from her parents by child protection in the developmentally sensitive period of early life, this additional stress is likely to exert a "biological embedding" of health vulnerability,(135) which can have far-reaching effects on biological systems and health over the life course that should be considered in analyses of child protection-affected populations.(84) Additionally, life course theory highlights the concept of "linked lives," which elevates the interdependence of mothers' and children's health, and undergirds the public health rationale for mitigating the negative health effects of family separation on birth mothers, as a vital step to improving family reunification outcomes and strengthening mother-child relationships, both of which are well-established as positively affecting mothers' and children's wellbeing.(136)

Postcolonial Theory

Given the large proportion of Indigenous women in my study population and the extent of disproportionality of Indigenous families involved in the child protection system in North America, the application of postcolonial theory is a fundamental tool for understanding macro level processes structuring health and social inequalities in my study.(137) Postcolonial theory, which was predated by key works of anti-colonial scholarship by Franz Fanon and Aimé Césaire,(138,139) calls forth analytic attention to continuities between colonial history, the neo-colonial present, and Indigenous resistance movements.(137,140) From this perspective, the

child protection system and colonialism are closely connected and have intertwined histories, the former perceived as a modality of colonial power that sustains settler society by reinforcing dispossession of Indigenous peoples of their lands and sovereignty.(116,119,122) This theoretical approach recognizes the ways that colonialism is carried in bodies and how the experiences of Indigenous women in this study are situated within a causal sequence shaped by colonial history and its long-standing disempowerment of Indigenous women and mothers as primary targets of colonial intervention.(119–121,141)

Intersectionality Theory

To understand the intersections of mothering and sex work, and the structural impediments through which health vulnerability is produced for this population, careful attention is further needed to interconnections between different systems of injustice and forms of oppression in women's lives. Intersectionality is a feminist theoretical approach and method of analysis that prioritizes attention to the multiple vectors of subjection that exist for an affected person or people, influencing their political and social status.(142) It was first popularized by the work of African-American feminist legal scholar, Kimberlé Williams Crenshaw,(143) yet as an approach, reflects long standing thinking and political beliefs practiced by peoples of color, and in particular women-of-color feminism, which sought to situate knowledge and research that could account for the multiple realities of women's identities and manifestations of social power.(144) Though not extensively incorporated in public health scholarship, intersectionality was first formally introduced in an article in the American Journal of Public Health by Bowleg (2012) as a “theoretical framework for understanding how multiple social identities such as race, gender and sexual orientations, socioeconomic status and disability intersect [...] to reflect interlocking systems of privilege and oppression (i.e., racism, sexism, heterosexism, classism)

(p.1267).”(145) In study analyses, this framework recognizes sex workers as an ‘intersectionally-targeted’ population,(146) and helps to articulate how social, economic, historical, and racial positionalities combine to differentially alter women’s institutional interactions, as well as conditions of motherhood and health. This framework also advocates for the importance of intersectional interventions developed from the perspectives of marginalized populations (i.e., sex worker-led) to remedy the injustices faced while acting carefully to not legitimize more harm.

Trauma

Limited previous research identifying child custody loss through the child protection system as a source of institutional trauma for birth mothers is a central starting point for my dissertation. (97,99,100) In framing ‘trauma’, I draw on a critical perspective from medical anthropology, which bring to analyses a conceptualization of trauma that is inseparable from the social conditions and institutional arrangements underlying its transmission. Tracing the social history of ‘trauma’ scholarship, Fassin & Rechtman (2009) challenge prevailing constructions of trauma that operate to reduce traumatic events and their conditions of injustice to an inventory of symptoms and disorders.(147) They also direct critical attention to what factors determine how events become legitimized as ‘traumatic’ for some people, while not for others.(147) Though not disputing the legitimacy of clinical services for symptoms of trauma, these modalities (put forward by Fassin and Rechtman and others) challenge tendencies for intra-individual somatic explanations of trauma, and bring into question the positioning of trauma as both cause and end result of suffering.(147–149)

In considering trauma experiences of Indigenous peoples, a separate body of scholarship has leveraged similar discursive insights and has strongly cautioned against making conclusions

about Indigenous peoples' mental health without directly account for the roles of colonial processes and structures.(121,150,151) This literature further argues that the conception of 'trauma' as occurring *within* an 'individual' is an inherently flawed logic, rooted in colonial norms and definitions of illness, which denies the collective nature of colonial trauma for Indigenous peoples, thus enacting what Indigenous scholar Taiaiake Alfred (2009) describes as the 'final stage of colonialism'.(152)

Drawing on these perspectives, this study aims to advance a conceptualization of an individual's trauma as a mutually constituted experience that is historically and socially shaped. Congruent with the critical orientations of postcolonial and intersectionality theories, we thus move away from intra-individual discourses of 'trauma' and the pathologization of women that can occur in medicalized frameworks, directing focus instead to the multiplicity of structural conditions leading up to 'traumatic' events of child custody loss and also mediating their consequences.

CHAPTER 3: FAMILY SEPARATION AND MATERNAL SELF-RATED HEALTH: EVIDENCE FROM A PROSPECTIVE COHORT OF MARGINALIZED MOTHERS IN A CANADIAN SETTING.

Background

Recent population estimates of children residing out-of-home due to involvement with child protective services indicate that 428,000 children in the US and 62,428 children in Canada are currently living apart from their parents.(153,154) There is mounting evidence demonstrating that child protection involvement is a socially patterned phenomenon, where poor families are more likely to experience intervention by the child protection system,(6) have children removed,(7) and face lower rates of reunification;(8) and where racially marginalized families, especially Indigenous and Black families, are widely overrepresented.(118,155) While health studies in this area have primarily focused on the health of children placed out-of-home, showing a higher frequency of negative physical and psychological health outcomes over the life course,(156) the consequences of out-of-placement on parents' health, particularly mothers (often primary caregivers at the time of out-of-home placement), remain under-investigated. Since a majority of children formally reunify or eventually reestablish ties with mothers, understanding the health effects of child removal on women, especially those cited in literature as already structurally disadvantaged and vulnerable to poor health, is an important step in preventing successive removals and supporting mother-child relationships, and further, constitutes an under-explored area of health disparities research.

Mothers who are sex workers can face an accumulation of social-structural stressors in

their lives that are shaped by poverty, racism, and the sex work policy/legal environment, which can differentially influence the likelihood of child protection intervention into their families.(19,23,24,157) Research shows sex workers can face formidable fear of losing parental rights, which has been shown to negatively impact their health by introducing additional barriers to accessing health, social, and legal services for themselves and their children.(20,24) and often contributes to a mistrust of government services.(27) Epidemiologic findings point to a high burden of child custody loss in this population, though research to date has been mostly limited to the experiences of street-based sex workers.(19,28) In the largest North American study on reproductive outcomes in this population, findings from a sample of 350 sex workers in Vancouver (Canada), of which 43% were Indigenous women, showed that 38% of women had experienced child removal, and among these 59% were Indigenous women.(28) This racial disproportionality suggests interactions with the child protection system are more consequential for Indigenous sex workers, and also reflect a wider trend in Canada and the US, whereby Indigenous children are at greatest risk for foster care compared to all other racial/ethnic groups.(5,118) This phenomenon is recognized as an extension of government-sanctioned removal of Indigenous children from their families dating back to the 1600s with the beginning of the Residential and Boarding School Systems in North America, and later through involuntary adoptions.(80,120) Such colonial initiatives, along with ongoing removal of land and basic provisions of housing, food and income, have been long acknowledged as forms of genocide and collective trauma for Indigenous peoples,(127) and notably have also been linked to the overrepresentation of Indigenous women in street-based sex work.(82,158)

While the relationship between child removal and sex workers' health status has not been directly studied in epidemiologic research, evidence from one cross-sectional study showed past

child removal was associated with increased odds of injection drug use and reduced occupational safety.(19) A small number of qualitative studies further describe child removal as precipitating elevated mental health distress, housing instability, and increased drug use.(20,24) Previous research examining child removal among women in other populations also shows higher levels of mental health distress (including suicidality, grief, depression, anxiety) and increased drug use, as well as poorer physical health and higher mortality.(97,99,100,106–108) Among these, some studies postulate that child removal constitutes a traumatic exposure,(100) associated with post-traumatic stress, as well as worsening social-structural disadvantage, including housing instability and intimate partner violence.(99,108) Examining intergenerational involvement with child protection, studies also suggest that post-removal maternal mental health and reunification outcomes are worse for mothers who themselves were removed from their parents.(113) This is an important consideration for sex workers, which some research suggests face a higher frequency of intergenerational familial separation compared to the general population.(19)

Looking to develop a theoretical foundation to better understand the potential mechanisms underlying the relationship between child removal and sex workers' health, and its role in women's health disparities overall, we draw on a life course perspective (133) and the "weathering" process (134). We conceptualize that women's experiences of child removal (themselves as children, their own children, or both) are structural-level traumatic stressors with subsequent reverberating effects, including on the pathways between child removal and traumatic stress, from traumatic stress to physiological stress, and from physiological stress to adverse physical health. From this perspective, we foreground the biosocial pathway through which an individual's life course exposures to historical, social and structural conditions, along with biological factors, accumulate to differentially shape health. Further, we rely on the

“weathering” process to account for how child removal, along with other stressors, may get “under the skin,” triggering a “wearing out” of the body and sustained increases in allostatic load, which over time leads to physiological dysregulation, accelerated aging or death.(134) In this conceptualization, events of child removal are theorized as independently and cumulatively increasing women’s traumatic stress, allostatic load, and health disadvantage, a process that may be particularly damaging for Indigenous women in our study because of conditions of historical and ongoing colonialism.(141)

To address the paucity of research on the link between child removal and the health of marginalized women, the objective of our study was to examine the relationship between involuntary child removal and women’s health trajectories in a prospective cohort study of sex workers, An Evaluation of Sex workers’ Health Access (AESHA). We estimated the association between child removal and sex workers’ self-rated health over time, and also estimated the joint effects of child removal and childhood history of removal from one’s own parents.

Methods

Study sample

Our study used data from the AESHA Study, a community-based open prospective cohort initiated in 2010 (n>950) in Metro Vancouver (Canada). The study builds upon longstanding community collaborations with sex work agencies since 2005,(159) and continues to be monitored by a Community Advisory Board of representatives from 15 community agencies.

Individuals who self-identify as women (trans-inclusive), are 14 years and older, have exchanged sex for money in last 30 days, and provide written informed consent, are eligible for inclusion in the cohort.(160) Because of challenges of recruiting sex workers in isolated locations, time-location sampling is undertaken by a peer research outreach team (current/former

sex workers) in spaces identified through a community mapping process where solicitation occurs and/or where services are exchanged, including indoor sex work establishments (i.e., massage parlors), and outdoor sex work venues (i.e., parks, underpasses).(159) The study holds ethical approval through Providence Health Care/University of British Columbia Research Ethics Board.

At enrollment and on a semi-annual basis, participants complete an interviewer-administered questionnaire and HIV/STI/HCV serology testing by a project nurse. In the main questionnaire information is gathered on socio-demographic characteristics, sex work patterns, drug use patterns, physical work environments, social/interpersonal environment, and structural environmental factors, and geographic data. Sex workers have the option to visit one of two storefront offices in Vancouver or to complete the interview-administered questionnaire and nursing component at their work or home location. Participants receive an honorarium of \$40 CAD at each biannual visit.

Measures

We restricted our analysis to a sample of women sex workers who reported a live birth at the first baseline interview and responded to the baseline question about involuntary child removal (n=466). We conceptualized the exposure of child removal as a structural-level traumatic stressor, and identified structural, interpersonal, and individual-level confounders based on the literature.

Exposure –Involuntary child removal

Exposure to involuntary child removal was assessed at baseline according to participants' response to the question "Have you ever had any children apprehended by Child Welfare Services?" Participants who responded affirmatively to currently parenting any children or

having a live birth in the last 6 months were again asked in follow-up interviews, if they had any children removed in the last 6 months. Among 12 participants reporting child removal in follow-up periods, all had also reported events of child removal at baseline. A sensitivity analysis was conducted to assess bias due to time-varying confounding when including these participants. This analysis showed a negligible difference in the main effect estimate (<2%) in the full versus restricted sample, and thus a decision was made to include these participants in the exposed category. Further sensitivity analyses were conducted to evaluate the role of the number of children removed and the number of removals.

Outcome – Self-rated health

We assessed women’s health dynamics over time using repeated measures of self-rated health (every 6 months). Self-rated health is based on the following question “in general, how would you rate your health?” with answer options of “excellent,” “very good,” “good,” “fair,” or “poor”?. Constructed as a five-point scale, it is frequently dichotomized as “excellent, very good, or good health” versus “fair or poor health,” and in our analysis was dichotomized following this approach. As a measure, self-rated health has been shown to be associated with a person’s morbidity and mortality, as well as accounting for an integrated perception of overall health, including the dimensions of physical, mental and social wellbeing.(161)

Covariates

Covariates in our analysis included those at the individual- (age, education, Indigenous identity); interpersonal- (childhood trauma, physical or sexual violence by a client or partner, material support from social network); and structural-levels (childhood history of removal from parents, residential stability, injection or non-injection drug use, and place of solicitation). Age and educational attainment, Indigenous identity, history of childhood trauma, and childhood

removal from parents were obtained via self-report during baseline interviews. Indigenous identity was categorized as “First Nation”, “Inuit”, “Aboriginal” or “Métis” versus no to all. History of childhood trauma was a continuous variable measured using the Childhood Trauma Questionnaire,(162) a 25-item scale, with high numbers indicating greater traumatic stress. Residential stability in the last 6 months was obtained at baseline and every 6-months thereafter, stable housing was assessed as living in an “apartment/house alone” or in an “apartment/house with roommates/ intimate partner/ family”, and all other housing arrangements were considered “unstable” (e.g., “single-room occupancy”, “couch surfing”, “shelter/hostel”, “treatment/recovery house”, etc.). A dichotomized variable for physical and/or sexual violence in the last 6-months was created to indicate any violence by a client or intimate partner versus none. A variable was created for any injection and/or non-injection drug use in the last 6 months (excluding marijuana and alcohol) versus “none”. Material support from social network in the last 6 months was assessed at baseline and every 6-months thereafter, using the question “When you need money, who do you most often rely on to get it?” Relying on “clients”, “intimate partners”, “family”, “friends” or “other” indicated material support versus relying on “yourself” only. Primary place of sex work solicitation in the last 6-months was obtained at baseline and in follow-up interviews, and categorized as street-level versus indoor/independent off-street (e.g. online/phone) or no sex work in the last 6-months (referent category). For purposes of describing intergenerational family separation, we also included a variable assessing whether a participant’s biological parents or family members spent any time in the Residential School System.

Statistical analyses

Descriptive statistics were calculated for variables of interest, stratified separately by child removal and Indigenous identity. Subsequently, logistic regression fit with generalized

estimating equations (GEE) and an exchangeable correlation structure was used to estimate crude and adjusted odds ratios (OR) and 95% confidence intervals (CI) of the relationship between child removal and repeated measures of self-rated health assessed over an average of 4 waves of follow-up. A complete case analysis was used to handle missing observations in multivariable models. To account for omitted cases due to non-random missing data for the childhood trauma covariate (10%), we undertook a sensitivity analysis, where we imputed participants' median, highest, and lowest value for childhood trauma for all of the observations with missing values. We then conducted multivariable logistic regression with full model including the imputed values. The magnitude and precision of estimates in full models with and without imputations were similar and thus we have reported the non-imputed estimates.(Appendix D) Other missing data considerations included multiple imputation for childhood trauma, however this was not possible based on available variables and information collected by the AESHA study.

Confounders included in the full model were determined according to a priori justification and by strength of associations with: a) exposure; and b) outcome among unexposed. Since the outcome of self-rated health assesses dimensions of mental health, we did not adjust for mental health status to avoid blocking the hypothesized causal pathway. To avoid over-adjustment, multicollinearity was assessed using variance inflation factors and Pearson correlation for each variable pair. The fully adjusted model was considered the least biased model, and a backwards elimination, change-in-estimate approach was used where inclusion of confounders was based on change in confidence limit ratios (a priori >0.01) observed in comparison to a change in estimate (a priori >0.05).

Given high levels of child removal and intergenerational family separation among Indigenous women, effect measure modification by Indigenous identity and history of removal

from own parents were assessed using stratum-specific odds ratios with 95% CIs (Tables 3 and 9) and the Quasi-likelihood Information Criteria to compare the fully-adjusted main effects model and reduced models. All analyses were performed using SAS (version 9.4; SAS Institute, Cary, NC).

Results

Baseline characteristics of the sample are shown in Table 1. Of 466 mothers, 180 (38.6%) experienced the exposure of involuntary child removal. Women who experienced child removal were more than twice as likely to have a history of removal from their parents (51.1% vs. 19.2%). They were also more likely to be Indigenous women, to be younger, to be born in Canada, to have elevated levels of childhood trauma, to have not completed high school, and to have a mental health diagnosis. Further, in the last 6-months they were more likely to have residential instability, to have done street-based sex work, to have used injection or non-injection drugs, and to have experienced physical and/or sexual violence by clients or intimate partners.

As previously documented,⁽¹⁹⁾ Indigenous mothers (n=173) in the sample were more than twice as likely to have experienced child removal compared to non-Indigenous women (60.7% vs. 25.6%), and were more than three times as likely to have experienced intergenerational family separation (34.7% vs. 10.9%). Sixty percent of all Indigenous women in our sample further had a family member who attended Residential School, and among these, three-quarters also experienced intergenerational family separation through the child protection system (themselves as children and their own children). Across all characteristics described, Indigenous women were also more likely to be structurally and socially marginalized, including a higher likelihood of being street-based workers, and to have experienced residential instability, and physical and sexual violence.

Table 2 shows the relationship between child removal and women's self-rated health in a crude model and multivariable adjusted model. In the adjusted model, women who experienced child removal had increased odds (OR 1.50, 95% CI 1.04, 2.16) of poorer health compared to women who did not. Sensitivity analyses of the number of children removed and the number of times removals occurred were not associated with worsened health (Appendix E, F).

In effect modification analyses by Indigenous status, the relationship between child removal and self-rated health was similar for both Indigenous and non-Indigenous women (Appendix G). When child removal and history of removal from one's own parents were considered as joint exposures, each experience individually was associated with worse self-rated health and the combination of the two was associated with the worst health (OR 2.04, 95% CI 1.27, 3.27) (Table 3).

Discussion

Using prospectively collected data on sex workers in Vancouver (Canada), we found that women's prior experience of involuntary child removal was associated with poorer self-rated health over the study follow-up period. This relationship was attenuated but remained significant after adjustment for individual, interpersonal and structural-level risk factors, highlighting their potential explanatory and mediating influences. We also found some evidence that the joint intergenerational effect of child removal and history of removal from one's parents was associated with a higher burden of poor health.

Results indicate that child removal may be an important life course exposure, and one where traumatic stress from these events may affect women for years, activating a plausible "weathering" effect on their health, and, as shown in previous research, increased risk of mortality.(107) This adverse exposure may also increase likelihood of other stressful events,

such as loss of income and housing instability,(98,108) which are also well-established as having deleterious effects on health. Results support earlier studies with mothers who are sex workers documenting the aftermath of child removal as characterized by worsened mental health and increased drug use (19,20,24) while also extending this literature by formally assessing the relationship between child removal and health status in this population. Together, these findings are compatible with the theory that child removal can be a widely disruptive life event conferring additional health and social-structural disadvantages to sex workers, and, as shown in our study, poorer self-rated health over time.

The odds of poorer self-rated health was greatest for women facing two generations of child removal, a majority of whom were Indigenous sex workers. Descriptive results showed extremely high prevalence of family separation among Indigenous women, which in some cases spanned three or more generations, including removal from biological parents and familial attendance at Residential School. This finding supports earlier research on diminished wellbeing of second generation mothers involved in the child protection system,(113) and adds to a growing evidence base positioning this system as a vector of colonization, that is inseparable from other forms of colonial dispossession, including loss of lands and culture, and inequitable provisions of housing, food, income, and health services.(80,118) This finding also suggests that intergenerational child removal may have a larger cumulative influence on life course health trajectories than each generation individually, and thus supports the likelihood of family separation being more adversely consequential for the health of Indigenous women (compared to non-Indigenous women) due to well-documented cumulative losses they face.(141) Similar to the established association between attendance at Residential School and poorer health among Indigenous peoples, our results suggest the current child protection system also has important

implications for population-level health disparities between Indigenous and non-Indigenous peoples, of which the extent and impact requires attention.

Our findings support the salience of initiatives to preserve families and prevent child removal among marginalized women, such as efforts to promote positive parenting experiences from birth. These include ‘rooming-in’ hospital-based programs for mothers with drug-exposed newborns, which have been shown to decrease lengths of stay of newborns, increase maternal custody of infants at discharge,(163) and reduce hospital expenditures.(164) The sheer magnitude of this exposure among sex workers in our study also highlights the need for tailored services for marginalized mothers, including sex worker-led family support and preservation services, including systemic advocacy to prevent child removal, and in cases of removal, post-removal health, legal, and social supports. Further, the disproportionately high number of Indigenous sex workers dealing with child removal, and intergenerational family separation, greatly emphasize the need to challenge colonial structures, and ensure development of Indigenous sex worker-led pregnancy and parenting services, including culturally safe birthing services and family-centered housing.

Limitations

Our study adds to existing literature on child removal and women’s health by expanding its scope to mothers who are sex workers, an understudied and high priority population. Other strengths include being among the first known studies to apply quantitative methods to the relationship between child removal and health, and to conduct a comparison of health status between first-generation and second-generation women involved in the child protection system. Our findings, however, must be interpreted within the limitations of the study design. First, a primary limitation is that we were not able to establish temporal ordering of self-rated health

status pre- and post-child removal to accurately assess causality, nor could we ascertain specific reasons for child removal, and whether these were associated with health status. Second, while we had acceptable data on child removal, we did not have data on event timing and could not account for how time-lapse since the event may differentially affect health. Third, we could not assess current status of mother-child relationship, including whether reunification had occurred following events of removal. Fourth, measurement inaccuracy of variables is also a limitation due to poor recall, a wish for privacy, or other reasons, however, good rapport with the AESHA interview staff may minimize social desirability bias.

Conclusion

Our findings echo calls for researchers to take account of the effects of the child protection system in the patterning of health among marginalized populations, including attention to how social and health inequities may be both causes and consequences of encounters with this system. Having prior exposure to family separation through the child protection system was found to be associated with poorer health among mothers in our study, that were further worsened when family separation spanned two generations. To reduce these disparities, findings underscore the need to develop sex worker and Indigenous-led services to prevent child removal and preserve families, as well as tailored health and social supports for those separated from their children. Mothers who were removed from their parents in childhood should be provided with additional supports to prevent their own children from being removed.

Table 1: Study sample characteristics of women sex workers who reported having a live birth at baseline interview, stratified by involuntary removal of children and Indigenous Identity, AESHA Cohort Study 2010-2015, Vancouver, Canada.

	n (%)	missing, n(%)	Involuntary child removal		Indigenous identity	
			Yes, n(%)	No, n(%)	Yes, n(%)	No, n(%)
Sample size	466 (100)		180 (38.6)	286 (61.4)	173 (37.1)	293 (62.9)
Child protection system history						
Involuntary child removal	180 (38.6)				105 (60.7)	75 (25.6)
Childhood history of removal from parents	147 (31.6)	14 (3.0)	92 (51.1)	55 (19.2)	93 (53.8)	54 (18.4)
Familial attendance at residential school	110 (23.6)	37 (7.9)	66 (36.7)	44 (15.4)	104 (60.1)	6 (2.1)
Involuntary removal & Childhood history of removal	92 (19.7)	14 (3.0)			60 (34.7)	32 (10.9)
Involuntary child removal & Childhood history of removal & Familial attendance at residential school	45 (9.7)	42 (9.0)			44 (25.4)	1 (0.3)
Individual and historical level factors						
Age, years (<i>median, IQR</i>)	38 (31-43)		36 (28-43)	39 (32-43)	34 (28-42)	40 (32-44)
Education, high school graduate or beyond	256 (54.9)		63 (35.0)	193 (67.5)	55 (31.8)	201 (68.6)
Indigenous (First Nations [†] , Metis or Inuit)	173 (37.1)		105 (58.3)	68 (23.8)		
Childhood trauma score (<i>median, IQR</i>)	43 (27-74)	47 (10.1)	61 (42-84)	36.5 (26-58.5)	60 (42-84)	36 (26-60)
Ever diagnosed with mental health issue	224 (48.1)		115 (63.9)	109 (38.1)	101 (58.4)	123 (42.0)
Interpersonal level factors						
Material support from social network [^]	171 (36.7)	3 (0.6)	69 (38.3)	102 (35.7)	78 (45.1)	93 (31.7)
Structural and environmental level factors						
Non-injection drug use [^]	310 (66.5)		165 (91.7)	145 (50.7)	158 (91.3)	152 (51.9)
Injection drug use [^]	175 (37.6)		98 (54.4)	77 (26.9)	86 (49.7)	89 (30.4)
Unstable housing [^]	376 (80.7)		162 (90.0)	214 (74.8)	155 (89.6)	221 (75.4)
Primary place to solicit clients [^]		6 (1.3)				
Street/public place	254 (54.5)		142 (78.9)	112 (39.2)	131 (75.7)	123 (42.0)
Indoor in-call venue or Independent	206 (44.2)		34 (18.9)	172 (60.1)	39 (22.5)	167 (57.0)
Any physical violence from client or partner [^]	123 (26.4)	18 (3.9)	70 (38.9)	53 (18.5)	56 (32.4)	67 (22.9)
Any sexual violence from client or partner [^]	70 (15.0)	20 (4.3)	40 (22.2)	30 (10.5)	35 (20.2)	35 (12.0)

[†] In Canada, the term "First Nations" includes over 600 distinct First Nations.

[^] In last 6 months

Table 2: Odds ratios for association of involuntary child removal with current poor/fair self-rated health among women sex workers in AESHA Cohort Study, 2010-2015.

	Crude Model		Adjusted Model [†]	
	OR	95% CI	OR	95% CI
Involuntary child removal				
No	1.00	ref.	1.00	ref.
Yes	1.98	1.47, 2.67	1.50	1.04, 2.16

[†]Adjusted for: age, education, Indigenous identity, childhood history of removal from parents, childhood trauma, sexual or physical violence by a client or partner, housing status, injection or non-injection drug use, material support from social network and place of solicitation.

Note: Both models use Proc Genmod with a logit-link.

Table 3: Odds ratios (OR) for joint effect of having involuntary child removal and childhood history of removal from parents on current poor/fair self-rated health among women sex workers, AESHA Cohort Study, 2010-2015.

No childhood history of removal from parents			
No involuntary child removal	225	1.00	ref.
Involuntary child removal	80	1.56	0.95, 2.57
Childhood history of removal from parents			
No involuntary child removal	55	1.41	0.81, 2.46
Involuntary child removal	92	2.04	1.27, 3.27

Adjusted for: age, education, Indigenous identity, childhood trauma, sexual or physical violence by a client or partner, housing status, injection or non-injection drug use, material support from social network and place of solicitation.

Note: Model uses Proc Genmod with a logit-link.

CHAPTER 4: HEALTH CONSEQUENCES OF MOTHER-CHILD SEPARATION AMONG MARGINALIZED WOMEN SEX WORKERS: CONSIDERING TRAJECTORIES, MECHANISMS, AND RESILIENCIES.

The child protection system can be a highly consequential social institution for marginalized mothers, who amid intersecting forces of poverty, racism, colonialism, and criminalization, often face temporary or permanent termination of parental rights.(19,21,23,25,30,165) While to date, an established body of scholarship has shown a mix of effects of involuntary removal on the social and health outcomes of children placed out-of-home,(88,93,94,156) there has been limited assessment of its impacts on birth mothers;(12,110) virtually all of whom are poor and thus already face a health disadvantage. Aiming to think more expansively about this institution through its health influences on marginalized mothers, this paper considers how event of mother-child separation were perceived as affecting trajectories of health and wellbeing in a Canadian sample of street-based sex workers, a majority of whom were Indigenous women and have faced intergenerational separation of their families.

Background

Across industrialized jurisdictions, the majority of street-involved sex workers are of reproductive age and have children,(19) yet their reproductive health and parenting experiences are rarely documented in research, and there is little understanding of how these domains interact with social institutions, such as the child protection system. Inattention to these issues has broadly obscured the conflicts that sex workers can encounter with cultural norms of mothering, and the consequences of their sociolegal and moral framings as fundamentally risky and

dangerous to their children.(23,72) Sex workers face high levels of stigmatization as mothers,(23,25) as they contend with “society’s diametrically opposed perceptions of sex worker and ‘good mother’ (Dodsworth, 2012, p.1)”’(20) ‘dual identities’, which may be further harder to navigate when women are working out of economic necessity.(23,76) The stigma facing this population can also be compounded by criminalization of sex work, the dominant public policy approach to the sex industry, which confers additional risks to mothers of being “discovered” as a sex worker, and in turn, can create barriers to health, social support, and legal services for themselves and their children.(20,73,77) Moreover, these challenges are complicated by the numerous structural and interpersonal inequalities that sex workers are often facing, such as poverty, low social support, racism, and colonialism, which can severely limit access to positive maternal identities.(19,23,78)

Given these multiple barriers, women sex workers frequently contend with a formidable fear of losing child custody,(20,24,79) and several North American studies point to a high burden of this form of loss in this population.(19,25,26,28,29) For sex workers, some evidence suggests this may also more commonly reflect an intergenerational cycle of family separation, whereby women facing the removal of their own child(ren) are also likely to have been removed from their parents as children.(19,30) Dewey et al. (2018) articulate this as a consequence of intergenerational poverty, revealing how the ‘shared precarities’ both prevalent in the lives of mothers and their biological families, can substantially increase challenges encountered by sex workers in the child protection system, elevating likelihood of child removal and of long term separation.(23) In a Canadian study by Duff et al.,(2014) sex workers who had themselves been removed from parents by child protection showed a 48% increased odds in subsequently having their own children removed. This study also identified markedly higher intergenerational family

separation among Indigenous sex workers; a phenomenon that is widely recognized as inseparable from ongoing colonial policies in Canada, which also have been closely linked to the overrepresentation of Indigenous women in street-based sex work.(82,158)

Colonialism and intergenerational family separation are closely interconnected for Indigenous sex workers in several colonial jurisdictions (i.e., Canada, the United States, Australia, and New Zealand), where previous research shows an extremely high burden of child protection interventions in this population.(19,79,166) This pattern is also reflective of the wider experience of Indigenous peoples and longstanding colonial policies targeting their families. In Canada, these practices began the arrival of Europeans and the genocidal policies of the Residential School System, which for almost 400 years, sanctioned the forced removal of 150,000 Indigenous children as young as 3 years old from their parents and communities.(80) This System was eventually replaced beginning in the 1960s through 1980s by state-led initiatives of forced adoption of thousands of Indigenous children into White families (known as the ‘Sixties Scoop’), followed by its latest iteration, known as the ‘Millenium Scoop’,(167) observed in the significant over-representation of Indigenous children in foster care, where they presently comprise over 50% of foster care children under 4 years, despite accounting for only 7% of Canada’s child population.(168) More broadly, the generations of forced family separation have also reinforced and made less repressible other forms of colonial violence towards Indigenous peoples that have targeted Indigenous lands, culture, and sovereignty, which further act to deeply undermine the health and livelihoods of Indigenous peoples.(141,151) In discussions of the health impacts of colonial family separation policies, it is also instructive to recognize that while Indigenous communities and scholars have precisely articulated historical and current traumas related to forced separation and relocation of families, as key factors

impacting wellbeing,(141,169,170) many of the historically-sourced health burdens they face have yet to be documented in the indexed health literature, which still systematically prioritizes non-Indigenous voices.(171) Thus, while a few population health studies have examined the role of the Residential School System and Indigenous peoples' health,(123,125) little health research focused on Indigenous peoples has expanded the scope to consider health impacts of family separation occurring through the current child protection system.

Looking to previous scholarship on family separation and health in the general population, a growing literature on health impacts of state-ordered child removal points to a strong eroding effect on maternal health. with studies reporting elevated mental distress, including grief, suicidality, depression, anxiety, trauma, increased substance use, and deteriorating physical health.(97,99,100,106,108) Alongside these effects, some studies have also pointed to heightened social-structural disadvantages, such as loss of housing, income and social support.(98,99,103,108) Notably, in one population-based study examining economic trajectories among child protection-involved parents, results showed two-thirds of parents lost employment and cash assistance benefits in the aftermath of losing custody of their children, suggesting that these collateral losses are considerable barriers to family reunification.(98)

Among mothers who are sex workers, the majority of previous studies reporting on experiences of child custody loss have been limited to the experiences of street-based sex workers, and have only tangentially focused on health experiences following these losses. In this literature, custody loss is often depicted as contributing to elevated drug use and mental distress,(20,22–24,78,83) as well as increased street-based sex work, previously identified as a key strategy for women to finance increased use of illicit drugs needed to cope with pronounced mental distress.(22,23) While together these insights point to events of family separation as

having deleterious influences on the lives of sex workers, they have not explicitly examined these events through a health frame, nor systematically addressed how and to what extent this form of institutional intervention may activate health vulnerabilities in this population.

To address this knowledge gap, this study aimed, first, to improve understanding of the unique health consequences of mother-child separation through the child protection system on women sex workers, and second, to elaborate on how women's trajectories of health were altered by these events.

Methods

Theoretical framework

The present study recognizes the case of the child protection system and the nature of its influences on maternal health as an undertheorized and emerging literature, which in the US-Canadian context is predominantly reflective of the experiences of poor women who are Black or Indigenous. In order to provide a more complex picture of women's experiences of family separation and how they may engender different health responses, our study applied a theoretical framework combining critical approaches from feminist and post-colonial perspectives to guide domains of inquiry and analysis.

Grounded in a feminist perspective, our study privileges mothers' perspectives and expertise on their experiences with the child protection system, seeking to elicit accounts of the health consequences of this systems on their terms, and to remedy what Runyan (2018) describes as a longstanding "gaze aversion" to the health implications of this system for women.(12) Putting forward an interrelated understanding of the personal and structural, central to a critical feminist health perspective,(172) we consider how social, economic, historical and racial positionalities of women in our study combine to differentially alter their institutional

interactions and health experiences.(173) Through this lens, we also engage with how maternal subjectivities are negotiated in women's attempts to exist as mothers, both vis-à-vis the dominant norms of motherhood and within discourses of personal responsibility.(174,175)

We further situate our study in a postcolonial perspective, which offers a critical interpretive lens through which to analyze the foundational role of ongoing colonial relations in shaping Indigenous women's experiences of motherhood. From this orientation, we do not separate colonial history and contemporary neo-colonialism, but rather conceptualize their continuities and the evolution of colonization as shaping present-day realities of Indigenous and non-Indigenous peoples, as well as Indigenous resistance struggles.(137,140) From this perspective, the cycle of Indigenous family separation and undermining of Indigenous motherhood is understood as a central modality of colonial power, through which other forms of colonial violence to dispossess Indigenous peoples of their lands and sovereignty are sustained and expanded.(116,119,122)

Recruitment and sample

We recruited interview participants from An Evaluation of Sex Workers Health Access (AESHA) Study. AESHA is a longitudinal, community-based prospective cohort study of street and off-street women sex workers in Vancouver, Canada. AESHA builds on longstanding and ongoing collaborations with sex work agencies in the city of Vancouver dating back to 2005.(159) AESHA cohort members complete semi-annual interviewer-administered questionnaires and HIV/STI/HCV testing, assessing a range of socio-demographic characteristics, sex work patterns, drug use patterns, physical work environments, social/interpersonal environment, and structural environmental factors, and geographic data. Individuals who self-identify as women are 14 years and older, have exchanged sex for money in

last 30 days, and provide written informed consent are eligible for inclusion in the cohort study.

Between November 2016 and May 2017, participants in the AESHA cohort who were 18 years or older, had experienced short or long-term custody loss of children, were women and were able to speak English were eligible to participate in the current study. Eligible participants were provided information about the qualitative study via phone and face-to-face encounters in street outreach and semi-annual interviews with the AESHA peer research outreach team and interview staff.

We conducted in-depth, semi-structured interviews with a purposive sample of 31 AESHA cohort members who had different profiles with regard to race/ethnicity (i.e., Indigenous, White), age, terms of separation from children, and current parenting status. Since a majority of the AESHA study's population who experienced child custody loss are Indigenous women (58%) and Indigenous peoples are to a great extent disproportionately intervened upon by child protective services in Canada, we aimed to have this population represent approximately 60% of our total sample. This strategy enabled both a fuller understanding of Indigenous women's lived experiences across different contexts, and more meaningful comparisons to White participants.

Data collection and analysis

Interviews were conducted from November 2016 to May 2017 in a private space at one of two AESHA community offices in Vancouver. Participants were interviewed by KSK, a White PhD candidate with a decade of community work experience with women who have lost custody of their children in another Canadian city, or FR, an Indigenous researcher and former sex worker with longstanding community ties to neighborhoods where many study participants reside. In the pilot-testing phase, seven interviews were conducted by two interviewers,

including co-author AK, to assess clarity, length, and participant feedback on interview guide. Based on pilot interviews, minor changes were incorporated into the final version of interview guide.

Given the sensitive nature of the research topic, participants were invited to participate anonymously by electing to use a pseudonym when signing consent. All participants provided informed consent and were remunerated with a CAD \$30 honorarium.

The interview guide was developed based on existing literature, knowledge from the research team, and in collaboration with community partners. The guide included four overarching threads of inquiry, asking participants to retrospectively describe experiences of: 1) pregnancy; 2) parenting; 3) child custody loss; and 4) stigma and discrimination encountered through these experiences. In all interviews, participants were encouraged to exert control over what information was shared (or not), and at what length, with the goal of eliciting women's perspectives and accounts on their terms. For some of the questions relating to influences of child custody loss on women's health, all participants, if desired, were provided coloured pencil crayons and visual representations of a Medicine Wheel (an Indigenous approach to holistic health and wellness) and a tree in various stages of growth. These served as alternative modalities for participants to narrate dimensions of their health experiences without imposing a chronological form. This non-linear approach can be especially useful with the multilayered and fragmented aspects of traumatic experiences. (176) Interviews lasted between 20 and 170 minutes (average length was 55 minutes), were audio-recorded, transcribed verbatim and checked for accuracy with audio recordings.

Our analysis drew on our critical feminist and post-colonial theoretical framework as a point of departure and aimed to understand the consequences of events of mother-child

separation on sex workers's health, including identifying factors that influenced trajectories over time. Through examination of trajectories, we aimed to call attention to how retrospective accounts of past losses are extended forward into women's present-day lives, including the mechanisms through which health status were exacerbated or mitigated over time to impact health. An iterative analysis process began concurrently with data collection. Immediately following interviews, KSK and FR wrote field notes to summarize interview content and themes. KSK then read each transcript and wrote brief analytic summaries of interviews to explore key features of cases and apply a timeline/chronological order to each.(177) A list of codes was developed by the research team based on key themes that were generated deductively based on our critical feminist and post-colonial theoretical framework, the research objectives, and topics covered by interview guide. The coding framework included 22 broad higher-level codes (e.g., "interactions with child protection", "parent-child separation") as well as specific descriptive codes (e.g., "events of child removal", "post separation stigma"), attributive codes (e.g., "post separation downward cascade"), and codes to capture unique experiences of Indigenous participants (e.g., "Indigenous family separation", "stigma for Indigenous mothers"). Several inductive codes were also derived by KSK during preliminary reading of transcripts and writing of analytic summaries and these were discussed with members of the AESHA research team (FR and AK) who participated in preliminary reading of transcripts. All transcripts were coded by KSK using ATLAS.ti 8.

Following coding, we generated code reports in ATLAS.ti reflecting all codes related to child custody loss and its consequences, including co-occurrence of codes. Using data from these reports and narrative summaries, KSK then developed case-by-case comparison tables to classify coded data into categories reflecting thematic areas of interest related to women's interactions

with child protective services, health consequences of separation, trajectories pre and post loss. At this stage, the analysis advanced beyond thematic description to interpretive connections between personal narrative, historical contingencies, and larger social structural arrangements.

Quotes by study participants are reported using pseudonyms. The study holds ethical approval by the Providence Healthcare/University of British of Colombia Research Ethics Boards, and from the Institutional Review Board at the University of North Carolina at Chapel Hill, where KSK was a doctoral student at the time of the research.

Results

Our sample consisted of 31 women, of which 27 (87%) had experienced termination of parental rights of one or more children. The median age of participants was 43 years (range 27-56 years). Nineteen women (61%) identified as Indigenous (First Nations and Métis) and 12 (39%) as White. Seventeen participants (55%) reported currently financially supporting themselves through street-based sex work and informal indoor sex work with regulars, while the others did not report sex work at time of interview. All women were born in Canada, lived within the severe constraints of poverty, had a history of drug use, previously or currently did sex work in street-based or informal indoor settings, and received limited income assistance through government social and disability schemes. Over half of participants (55%) resided in public/government or supportive housing, 5 (16%) lived in private apartments/houses, 5 (16%) were housed in single-room occupancy hotels, and 4 (13%) were homeless. Five participants (16%) were currently parenting 1 or more children. Thirteen women (42%) reported intergenerational family separation through child protective services. Among those reporting intergenerational family separation, eleven women (85%) were Indigenous. Four (13%) participants reported tragic deaths of children due to suicide, violence, or drug overdose. All of

these participants were Indigenous, including two mothers who had each lost two children. Though the conditions through which children were removed or relinquished from women's care are not the focus of this analysis, below we briefly consider factors deemed most consequential leading up to events of mother-child separation.

Women's accounts of how the child protection system became involved in their lives foreground intersecting historic and institutional barriers faced, which for some Indigenous women were described as beginning before birth, marking a continuity of forced family separation across generations. Almost unanimously, multiple dimensions of poverty pervaded women's contexts of separation from children, and for almost half of participants, unsuitable housing was a key factor in this struggle. Contexts of separation also notably occurred in ways that blurred boundaries between the past and present. For example, historical removal from one's own parents, past evidence of drug use or sex work, or having previously lost custody of children were viewed as part of the system's etiology of 'risky' parenting. In women's narratives, drug use, either past or present (or suspected), was most often judged to be the determinable failing point by the system, and the overarching target that motivated intervention. Though several women described doing sex work while pregnant or parenting, their sex work status remained mostly covert in interactions with the system. Overwhelmingly, when describing occurrence of child custody loss, participants contested grounds of separation as involuntary, with the exception of a few women who considered separations as reasonable based on circumstances they deemed unsuitable for parenting due to resource constraints, an internal discrediting of themselves as mothers, or both.

Four trajectories are described below categorizing the broad patterns in how events of mother-child separation influenced the course of women's health and lives. These include: 1)

mental distress; 2) intensifying poverty; 3) social displacement; and 4) caretaking and family regeneration. Each trajectory is described in more detail below.

Mental distress

Women articulated extreme mental distress following separation from their children, including a few participants who spoke of contemplating or attempting suicide. Describing their mental health, some participants referred to diagnoses of “post-traumatic stress” and “depression”, but more often ‘distress’ was articulated beyond medical framings in metaphors and affective states of loss, grief, sadness, and anger.

In the early days following family separation, the sudden absence of children as the central vocal point of women’s lives and routines was described as conferring an unbearable ‘void’ for mothers. Nina (Indigenous, 42 years) explained this as an ‘emptiness’, which she later noted as prompting the onset of an anxiety condition: “It’s really hard.... you feel so empty... a piece of you is gone.” For some participants this ‘void’ was described as a dimension of ‘life-ending’, having a profound effect on how women related to their wellbeing and day-to-day living. Ginelle (Indigenous, 31 years) spoke of the devastation in terms of forgetting the basic skills of “how it was to live” and look after herself:

Um, never slept, never showered, never ate, never had any self-care. Like I lost all my life skills. Like- as so much as, when I’d go to the shelter I’d leave my plates and my bowls everywhere. Because I just forgot how it was to live. Yeah. Yeah. So spiritually, I don’t think even think I had a spirit to be honest. You know I totally lost it. Everything.

Similarly, Brenda (Indigenous, 48 years) emphasized the significance of this family disruption as being severely destabilizing, greatly affecting her sense of purpose and relationships with the past, present, and future; temporalities which previously were all deeply interconnected with her children. In recalling the health consequences of this period, she described starting again to use drugs, and a dire reality where she was just barely ‘clinging to life’:

I didn't start using again until after they got taken away. They were my life. I, I['d] never go anywhere except for those times I went out of town, away from them. The longest I'd be away from them is to go to bingo. [...] It affected my whole life. [...] I had nothing. I was barely clinging to life.

Also referring to the unbearable present following the loss of her four young daughters, Kathi (White, 54 years) remarked how the losses were also a loss of all valued aspects of her life, prompting a fundamental shift in how she cared about herself and her wellbeing: “My kids were my life. You know. To the point that [once they were gone] I just, started – I didn’t care if I lived or died, to tell you the truth.” In another account, Tina (White, 36 years) provided a similar example of indifference toward her wellbeing and safety in the context of sex work:

My sex work got more careless, and lot more frequent. [...] Oh I've always been, like pretty careful about condom use, but I just mean like, [I would] be in high risk situations. Not really caring if I lived or died.

In this case, the consequences of ‘not caring’ also carried risks as a sex worker, increasing Tina’s vulnerability to violence and related occupational harms.

Women's narrations of how separation affected their health was most commonly described in reference to increased drug and alcohol use as a direct response to profound mental distress. Women equated their drug use with a desire to forget, serving the critical functionality of being able to live with the burden of their losses. As Margo (Indigenous, 50 years) reflected, the escalation of drinking after the loss of her child marked an urgency to numb and dissociate: "It was just a lot of drinking. Lots of escaping. Just not wanting [to feel] – Disassociation, right?" In another narrative, Amanda (Indigenous, 40 years) provided an example of initiating drug use for the first time in the aftermath of losing her children, in order to deal with the intense emotional pain: "[Loss of my children] is what got me into drugs, and 'cause I couldn't figure out how [to manage] the pain."

During this period, how women used drugs (including drug dose and physical setting) and the safety of drugs (especially in an unregulated illicit drug market) also mattered for health, and, in some cases, women described conditions of heightened risk for overdose. For example, Ginelle (Indigenous, 31 years), explained how during the extreme hardship of this period, she was more likely to use alone, use more frequently, and did not take time to check her drugs; clear risk indicators for overdose and other drug-related health adversities:

...The increase of using by myself. The increase of drug use. I would never double check whether if it really was that or this or that, I would just do it. You know because, oh there, that pain's surfacing. I need to do it now. So yeah there was lot of risk.

Notably, the etiology of mental distress following separation was also inseparable from women's institutional histories. Among Indigenous participants, the loss of children marked a devastating continuity of forced family separation directly linked to ongoing colonialism.(4) In the example

of Victoria (Indigenous, 38 years) the chronicity of family disruption was reflected over four generations. Her grandmother was removed from her family to attend Residential School, her mother was taken as a young child and put in a Catholic boarding school, and she had been taken from her kindergarten classroom by social worker and eventually moved between 57 different foster homes. When Victoria's first-born child was removed at birth, the intolerable possibility of a similar cycle of foster care to hers repeating itself in her daughter's life added considerably to her mental distress. This distress, coupled with despair that she would likely never regain parental rights, led to her intentional withdrawal from custody proceedings, opting instead to have her daughter adopted, which in her mind was the safest option given risks inherent in long-term foster care. For the small number of women who expressed experiencing physical and sexual abuse in foster care as children, all of whom were Indigenous, the reality of their children going into this same system and risking the same trauma also produced significant mental distress during this period. In the example of Margo (Indigenous, 50 years), she described reluctantly not pursuing a custody battle with her daughter's father, viewing this as an excruciatingly hard but necessary risk minimizing strategy, to keep her daughter out of the system and harm's way.

For several participants, dimensions of heightened mental distress and increased drug use was also described in bodily experiences of declining health, including weight loss, lack of appetite, and insomnia. As explained by Tina (White, 36 years), severe mental distress and increased drug use over the past 10 years since losing her four children contributed directly to her poorer physical health:

Well, I think that probably the drug use goes with the mental health, which affected my physical health, but I guess that's probably the only way [...] the drugs have taken a toll on

me physically, but [...] um I think the depression probably affected sleeping and eating. Like making me not sleep, and not wanna eat and stuff,

A couple women also spoke of this experience with their children as linked to chronic conditions such as fibromyalgia, and what Pamela (Indigenous, 33 years) abstractly termed to be a form of “physical sadness”.

Guilt, regret, and shame were also sources of mental distress expressed in some narratives, wherein women usually positioned themselves as the ‘problem’, and their own individual actions as the basis for separations. Below, Alice (Indigenous, 56 years) described the far-reaching manifestations of this internalized stigma in her day-to-day life and mental health:

I guess self-acceptance and a feeling of failure as a mom, as a provider. ... I had to go on uh anti-depressants. I've been on them ever since and if I go off and if I, try to wean myself off and not be, it's just all the guilt and all the emotions when you were- I could've done this differently or I should've done that and, you feel a lot a of guilt.

This self-censuring paralleled women’s sense of failure to achieve dominant norms of mothering, enacting additional forms of disciplining for poor ‘self-management’ of women’s circumstances.(174) For Indigenous participants, this self-censuring and internalized stigma within families also brings attention to how colonialism is carried in bodies, and, in the words of Fanon (1952), “works on and through the psyche [and] infuses everyday relationships”.(139)

Intensifying poverty

Beyond the severe toll of mental distress and related poor health, child custody loss also affected the social spheres of sex workers’ lives, most evident in their intensifying poverty, which also contributed to increased health risks and worsening health. While there were several

participants who were in very marginal social positions prior to losing their children, making the increase in socioeconomic disadvantage not as readily detectable, almost two-thirds of study participants described heightened poverty following losses of children. The downward trajectory was most commonly observed in accounts of increased homelessness and street-involvement, which in addition to posing threats to health, also added considerably to women's internal discrediting of themselves as mothers, recalled as further limiting their abilities to work productively within the system to contest losses and address their families' needs. Significantly, the intensification of poverty was highest for Indigenous participants, who, compared to White participants, more often became homeless and reliant on street economies following child loss.

Housing loss and residential instability was experienced by just under half of participants, among whom almost all (n=10) became homeless. Reflecting on this period, women articulated several barriers to maintaining housing. For example, a few participants in subsidized housing described losing their homes because they no longer qualified to live in them without their children. A few other women identified being ostracized in remote communities due to family/custody issues and forced to relocate to the city with few resources to adequately house themselves. In another example, Desi (White, 34 years) recalled how she could not return to the new apartment she had recently set up for her and her 3-year-old son, because the memories and his belongings would be too emotionally triggering. She expressed going "*totally went off the deep end*" following the separation, losing her apartment and facing prolonged homelessness of several years during which she did not see her son. After losing her two daughters, Alice (Indigenous, 56 years) recalled a similar downward cascade, whereby several dimensions of her quality of life and wellbeing, including her employment and housing, were negatively affected:

The mental health aspect of it was really, really hard. Um, it was hard to go to work every day and, keep my head up and um, you know, so I delved into[it]. Every time I got paid I started smoking crack and I started drinking a lot and uh, I lost my BC Housing. We had a beautiful townhouse two-bedroom home at [location] in Vancouver. And so I lost that and um ended up homeless for a while and sleeping on couches and, I ended up uh at [a shelter].

Increased or newfound street-involvement following custody loss was a second indicator of women's intensifying poverty, recalled by almost half of participant (n=12) as occurring both alongside or independent from housing instability. Among a few women, street-involvement also prompted initiation into sex work, while for other participants who had already worked, some reported increased sex work during this period to cover costs of increased drug use. In one example, a participant described how her financial hardship during this period also constrained her decision to use condoms with clients. This rare instance of increased HIV vulnerability, however, stood out in contrast to most women's experiences, which pointed to increased street-based sex work and its inherent structural risks (i.e., violence), as the main drivers of their increased health vulnerability. Describing some of the ways her health was affected during this period, Christie (Indigenous, 51 years) spoke about how the combination of being out on the street, the lack of care for her wellbeing, and her increased drug use, played a catalyzing role in her increasing health vulnerability:

After I had the kids [taken away] and I was out on the street it didn't matter you know. Cause they were gone. And I was alone and, you know [I] just didn't care, you know. ... I

was uh, grieving for my kids, and I wanted to stay high all the time. [...] I'd just go out and you know, whoever picked me up is, I'd just see dollar signs, that was it, you know.

Social displacement

Displacement from social support, as necessary resources for health, was another trajectory influencing sex workers' health following loss of child custody. For almost one-third of women, the loss of their children was coupled with the loss of other close relationships. These losses created barriers for women both to rebuilding their lives and in coping with the significant mental distress and increased disadvantage faced. In one example, Brenda (Indigenous, 48 years) emphasized how her isolation was linked to her increased drug use during this period, which she felt a lot of stigma and shame around, and which prompted her to cut ties to her family (who were caring for her sons), deepening her feelings that she could no longer pursue any meaningful relationships. For Alice (Indigenous, 56 years), who attributed the severe isolation she faced to the shame of having lost her two daughters, there was also the belief that she was not deserving of any happiness, thus also precluding the possibility of pursuing intimate relationships:

My family I was too ashamed to talk to them. I didn't have any intimate partners because I didn't deserve to be happy. [...] Yeah. So I was, alone, alone, alone.

In the next passage, Ginelle (Indigenous, 31 years) provided a somewhat broader view, expressing how the shame and mental distress following loss of her daughter infused several areas of her life, including her relationship to her partner:

Emotionally, emotionally I was just a wreck. I had a lot of, self-hate. I was really ashamed, to say okay I've lost my children. I'd just always say, oh they're staying with family. So, I'd never actually speak the truth. [...] with my hus- my ex-husband um, we started cheating on each other, hurting each other, beating each other. You know. Throwing things out that belonged that were so sentimental, like hurting. Like, mentally and physically hurting each other and it's ... We stayed alone. Do you know what I'm saying? Like we would just stay in our little room. All the time.

In this narrative, Ginelle also sheds light on conditions of intimate partner violence by her child's father, identifying this negative consequence as another potential source of hardship and health disadvantage for mothers during this period.

Significantly, we did not encounter a single narrative where women felt adequately supported either in the short or long-term aftermath of being separated from their children. Stigma and shame were key features articulated as undermining women's access to supportive relationships during this period. The negotiation of stigma was particularly evident in women's narratives of the system's institutional practices, which in some examples were described as reinforcing women's sense of inevitable failure, adding further momentum to the burden of mental distress and decisions to withdrawal or disengage from services:

Mentally it was just, it was so much stress. Cause like they weren't working with me. They were doing everything they could, um to tear, tear us apart and, um, it was like-It was awful. Like I felt like I had nobody on my side. [...]Like, if I if I coulda got a different worker maybe, things mighta came out different but um. I just gave up (Sara, White, 54 years).

In the case of Mary (Indigenous, 34 years), relinquishing parental rights to her newborn at the hospital was a strategy to protect herself, both from the inevitable systemic stigma she feared facing because of her sex work and drug use, but also from the emotional “heartbreak” of bonding with and then losing her son. Reflecting on this below, she pointed out how the absence of critical support constrained this decision, giving her “no choice” but to disengage:

I wanted them to know that I'm giving him up because I have no choice, right? Instead of [...] getting my hopes up of keeping him, and then having them say sorry you can't. I, I, I knew, I knew [that] was gonna be the end result. You know, I started thinking about that few days before I actually went into labour. Cause [...] what the hell is a pregnant woman doing in a street shelter? And I knew they wouldn't let me take him back to a street shelter. There's no way... I didn't want it. I didn't want the emotional drama [of getting my hopes up] cause my heart would've actually, I probably would've died of a heart attack, from heartbreak.

Caretaking and family regeneration

Amidst indisputably difficult circumstances of profound loss, women also provided insight into various resistance strategies to care for their wellbeing, and maintain or regenerate connections with their children.

Most commonly, connection and in-person access to children were expressed by participants as vital for their wellbeing and coping following separation. This included even simple things like the knowledge of a child's recent developmental or school accomplishment. In one example of connection, Shelley (Indigenous, 33 years) spoke of being incarcerated and pumping breast milk for 6 months for her infant daughter who remains in the care of a friend:

It made me feel really good like, it was uh really amazing because I did it for six months straight. Right. So my daughter got really good milk.[and] me and her are very connected.

Near unanimously, participants described desiring and feeling more content knowing and being part of their children's lives, and that these goals held greatest possibility when children were in the care of family or friends, rather than in the foster care system. Desi (White, 34 years) reflected below how helpful it was for her to know that her child was with family, rather than in foster care:

I knew my son was safe. You know. So that really helped me, while I was out there. Like there were so many girls that had kids that were, their kids were in the Ministry and they didn't even know where they were, or you know like. So, I was always happy to know that- I knew where he was and he was safe, right?

This preferred custody arrangement was also articulated by several women as unquestionably safer for their children given their own past childhood trauma through the system.

Despite at times prolonged period of separation, being in a position to maintain or re-establish bonds with children were often described as an important point of influence in intentions toward wanting more stability and improved life circumstances. In the example of Participant 23 (Indigenous, 48 years), who recounted feeling barely alive after losing her children, there was the memory of a conversation with her mother that was pivotal to keeping her going:

My mom said “They’ll come looking for you. They’ll figure it out.” And they did. And that’s what kept me going

In another example, Alice (Indigenous, 56 years) described her current instrumental role in being ‘good’ grandmother to her grandson as engendering important forms of caring and remedying some of her past:

How do you say sorry? You know for not being there for them when they were growing up. [...] I think that’s why I took care of my grandson. You know. I taught him everything. The right way. [...] You know and I’m gonna be a good grandma. I’m wanna be a good Kokum you know. And I am and I’ve quit drinking about 95%. [...] stopped when he was born [and] I stopped doing drugs.

Similarly, Violet (Indigenous, 55 years) spoke of her intent on restoring customary forms of love and connection to her children, explaining this as a resistance strategy to the grave harms suffered through generations of forced separation in her family:

I love my kids with my whole heart. Oh, I tell them every day like cause when I was growing up I was never told that “I love you, I love you”, right? Cause that’s how we’re brought up in the residential school. And what we were never, never interacted [with] like that right. It was like um, uh, how, how would you say like we were numbers. You know. We never knew our names.

Managing fear of the system returning into one's life was another dimension of coping that was pointed to by a few participants. For example, Leila (Indigenous, 49 years), who had extensive involvement with the system since birth, expressed fear of the repercussions for being as much as late to pick up her son from school, and the need for regular self-reminders of her worth as a mother: “[I keep] telling myself I can do this. That I’m worthy of this, and I’m worthy of loving my kids.”

Spirituality was another key component of coping that was voiced most frequently by Indigenous participants and often described simultaneously with the power of cultural resurgence. As Esther (Indigenous, 51 years) stressed, her traditions have always been in her as a hereditary, generative force:

I’ve always had my traditions. My grandmother, I’m a hereditary medicine line. And my grandmother was the knowledge keeper of our tribe. So, for all that [family] dysfunction, [my grandmother] is the budding rose.

In women's accounts, spirituality and culture conferred strength and healing, as well as a sense of continuity between past, present, and future, which was a countering force to the fragmentation caused by losses. Shelley (Indigenous, 33 years) explained the importance of spiritual support in helping her from going “off the map” during difficult times after being separated from her children: “I had to like, really like, keep something close to me like a higher power, like a, something to keep me strong, to keep me going.” In another narrative, Leila (Indigenous, 49 years), who had been taken from her parents at birth, spoke also of reconnecting with her brothers and sisters, and discussed the significance in preparing for an upcoming

‘homecoming’ ceremony in her home community, where along with her two youngest children, she will be vested with her clan symbol and colors. In speaking about this momentous event, she reflected:

My brothers and sisters knew about me. Cause my mum always talked to them about me.

[...]They’ve been looking for me for years. Now I have them.

For Indigenous participants whose cultures are based on relationships with land, the loss of land and family closely intersect, and regenerating family relationships encompasses relationships to land and water, emphasized as essential to healing. Esther (Indigenous, 51 years) put forward a vision for widespread cultural and land-based family healing initiatives, not mandated or part of the child protection system, but rather offered to Indigenous families to participate in voluntarily to begin healing, as she puts it: “[We need to] get our culture back, ‘cause that’s what’s gonna heal us.”

Discussion

This study identified four interconnected trajectories linking events of child custody loss through the child protection system to sex workers’ health. First, losses of children were described as an acute and sustained source of mental distress, leading to grief, anxiety, and suicidality, as well as increased use of drugs/alcohol, insomnia, and weight loss. Second, women experienced increased poverty following losses that was more severe among Indigenous participants, and included the onset of homelessness and increased street-involvement, key mechanisms for how health functioning was further exacerbated during this period. Third, women faced increased social displacement, observed in an absence of support and increased

isolation, which undermined access to social relationships as resources for health and further reproduced marginalization in their lives. Finally, losses of children were not ‘complete’ for many participants in our study, as many women’s narratives revealed a continuity of presence with their children, claiming different roles and opportunities to regenerate and preserve family bonds, which were vital to wellbeing.

Narratives of worsening health following events of family separation extend research on health vulnerabilities faced by sex workers, providing insights into a range of health and social dimensions linked to this form of loss.(20,22–24,83) While drug use has been a central mechanism previously identified as a consequence of child custody loss and a precondition to women’s increased street-involvement during this period,(22,23) we found that women’s health (including relationships to drug use) was also influenced by changes to their social conditions. In these deteriorating conditions, the onset of housing instability, as well as losses of social relationships and support, were additional key drivers of women’s street-involvement, further altering the social fabric of their lives and increasing health vulnerability. Increased displacement from social ties and home communities as resources for health also exacerbated women’s isolation, adding to challenges of reuniting with children and recuperating valued maternal identities. Drawing on works by Dewey et al. (2018) and Namaste (2000), these intertwined effects on reduced health functioning can also be emphasized as an additional form of social ‘erasure’, further regulating women’s daily existence as “criminalized citizens” and rendering their existence as mothers impossible.(23,35,178) In writing about women who use drugs, Campbell (2001) refers to a deep sense of ‘reproductive loss’ that can pervade the lives of these women in ways that extend beyond their own traumatic losses of child custody, to the loss of reproductive potential in the eyes of society, articulated as an additional powerful process of

social exclusion and public shame that also reproduce far reaching marginalization in women's lives.(179)

Significantly, for Indigenous women, who comprised a majority of participants in our study, consideration of the health impacts of child protection interventions were inseparable from larger processes of colonialism. Drawing on work by De Leeuw's (2016) and Nixon (2011), we conceptualize Indigenous mothers' health trajectories as micro-scale markings of 'slow violence'.(117,180) This form of violence, enacted in the hidden spheres of Indigenous families and lone-women led homes, outside of media-capturing scenes, is an attritional form of violence that can take time in wreaking the full extent of its havoc, having slow and lasting consequences for women and their families, that are critical to reinforcing the larger and more visible continuum of colonial violence aimed at seizing Indigenous lands and resources.(119) For Indigenous women, this path of slow violence and cycle of forced family separation can be a pacing of death or form of 'life-ending', not just at the level of the individual, but for entire Indigenous communities and nations.(117) As Springer (2012) argues: "When we bear witness to violence, what we are seeing is not a 'thing', but a moment with a past, present and future." For Indigenous women in our study, consequences of this violence are evident in widespread displacement both leading up to, as well as following events of separation, where they faced a far higher frequency of homelessness and reliance on street-based economies. Notably, these different dimensions of displacement also have a unique ontology for Indigenous peoples, recently conceptualized by Thistle's (2017) definition of 'Indigenous homelessness'.(181) Unlike colonial definitions of homelessness, which define a lack of a structure of habitation, Thistle (2017) recognizes the plight of Indigenous homelessness through a composite lens of Indigenous worldviews, defining its dimensions as including losses of relationships to land,

water, place, family, kin, animals, cultures, languages, and identities. Through this lens, the challenges of locating home and the multiple forms of dispossession enacted by removing Indigenous children from their mothers are more clearly elucidated, providing a clear policy directive for Indigenous-led initiatives to redress the harms of these practices and improve the futures of Indigenous families.

Limitations

While our research presents some of the first evidence examining the health impacts of child custody loss among sex workers, findings should be considered in light of study limitations. The accounts of child custody loss shared by participants in this study represent experiences of street-involved sex workers living in poverty, and therefore do not capture the experiences of sex workers in other segments of the sex industry. We also acknowledge that the majority of mothers in our sample did not regain custody of children following custody loss, and therefore it is likely that findings on women's health experiences would differ in a sample of mothers who successfully regained custody of their children.

Conclusion

Our study advances understanding of child custody loss to the child protection system as a rapidly life-changing and complex event, leading to a cascade of negative health consequences for sex workers that were sustained over time. Beyond direct causation of mental distress and related poor health, this form of loss further altered women's social conditions, leading to an accumulation of socioeconomic disadvantage that was difficult to recover from and had far reaching implications for women's health. Our findings also bring attention to child custody loss through this system as a potential structural mechanism of health and social inequalities, and future research is needed to expand this emphasis, and provide a more complete understanding of

mechanisms and consequences.

Finally, in terms of policy implications, our conclusion that child custody loss was severely consequential for sex workers' health highlights the need for tailored services for this population, including family support and preservation services, and in cases of removal, post-removal health, legal, and social supports. The unique historical and ongoing disadvantages faced by Indigenous sex workers in our study further highlight the need to challenge colonial relations, and ensure development of Indigenous and sex worker-led services to support families in ways that center reproductive justice, land defense, and Indigenous sovereignty, including culturally safe birthing services and family-centered housing.(182,183)

CHAPTER 5: CONCLUSIONS AND IMPLICATIONS FOR PUBLIC HEALTH

In this concluding chapter, I discuss the relevance of this dissertation. I begin by reviewing the key knowledge gap that motivated my research questions. Next, I summarize main findings from analyses, as well as provide an overview of directions for future research and policy/intervention development.

Family separation and maternal health

The US and Canada are among a handful of jurisdictions in the world with the highest rates of children residing in out of home placement through foster care or adoption.(3) As an exceptionally powerful form of state intervention, events of family separation through this system are also unequally distributed, disproportionately impacting poor, Black and Indigenous populations.(4,5,155,184) To date, research on the health consequences to families involved in this system generally falls into two categories. The first category, receiving the most empirical attention, has focused on the impacts of child maltreatment, establishing several pathways to deleterious health, of which the overwhelming majority stem from child neglect, a key corollary of family poverty.(2,3,185) The second category, a more limited literature, has focused on health outcomes of children placed out-of-home, with some study results reporting health benefits,(85,86) and a greater proportion pointing to health harms.(10,11,88) While taken together, this body of research has informed policy aimed at protecting and supporting disadvantaged children, it has largely overlooked the health of a key population who play a critical role in supporting the long-term health of children: children's parents.(12,186) Birth

parents and particularly mothers, who are frequently primary caregivers to children at the time of their removal, are most often from populations cited in public health literature as structurally vulnerable to poor health prior to losing their children.(13–15)

Among structurally disadvantaged populations of longstanding interest to public health, women who do sex work and their families experience high levels of intervention by the child protection system, largely influenced by the ways that poverty, racism, colonialism, the sex work legal environment, and stigma intersect in their lives.(19–26) In these contexts, mothers can face formidable fear of losing custody of their children and studies reveal a high prevalence of mother-child separation in this population. To date, despite evidence of the child protection system’s dominant presence in the lives of sex workers, empirical insights into its impacts on their health has received little attention. (20,22–25,83) To this extent, a more systematic understanding of how and through what mechanisms child custody loss exerts influence on sex workers’ health is warranted.

Overview of findings

To address this knowledge gap, the purpose of this dissertation was to elucidate the role of child custody loss to child protective services in shaping health and wellbeing among women sex workers in a prospective cohort study of sex workers’ in Vancouver, Canada

The first paper (**Chapter 3**) examined the relationship between prior events of involuntary child removal and women’s subjective wellbeing. Life course theory was particularly well-suited here in conceptualizing women’s experiences of child removal as a unique type of adversity, triggering a proliferation of stress (129) and a potential pathophysiological process of ‘weathering’, that are both evident in poorer health.(134,187) This paper investigated the link between child removal and repeated measures of self-rated health, including a comparison of

health status between women with first-generation and second-generation involvement with this system. Two health patterns emerged from this analysis – first, historical child removal was associated with trajectories of poorer health in study follow up. Second, health was found to be further impaired when family separation spanned two generations; a ‘dual jeopardy’ that disproportionately affected Indigenous women in our sample. Findings corroborated life course theory predictions, including providing some evidence that child removal among women who were themselves removed from their parents in the developmentally sensitive period of early life, may reactivate and exacerbate stress proliferation, potentially adding to their health disadvantage over the life course.

The second paper (**Chapter 4**) was a qualitative examination of how experiences of child custody loss impacted the health and lives of sex workers. Since a majority of participants were Indigenous women and facing historic and ongoing colonial oppression of their families, postcolonial theory was drawn on here to more carefully examine how colonialism operated in Indigenous women’s past/present-day health experiences. Results showed events of child custody loss to be rapidly life-changing events leading to a cascade of negative health consequences for women. Three interconnected trajectories emerged as key paths for how this form of loss negatively affected health. First, losses of children were described as an acute and sustained source of mental distress, articulated as traumatic by some, that was registered in trauma-related anxiety and grief, as well as increased drug/alcohol use, weight loss, insomnia, and suicidality. Second, women faced increased poverty following losses that was more severe among Indigenous women, and included the onset of homelessness and increased street-involvement, interpreted as key additional factors for how health was affected during this period. Third, women were socially displaced and vastly unsupported in the aftermath of losing their

children, which undermined access to social relationships as additional resources for health. Lastly, women enacted several strategies to care for themselves and maintain connections with their children, which were critical to regenerating wellbeing. Study findings highlight the primary mechanisms of mental distress, increasing poverty, and social displacement as key factors for how health was negatively affected during this period. Together, they emphasize the importance of moving beyond a mental health/trauma narrative to consider how losses of children to the child protection system also affect the social fabric of women's lives.

This dissertation advances understanding of how events of child custody loss to the child protection system negatively impact the health of birth mothers. Findings show that these losses are associated with worse subjective wellbeing among sex workers, demonstrated in **Chapter 3**, and with a broader cascade of negative health and social consequences, shown in **Chapter 4**. As an institution that disproportionately intervenes upon Indigenous families more than any other racial-ethnic group in North America, our findings also link experiences of child removal by this system to a perpetuation of the colonial structure, with markedly more adverse outcomes observed among Indigenous women. For example, in our sample Indigenous sex workers were twice as likely to have experienced child removal, compared to non-Indigenous women, and were more than three times as likely to have experienced family separation spanning two generations (Table 1). The 'double jeopardy' of intergenerational family separation was also shown to be associated with the worst health (Table 3).

Taken as a whole, this dissertation positions child custody loss as an immense structural-level stress exposure resulting in severe mental distress and related health sequelae, while also increasing women's poverty and social displacement, which were key additional mechanisms for how health was negatively affected during this period. These findings reveal that family

separation through the child protection system has consequences for the health of women sex workers that include and go beyond the single causative mechanism of mental distress/trauma and related poor health to further alter women's social conditions. Insights thus point to the potential underrecognized role of this form of intervention as a mechanism of stratification of marginalized mothers. By bringing attention to how social and health inequalities may be both causes and consequences of encounters with this system, findings reinforce the complexity of this unique burden in women's lives, and the need for family support policies and intervention initiatives that are designed to respond to women's multifaceted needs and realities.

Research, policy and intervention implications of key findings

A primary contribution of this dissertation is that it encourages academic and policy audiences to think differently about the role of family separation through the child protection system in shaping the lives and health of marginalized women. In moving toward a more complete understanding of how and to what extent the child protection system is consequential for the health of parents and their children, I put forward several ideas below to guide future research and policy/intervention development.

Future research directions

While life course theory and intersectional and postcolonial frameworks are particularly well-suited for explaining some of the health implications and historical/social bases on which families encounter and are intervened upon by this system, greater integration of other theoretical and conceptual approaches is also warranted to guide future research in this field.

One fruitful avenue is to position a family's child protection history as a structural determinant of health, which alongside other historical, social, and economic factors, is shown in this dissertation and elsewhere (10,11,188) to influence health and access to health resources. In

prioritizing this conceptual approach, researchers working with marginalized populations should more adequately account for the unique role that an individual's history with the child protection system, both within and across generations, may have on their current health status. For quantitative health researchers wishing to pursue inquiry of this type, there should also be attention to identification and measurement of different levels of factors (structural-level, group-level, individual-level) that may be affected by a family's child protection system history, including examination of intersectional effects at each one these levels, and careful discernment of what factors may be confounders or mediators on the health pathway.

Another promising direction introduced by Broadhurst and Mason (2017) seeks to bring attention to the need for a more complete understanding of the collateral consequences of court-ordered family separation on birth parents.(18) Following in the footsteps of literature on parental incarceration, which similarly to the child protection system, is more commonly encountered by poor and racially/ethnically marginalized parents, this approach aims to help researchers think more expansively about the range of informal/formal penalties to parents following removal of their children, including attention to health impacts and changes to parents' social and economic status (e.g, employment, social network, etc.). More broadly, this approach also supports research inquiry into community-level consequences of child protection interventions, such as the impacts that spatial concentration of these interventions may have on group-level indicators of health in Black and Indigenous neighborhoods, including levels of community mistrust, collective efficacy, social cohesion, and barriers to social and health services.(189)

Reproductive Justice (RJ) is another key conceptual orientation for research seeking to improve the health and wellness outcomes for mothers who are sex workers and marginalized

mothers broadly. RJ, a term and wealth of conceptual and practical ideas developed by feminists of color, articulates a rights-based paradigm that strives to implement optimal conditions of justice where all people have equal freedom to have a child, not have a child, and further, to parent one's children with dignity.(190) This approach is of particular importance to marginalized mothers who face systemic barriers to realizing their full reproductive rights. Taking an RJ approach in health research with sex workers thus necessitates an explicit focus on sex worker-led solutions to addressing structural barriers shaping their reproductive rights and parenting experiences, including poverty, stigma, discriminatory laws, race, and gender.(191) For Indigenous women, whose experiences are also central in this dissertation, further attention to Indigenous RJ frameworks is important in promoting Indigenous-led research on the barriers to full reproductive rights of Indigenous peoples that incorporates a conceptualization of “issues of land and body as intimately connected (p.8)”(169) and focuses on community defined solutions to that are based in Indigenous resurgence,(192) self-determination, and sustainable and culturally-safe pathways forward.(169)

Policy and intervention implications

While in the discussion sections of **Chapter 3** and **Chapter 4** I have provided some recommendations for interventions based on study findings, my overall dissertation findings also provide empirical support for policy and program intervention that push for investment in resources to support the wellbeing of sex workers and their families and marginalized families, broadly.

First and foremost, there is a need for low-barrier family support programs for marginalized women, which involved women sex workers and women who use drugs in all stages of development, implementation, and evaluation. These programs should be premised on

non-judgmental approaches that confront the conditions of poverty, racism, violence, and gender discrimination, which can negatively impact parenting and drug use practices among street-involved women. Needed approaches include support of livable incomes for families and strengths-based, non-punitive initiatives that promote positive pregnancy and parenting experiences, such as North America's first harm reduction hospital-based maternity program, Fir Square, and other harm reduction programs for women and children focused on supporting families, including needs around withdrawing from or stabilizing drug use, and provisions of social, economic, and housing resources.(163,193,194) Additionally, in shifting the balance to intensive family support and preservation services, multiple other strategies are needed, including mobile and home visiting programs with peer-support components to ensure accessibility and flexible service delivery models.(195) Further strategies needed include high quality legal support and accessible 24-hour child care options for mothers who are working at night, as well as low-barrier, drop-in programs focused on meeting all types of family support needs.(196) As children are often viewed as motivating forces to abstain from drugs and alcohol, interventions are also needed to provide accessible and diverse models of women-centered and child-friendly drug treatment and detoxification.(197) Significantly, support for socio-legal frameworks of sex work decriminalization also represent a critical policy direction and key preventative measure for helping to keep families together, and is the sole approach shown empirically (in the case of New Zealand) to promote human rights, wellbeing, and social justice for this sector of the population.(50–53)

Second, in response to the rate of family separation among Indigenous peoples being at an all-time high in Canada (168) and the historic and ongoing disadvantages facing Indigenous families, there is also an urgent need to support decolonizing strategies that reverse longstanding

inequities in housing, food, water, income, and educational and health services in this population.(118) This includes supporting development of Indigenous and sex worker-led services that center Indigenous knowledge and perspectives on the interconnectedness between issues of reproductive justice, culture, land defense, and Indigenous sovereignty.(169) Australia’s Stronger Families Program, which began in 2013 and supports Indigenous families in Brisbane to keep children safely at home, is one promising public health intervention model showing positive results, including a 100% reduction in child removals over the first 2 years of the program’s operation.(198) Described as taking a social determinants of health approach to child protection, this intervention includes multi-disciplinary family care teams that enable comprehensive, culturally safe, and flexible services to Indigenous families focused on early intervention to promote family wellbeing. In Canada, to help reverse the crisis of Indigenous children in foster care, a core concern is also the full implementation of Jordan’s Principle, a federal court order meant to ensure equitable funding for child and family services on reserves.(199) This order has only been narrowly and inconsistently applied, despite its critical role as a funding mechanism to support children’s rights to remain in their families and to address the root causes of displacement.

Third, our findings support calls for initiatives that address mechanisms of social and economic exclusion and the full range of consequences facing birth parents in the aftermath of child placement.(17,98) This includes broadening the scope of family services from being primarily focused on children to create additional new services and resources for parents, including provisions for housing and economic resources to minimize the additional negative impacts of child placement on parents’ living conditions.(17,200) The “two generation”(201) approach to service and policy design, whereby parents and children simultaneously receive

responsive support services, could have positive synergistic effects on improving parent wellbeing and family reunification outcomes. Coupled with these new directions, consideration and funding of peer-led initiatives to respond to birth mothers' mental distress and needs in the aftermath of separation are also essential, both in mitigating isolation and navigating the system, as well as resisting stigma and fostering social solidarity among mothers affected by this system.(202) Further, for Indigenous mothers, Indigenous-led approaches focused on relationships to culture, place, land, and kin are also potentially important starting points for women and their children to restore wellbeing during this period.(151,203,204)

Finally, in response to mixed evidence on the child protection system's effects on children's health, as well as emergent research showing health harms to mothers, there is a renewed imperative to rethink the system's response to marginalized families and its dominant paradigm that often confuses family poverty with child neglect. To this extent, influential stakeholders from the public health sector are well positioned to come forward in support of non-punitive approaches that prioritize intensive investment in family preservation and community building as the bases for keeping children safe. This includes paving a way forward that comes to terms with past institutional injustices encountered through this system, addresses current social and economic impediments to family wellbeing, and ultimately, actualizes transformation of this system into a new form that truly supports families and works unrelentingly to keep them together.(200,205)

APPENDIX A: CHILD PROTECTION SYSTEM HISTORIES - AESHA COHORT

Table 4: Child protection system histories, stratified by Indigenous Identity, among women sex workers, AESHA Cohort Study 2010-2015, Vancouver, Canada.

	n (%) n=466	Missing n(%)	Indigenous Identity	
			Yes, n (%) n=180	No, n(%) n=286
Child protection system history				
Involuntary child removal			105 (60.7)	75 (41.7)
0 children removed	286 (61.4)	8 (1.7)	68 (39.3)	218 (74.4)
1 child removed	74 (15.9)		31 (17.9)	43 (14.7)
2 children removed	42 (9.0)		27 (15.6)	15 (5.1)
3+ children removed	56 (12.0)		42 (24.3)	14 (4.8)
0 event of removal	286 (61.4)	3 (0.6)	68 (39.3)	218 (74.4)
1 event of removal	97 (20.8)		47 (27.2)	50 (17.1)
2 events of removal	41 (8.8)		26 (15.0)	15 (5.1)
3+ events of removal	39 (8.4)		30 (17.3)	9 (3.1)
Childhood history of removal from parents	147 (31.6)	14 (3.0)	93 (53.8)	54 (18.4)
Familial attendance in Residential School System	110 (23.6)	37 (7.9)	104(60.1)	6 (2.1)
Involuntary removal + Childhood history of removal	92 (19.7)	14 (3.0)	60 (34.7)	32 (10.9)
Involuntary child removal + Childhood History of removal + Familial attendance at residential school	45 (9.7)	42 (9.0)	44 (25.4)	1 (0.3)

APPENDIX B: CHILD CAREGIVING ARRANGEMENTS - AESHA COHORT

Table 5: Child caregiving arrangements, stratified by Indigenous Identity, AESHA Cohort Study 2010-2015, Vancouver, Canada.

	n (%) n=964	Indigenous Identity	
		Yes, n (%) n=481	No, n(%) n=483
Location of child(ren) at baseline			
Residing with mother	119 (12.3)	14 (2.9)	105 (21.7)
Residing with family members	365 (37.9)	198 (40.1)	162 (33.5)
Residing in foster care	38 (3.9)	30 (6.2)	8 (1.7)
Residing in adoptive family	99 (10.3)	55 (11.4)	44 (9.1)
Grown up/living alone	277 (28.7)	147 (30.6)	127 (26.3)
Deceased	13 (1.4)	6 (0.01)	7 (1.5)
Other	56 (5.8)	31 (6.4)	25 (5.2)

**APPENDIX C: CHARACTERISTICS OF MOTHERS OF CHILDREN CURRENTLY
ADOPTED OR IN FOSTER CARE – AESHA COHORT**

Table 6: Child protection histories of mothers with children currently adopted or in foster care, AESHA Cohort Study 2010-2015, Vancouver, Canada.

	Children currently in foster care Yes, n (%) n=38	Children currently adopted No, n(%) n=99
Race/ethnicity and child protection histories of mothers		
Indigenous identity		
Involuntary child removal	30 (79.0)	55(55.6)
Childhood history of removal	21 (56.8)	37 (37.4)
Involuntary removal & Childhood history of removal	16 (42.1)	29 (29.2)
Involuntary removal & Childhood history of removal & attendance at Residential School	16 (42.1)	21 (21.2)
White or visible minority		
Involuntary child removal	6 (15.8)	30 (30.3)
Childhood history of removal	3 (7.9)	32 (32.3)
Involuntary removal & Childhood history of removal	3 (7.9)	25 (25.3)

APPENDIX D: SENSITIVITY ANALYSES WITH IMPUTATIONS FOR CHILDHOOD TRAUMA – AESHA COHORT

Table 7: Comparison of odds ratios (OR) of final model of involuntary child removal on current poor/fair self-rated health to different models with imputed values for childhood trauma, AESHA Cohort Study, 2010-2015.

	Final Model		Model 1		Model 2		Model 3	
	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Involuntary child removal								
No	1.00	ref.	1.00	ref.	1.00	ref.	1.00	ref.
Yes	1.50	1.04, 2.16	1.49	1.05, 2.10	1.52	1.07, 2.16	1.50	1.06, 2.12

Adjusted final model with childhood trauma with missing value (10%).

Adjusted model 1 with childhood trauma with median imputed for missing values.

Adjusted model 2 with childhood trauma with highest score imputed for missing values.

Adjusted model 3 with childhood trauma with lowest score imputed for missing values.

All models use Proc Genmod with logit-link.

**APPENDIX E: SENSITIVITY ANALYSES WITH EXPOSURE OF CHILD REMOVAL –
AESHA COHORT**

Table 8: Sensitivity analyses of odds ratios (OR) of involuntary child removal on current poor/fair self-rated health, testing the role of the exposure per child removal and per number of removals. AESHA Cohort Study, 2010-2015.

	Unadjusted Models	
	OR	95% CI
Number of children removed		
0 children (ref.)	1.00	ref.
1 children	2.65	1.79, 3.91
2 children	1.81	1.19, 2.74
3+ children	1.58	1.03, 2.42
Number of removals		
0 event (ref.)	1.00	ref.
1 event	2.26	1.57, 3.26
2 events	1.70	1.05, 2.76
3+ events	1.64	1.01, 2.67

Note: Both models use Proc Genmod with a logit-link.

APPENDIX F: MODEL OF INTERSECTION OF INDIGENOUS IDENTITY AND INVOLUNTARY CHILD REMOVAL – AESHA COHORT

Table 9: Unadjusted odds ratios (OR) for effect of intersection of Indigenous identity and involuntary child removal on current poor/fair self-rated health among women sex workers, AESHA Cohort Study, 2010-2015

	n	OR[†]	95% CI
White or visible minority			
No involuntary child removal	218	1	ref.
Involuntary child removal	75	2.64	1.70, 4.08
Indigenous identity			
No involuntary child removal	68	1.99	1.27, 3.10
Involuntary child removal	105	2.31	1.58, 3.36

Unadjusted model

Note: Model uses Proc Genmod with a logit-link.

**APPENDIX G: BIVARIABLE ASSOCIATIONS OF CONFOUNDERS WITH
OUTCOME OF POOR/FAIR SELF-RATED HEALTH – AESHA COHORT**

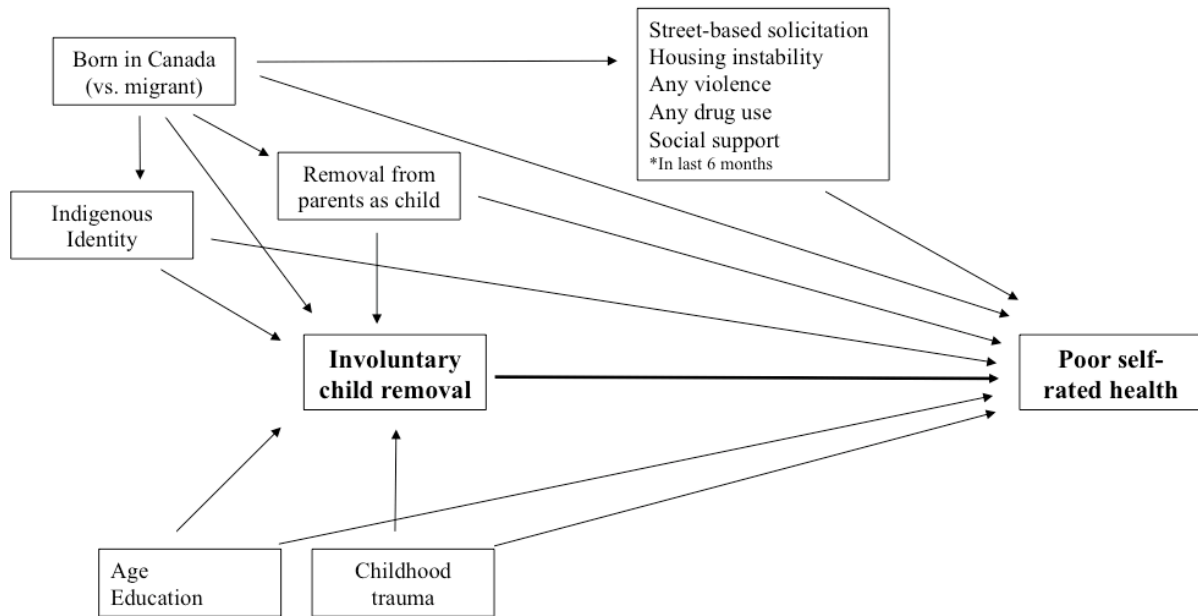
Table 10: Odds ratios (OR) for bivariable associations of confounders with outcome of poor/fair self-rated health among women sex workers, AESHA Cohort Study, 2010-2015

	Unadjusted odds (OR)	95% CI
Involuntary child removal		
No	1.00	ref.
Yes	1.50	1.04, 2.16
Age (β ,SE)	-0.0008 (0.0095)	
Indigenous		
No	1.00	ref.
Yes	1.56	1.16, 2.11
Education (less than high school)		
No	1.00	ref.
Yes	1.55	1.15, 2.10
Childhood history of removal		
No	1.00	ref.
Yes	2.00	1.47, 2.72
Childhood trauma score (β ,SE)	0.075 (0.0029)	
Physical or sexual violence [^]		
No	1.00	ref.
Yes	1.41	1.13, 1.75
Injection or non-injection drug use [^]		
No	1.00	ref.
Yes	2.19	1.63, 2.94
Housing instability [^]		
No	1.00	ref.
Yes	1.56	1.23, 1.97
Street-based sex work (vs. Indoor/off-street/no sex work) [^]		
No	1.00	ref.
Yes	1.49	1.22, 1.83
Material support from social network [^]		
No	1.00	ref.
Yes	1.02	0.86, 1.21

[^] In last 6 months

APPENDIX H: CONCEPTUAL MODEL FOR SELF-RATED HEALTH ANALYSIS

Figure 1: Simplified directed acyclic graph for relationship between involuntary removal and self-rated health.



APPENDIX I: SEMI-STRUCTURED, IN DEPTH QUALITATIVE INTERVIEW GUIDE

I'd like to start off with asking you a bit about yourself

<p>Current living/ social support</p>	<ol style="list-style-type: none"> 1. Can you tell me a bit about yourself (where were you born? Where did you grow up?, how long have you been in Vancouver?) . What is your current living situation? 2. What does sex work look like for you these days? Have there been any changes in areas you usually work or how often you work in sex work recently? 3. Who are your social supports currently in your life? How many people can you rely on for support (emotional? financial)? (probe: Family, friends, intimate partners, regulars, children, care providers)? Do you have challenges meeting your needs or those you support? (e.g. food, shelter/housing, drugs or alcohol) via sex work and/or other income? 4. Are you supporting any other members in your household? [If yes, probe for: children, partner, relatives (cousin, siblings) friends, pets) 5. How many children do you have?
--	--

I want to ask you about any experiences of discrimination as a pregnant or parenting sex worker.

<p>Stigma and Discrimination</p>	<ol style="list-style-type: none"> 1. Are there places (areas of Vancouver), people or services that you avoid/avoided when you have been pregnant or parenting a child due to fear of being judged or discriminated against? (If yes), probe: housing, health clinics, physicians, hospital/ ER, A&D counseling, child welfare workers? 2. As a pregnant/or parenting women, are there health services or where there housing supports where you feel/felt safe going to and being open about your sex work status? (If yes) probe: can you tell me what was positive about these services/programs?
---	---

	<p>3. Can you describe any direct experiences of judgment or discrimination you have encounter/encountered as a pregnant/or parenting woman in sex work:</p> <ul style="list-style-type: none"> -health care providers -Social workers -A&D counselors -legal advocates -police -Ministry/Child Welfare Authorities -housing providers? -family -neighbours -home community -clients -other (specify:) <p>If yes, can you say more about how this experience affected your health or wellbeing in any way?</p>
--	---

In the next section we'd like to learn more about your experiences of being pregnant. We will ask about supports and barriers you've encountered. We will also ask what is needed to better support women sex workers who are pregnant. We know this can be a difficult topic for women to talk about, and may be especially difficult for women who have children that are not currently living with them. By learning more about women's experiences, we hope to use this research to better meet needs of sex workers who are pregnant.

<p>Pregnancy</p>	<ol style="list-style-type: none"> 1. Could you tell me a little bit about your experiences of pregnancy? How were these experiences positive? Challenging? Were these pregnancies planned or unexpected? 2. Were there any family, friends or programs that were helpful or supportive during your pregnanc(ies)? (If yes), probe: - types of support received: child's father or partner? family support? support from chosen family/friends? health or social support, other? 3. Were you in a position to look after your health needs while pregnant? (Probe: prenatal care? Housing? Food? Transportation? Emotional support? Traditional teachings/cultural support?)
-------------------------	---

	<p>4. Were there services/programs that you needed when you were pregnant that were not available or accessible? (If yes) probe: -can you describe the barriers you faced? -can you describe what services you feel are missing for women sex workers who are pregnant?</p> <p>5. Did you face any challenges doing sex work when pregnant? Please describe. Probe: Did you ever feel like you had to hide your pregnancy? Did you experience any discrimination or violence from clients, police or others while working when you were pregnant? Did being pregnant change where and how you worked? (If yes), what was different? Did you feel safer or less safe in these working conditions?)</p> <p>6. Did you access any harm reduction and/or A&D services during your pregnancies? (If yes) probe: In what ways were these services helpful or unhelpful? Did you access services at Sheway, FirSquare, Oak Tree?</p> <p>7. Did you have any challenges in accessing safe and affordable housing while pregnant? If yes, please describe. What type(s) of housing were helpful or unhelpful as a pregnant woman? Please describe (SRO, supportive housing, women-only, shelter, family-centered, etc.). Were there features of housing that felt safe/unsafe to you as a pregnant woman? Please describe.</p> <p><i>We recognize that after babies are born, apprehensions by Ministry/Child Welfare can sometimes occur immediately at birth. The next question asks about whether you feel you parented your children. We ask this question to help us understand what questions to ask in the next sections of the interview.</i></p> <p>8. In your past experience, did you have your child(ren) in your care for either short or long-term periods? (Probe: If no, did you spend the first couple of weeks or months with your baby in the Fir Square Unit?)</p>
--	---

Note to Interviewer: Question 8 in section above is aimed at determining whether or not women had an opportunity to parent 1 or more children. If women feel they have not had the opportunity or right to parent any of their children, interviewer should: 1) not ask the parenting-related probes in the Indigenous parents section; and 2) skip the Parenting/Parenthood section of guide.

If participant did not identify as Indigenous on interview coversheet, before moving on to Parenting/Parenthood section of interview guide, please ask here if any of the participant's children are indigenous. If a child is Indigenous, ask questions #3, and #5 in section below.

If you are a women who identifies as Indigenous or have children who are Indigenous, we'd like to ask you a bit more about your specific experiences or pregnancy and (if applicable) parenting as an (Indigenous) women or parent of (Indigenous) children. We recognize that Indigenous families are separated at alarmingly high rates by Child Welfare Authorities, and that forced family separation has been occurring in some communities for hundreds of years since first contact with settlers. In this section we would also like to ask some questions about whether you have had experiences with Child Welfare Authorities.

Topic	Questions
Indigenous parents/Parents with Indigenous children	<p>1. (If woman identifies as Indigenous) What term do you prefer? (Aboriginal, Native, Indigenous, First Nations...) – use term they identify [if applicable]</p> <p>2. (If woman identifies as Indigenous) Did you experience specific barriers to accessing pregnancy supports or parenting supports as an (Indigenous) woman? Please describe.</p> <p>3. Are there any pregnancy or parenting supports and programs that you feel are particularly important for (Indigenous) women or women with (Indigenous) children? (E.g. Indigenous-focused family services family housing, access to elders, ceremonies, medicines (sweat lodges, smudging, pipe ceremonies, sharing circles etc.), ability to visit family and community, Indigenous/Indigenous women spaces?) Have you faced any barriers in accessing these types of services? Did you experience any differences between Indigenous-focused services and non-Indigenous pregnancy/parenting services you may have received?</p> <p>4. (If woman identifies as Indigenous) Can you share whether as or not as a child you were separated from your parents or siblings due to Child Welfare involvement?</p> <p>5. Did fear of Child Welfare intrusion affect your experience of pregnancy or parenting in any way? If yes, how? (Probe: Did fear affect at all how you and (if applicable) your children connected with health care, social services, cultural/traditional services, other? Please describe.</p>

In the next section we'd like to learn more about your parenting experiences. We are hoping that by learning more about women's experiences we can better advocate for programs and policies that better meet the needs of women sex workers who are parents.

<p>Parenting</p>	<p>1. Could you tell me about your experiences as a parent? Were these positive experiences? Challenging?</p> <p>2. Could you describe what supports or programs were available to you while parenting, if any? Were there any supports/services that you need/ed but do/did not have access to as a parenting woman? If yes, can you describe them?</p> <p>3. Can you say a little bit about your past experience of doing sex work while caring for children? Did parenting affect at all where and how often you were able to work? (If yes, probe: How, if at all, did method(s) of solicitation or venues/ location where you serviced clients change? Childcare? Food banks? Postnatal care? Other parenting support groups?</p> <p>4. Can you talk about whether there are advantages of doing sex work as a parent/parent as compared to other work. (If yes), probe: flexible hours? more income to provide for family? etc.)</p> <p>5. Did you have any challenges in accessing safe and affordable housing that allows children? If yes, please describe. What type(s) of housing were helpful or unhelpful as a parent? Please describe housing (SRO, supportive housing, women-only, shelter, family-centered, etc.). Were there specific features of housing that felt safe/unsafe as a parent? Please describe.</p> <p>6. Did parenting affect your alcohol/ drug use patterns or where/how/who you used with? Did you find any strategies helpful to reduce potential harms of drug use on your children? (If yes) What were these strategies? Have there been any positive impacts of drug use on your parenting? What were these? Were you able to access harm reduction-centered care for pregnant/parenting women (Sheway, Firsquare)? Were any family, friends or programs helpful to you in balancing your drug use and the caretaking of children? If yes, can you describe them? Were there any people or programs that you need/ed but do/did not have access (probe: harm reduction programs for parents? respite care for children? 24-hour affordable childcare options? etc.)</p> <p>7. [If answered described using drugs while parenting] Have you ever attempted or sought out drug or alcohol treatment as a parent? (If yes)</p>
-------------------------	--

	<p>What types? Did you seek out treatment or were you asked/mandated to attend? Were you able to bring your child/children to treatment? How were these programs helpful or unhelpful to you? Could these programs be improved to better meet the needs of women with children? How?</p> <p>8. Are/were you on an opioid-replacement therapy (methadone, suboxone, etc.) while parenting? What was unhelpful or helpful about your experience of opioid-replacement therapy while parenting?</p> <p>9. Thinking overall about past and/or current experiences as a parent, what knowledge, skill or ability has been most helpful to you as a parent? How did you acquire this? (Probe: self-taught, past down from family, parenting class, etc).</p> <p>10. Is there a moment in your role as a parent that you would like to describe that you feel particularly proud of what you were able to accomplish? [Probe: What is it about this moment that makes you proud?]</p>
--	--

The next section will focus on experiences with parent-child separation due to Child Welfare Authorities or other family arrangements. We understand that for some families, parent-child separation may be temporary until a parent regains custody, and also that a child can be separated from a parent more than one time. Through this research we hope to build understanding of women’s experiences and promote and support better pregnancy and parenting supports.

<p>Experiences of parent-child separation due to Child Welfare Authorities or other family arrangements</p>	<p>1. Can you describe what barriers you think make it challenging for women to keep children in their care? (Probe: housing, poverty, discrimination, racism, previous involvement with Child Welfare Authorities, mental health struggles, substance use, etc.)</p> <p>2. While pregnant or parenting, do/did you ever experience supervision by Child Welfare Authorities (Probe with examples: home visits by Child Welfare workers? hair testing? urine screens? supervision by family members? Other type (specify)?) (If yes), how was this helpful or unhelpful? Did it impact at all what people and programs you went to for support?</p> <p>3. Have you ever had a child(ren) removed from your custody by Child Welfare Authorities? (If yes, probe: did this happen more than one</p>
--	---

	<p>time?) Have/has your child(ren) ever been placed with family or home community (If yes), can you describe how this arrangement was/is helpful or unhelpful?</p> <p>4. Can you describe a little bit about what was going on in your life around the time(s) that you experienced separation from your child(ren)? (Probe: did you have safe place to live, access to harm reduction for parents (Sheway, Fir Square)? was there partner or family support? partner violence? financial stresses? Other?)</p> <p>5. (If child ever removed by Child Welfare Authorities) Can you share what reason(s) Child Welfare Authorities gave for removing your child(ren) from your care? Did Authorities know about sex work and if yes, how was this information shared with them? Was sex work given as a reason for removing child(ren)? Was sex work given as a reason for not returning child(ren) to your care? Was substance use used as a reason? What efforts, if any, were made by Child Welfare Authorities to put your child(ren) in the care of family members or your home community following separation?</p> <p>6. (If child(ren) ever removed by or placed with family/home community). Was sex work given as a reason for separating child(ren) from you? Was sex work given as a reason for not returning child(ren) to your care? Was substance use used as a reason?</p> <p>7. If desired, were you able to attend visits with child(ren) following separation? (If yes, probe: what was helpful and what was unhelpful about visits? (If no, probe: what were barriers to visiting with children (child adopted with no access, money, transportation, health issues, grief/stress of visits, supervision at visits).</p> <p><i>Now I'm going to ask some questions about how experiences parent-child separation may have affected your health and wellbeing. Because being separated from your own siblings or parents in your childhood may also affect this experience, I'm going to ask a question about this as well.</i></p> <p>8. As a child, were you separated from your parents or siblings due to Child Welfare involvement? (If yes) probe: Did this history affect your</p>
--	--

experience of living through the aftermath(s) of separation from your child(ren)?

Note to Interviewer: Question below is VISUAL QUESTION #1, please refer to appendix with visual prompts and instructions.

9. How is/was your health and wellbeing after becoming separated from your child? Your physical health? emotional health? mental health? overall well-being? (Probe: How, if at all, does it affect how you take care of yourself and your health?) Do you struggle with any anxiety, depression, suicidal tendencies, or other mental health issues as a result of separation from your child? What about your physical health? Sleeping? Eating?

10. Can you describe if there were any people or services available to support you after you were separated from your child(ren)? (If yes, probe: Legal advice, family/friends, professionals, etc)? Please describe types of support (help with grief, assist with family reunification, financial help, food, shelter, traditional healing/cultural support, other?) What people or programs were/are needed that you did not have access to following separation from your child(ren)?

11. Did the experience of living through separation from your child(ren) affect your use of drugs or alcohol (for example bingeing or more risky use)? What about sexual risks (e.g. condom use, choice of partners, clients) Please describe.

Note to Interviewer: Question below is VISUAL QUESTION #2, please refer to appendix with visual prompts and instructions.

12. How does the separation from your child affect your relationships with others?

Probe:

-family and home community -friends-medical and health care providers-intimate partners- Child Welfare Authorities

-social service providers

-other-please specify

13. Do you feel differently about the experience of separation from your child now than you did earlier? In what ways is it different or the same as when it first happened (probe: has there been healing? have feelings

	<p>changed or are they unchanged?) Are there services or programs that you need at the present time but do not have access to? What are these?</p> <p>14. Have you experienced judgment as a result of being a woman who is/was living separately from her child(ren)? (If yes, probe: From who or where does this judgment/discrimination come from? Has this judgment/discrimination affected you or your family’s health or wellbeing in any way?</p> <p>15. Have you have been reunited or are you working toward reunification with any child(ren)? (If yes) probe: Are there any steps for reunification that you had/have to meet? Have any people or programs or strategies been helpful with reunification or healing relationships with your child(ren)? Are there any services that you need/ed but do/did not have access that would help? What are these?) (If no) probe: Has there been anything that you do or have told yourself that has been helpful in the time apart from your child(ren)?</p> <p>16. Thinking about the experience of separation from your child(ren), is there a name you would give to a strength that has helped you cope or “get through” this time? Is there a story you can tell me that would help me understand better how you came to acquire this strength?</p> <p>17. What support or advice would you give a woman in your community who has just recently lost custody of her child?</p>
--	--

Thank you for your time and for sharing you story so far. Before we finish, we have some final questions:

Topic	Questions
Final thoughts	<p>1. Are there any other changes/programs/policies you would like to see for sex working parents?</p> <p>2. Is there any specific support or advice you would give to sex workers who are pregnant or parenting?</p> <p>3. Is there anything else you would like to share with us?</p>

Thank you so much for sharing your experiences with us today.

APPENDIX J: VISUAL QUESTIONS IN QUALITATIVE INTERVIEW GUIDE

Figure 2: Visual question prompt 1 in qualitative interview guide.

Instructions for visual question 1: Using the diagram as a visual aid, please describe if and how different dimensions of your health and wellbeing (i.e., spiritual, social, mental, emotional, physical or cultural health) may have been affected after becoming separated from your child(ren). Describe the intensity of possible health effects by pointing to the inner areas of the circle for lower intensity effects and outer areas for high intensities effects.

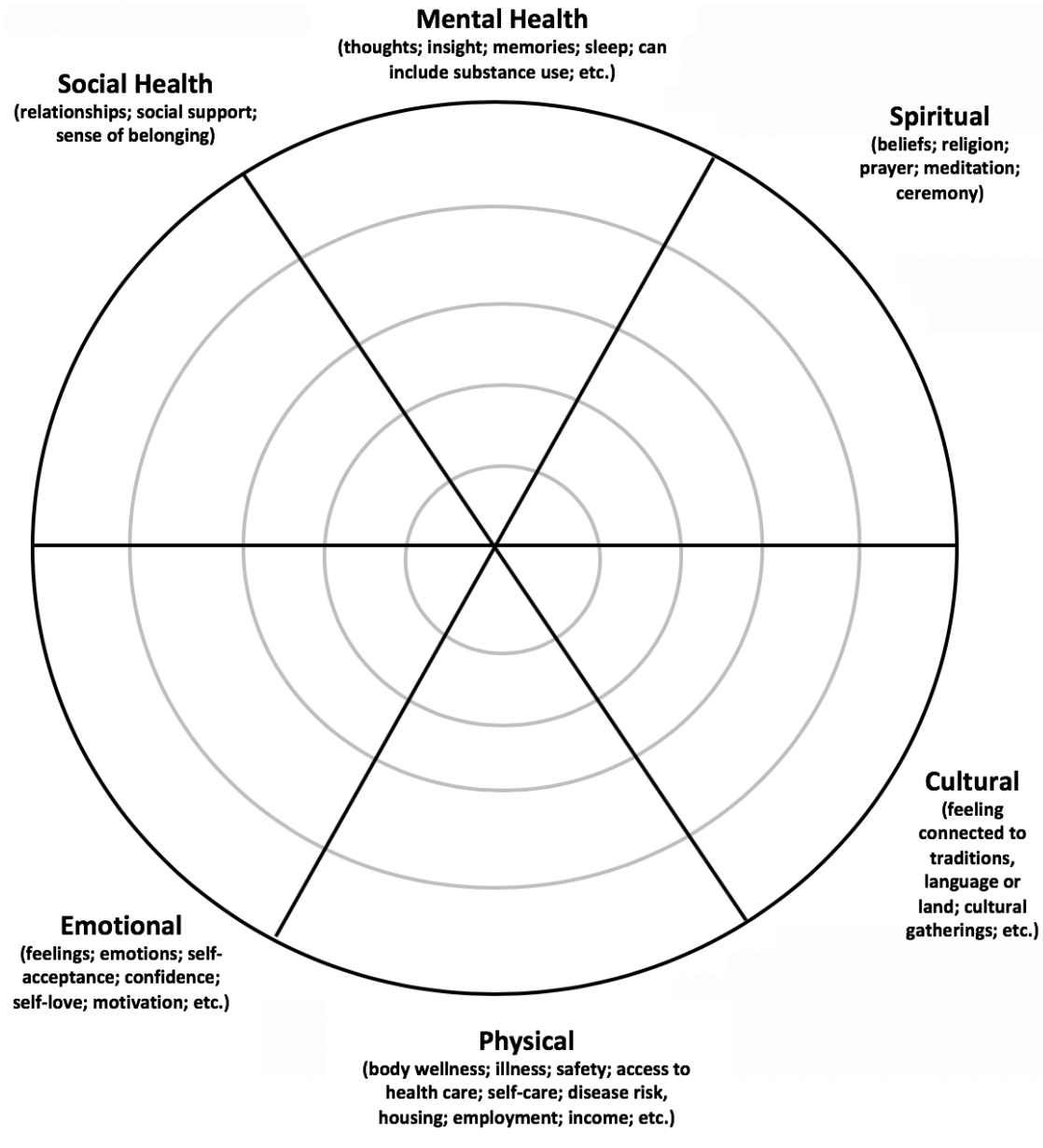
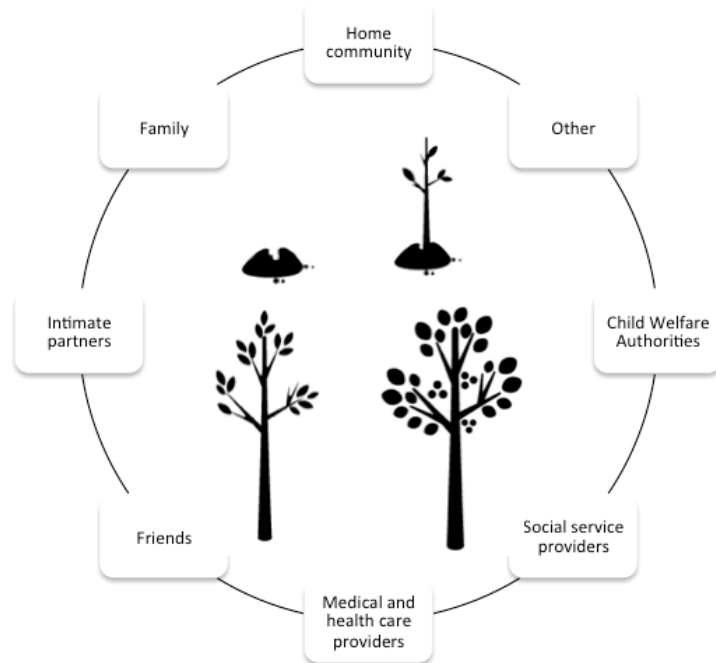


Figure 3: Visual question prompt 2 in qualitative interview guide.

How does the separation from your child affect your relationships with others?



Instructions for visual question 2: Using the diagram as a visual aid, describe if and how separation from your child (ren) affects your relationships with family, friends, intimate partners, family, Child Welfare Authorities, etc. Use the symbol of the tree to describe the quality of of social relationships (larger tree = healthier, more positive relationship).

**APPENDIX K: SOCIO-DEMOGRAPHIC CHARACTERISTICS FOR QUALITATIVE
SAMPLE**

Table 11: Socio-demographic characteristics for qualitative interview sample.

	Total sample n=31, n(%)
Age (median, range)	47 (27-56)
Race/ethnicity	
Indigenous identity	19 (61.3)
White	12 (38.7)
Born in Canada (vs. immigrant)	31 (100)
Childhood history of removal from parents	13 (41.9)
Housing status	
Supportive housing	11 (35.5)
Social housing	6 (19.4)
Homeless/staying in shelter	3 (9.7)
Single room occupancy hotel	5 (16.1)
Private house/apartment	5 (16.1)
Halfway house	1 (3.2.)
Currently working as sex worker	17 (54.8)

APPENDIX L: BROAD CODES FOR QUALITATIVE ANALYSIS

Category: Current life circumstances

Current_living_environments

- Descriptions of where participants live
- Advantages/disadvantages of current living environment
- Narratives about stressful living conditions

Current_sex_work

- Descriptions of soliciting and doing dates

Current_social_supports

- Descriptions of social supports
- Feeling connected to community
- Current relationships with family

Category: Stigma

Druguse_Pregnancy_Parenting_Stigma:

- Where stereotypes come from
- Fear of disclosure of sex work status as pregnant/parenting woman
- Changes to relationships with service providers
- Changes to relationships with relationships with family/friend
- Shame and secrecy
- Narratives of health experiences related to drug use stigma

Sexwork_Pregnancy_Parenting_Stigma:

- Where stereotypes come from
- Fear of disclosure of drug use status as pregnant/parenting woman
- Changes to relationships with relationships with service providers
- Changes to relationships with relationships with family/friends
- Shame and secrecy
- Narratives of health experiences related to sex work stigma

Category: Pregnancy

General_pregnancy:

- Narrative about health/social services accessed/not accessed while pregnant
- Housing status while pregnant
- Food security
- Social supports while pregnant
- Physical and mental health status while pregnant
- Incarceration during pregnancy
- Meeting of basic needs

- Narratives about pregnancy experiences at Fir Square, Oak Tree, Sheway
- Physical, sexual, verbal and psychological intimate partner violence while pregnant
- Ideas for systemic changes to better support pregnant women
- Service and support needs currently lacking for pregnant women

Pregnancy_sex_work:

- Narrative about sex work while pregnant
- Narratives of sex work safety/unsafety while pregnant
- Secrecy and fear
- Barriers/opportunities of sex work during pregnancy

Pregnancy_drug_use

- Experiences of drug use while pregnant
- Opiate replacement therapy while pregnant
- Narratives about detox and treatment facilities drug treatment while pregnant
- Harm reduction strategies during pregnancy

CPS_pregnancy:

- Narratives of interactions with CPS/Ministry while pregnant
- Secrecy of pregnancy due to fear CPS/Ministry
- Concerns or anxiety about unborn child due to fear or presence of CPS/Ministry
- CPS/Ministry as barrier to prenatal care
- Narratives of institution coercion while pregnant
- Narratives about monitoring, surveillance and over-surveillance

Category: Parenting

General_parenting:

- Narratives about parenting, motherhood and mothering
- Narratives about trying to make ends meet, poverty, inadequate welfare rates, etc.
- Narrative about health/social services accessed/not accessed while parenting
- Housing status while parenting
- Social supports while parenting
- Physical and mental health status while parenting
- Incarceration while parenting
- Meeting of basic needs while parenting
- Physical, sexual, verbal and psychological intimate partner violence while parenting
- Ideas for systemic changes to better support parenting women
- Service and support needs currently lacking for parenting women
- Narrative about parenting experiences at Fir Square, Oak Tree, Sheway

Parenting_sexwork:

- Narrative about sex work while parenting
- Narratives of sex work safety/unsafety while parenting
- Secrecy and fear
- Barriers/opportunities of sex work while parenting

Parenting_druguse

- Experiences of drug use while parenting
- Opiate replacement therapy while parenting
- Narratives about detox and treatment facilities drug treatment while parenting
- Harm reduction strategies while parenting
- Positives of drug use while parenting

Category: CPS interactions**CPS_parenting**

- Narratives of interactions with CPS/Ministry while parenting
- Fear of CPS/Ministry
- Concerns or anxiety about children due to fear or presence of CPS/Ministry
- Narratives about experiences with social services referred to or mandated by CPS
- Narratives about monitoring, surveillance and over-surveillance
- Suggestions for services or supports for parents involved with CPS
- Suggestions for services or supports for parents living apart from children
- Suggestions for services or supports for parents regaining custody of children

CPS_apprehension

- Events of child apprehension
- Supports to mother offered/not offered during event
- Narratives of reason(s) for CPS involvement

Intersecting_oppressions_CPS

- Narratives about sexism, racism, ableism, ageism, classism, as barriers with CPS

Category: Children**Children_living_apart**

- Narratives about access to children in foster care or other out-of-home arrangement
- The place and meaning of these children in their life
- Memorial object to remember child
- Plans for future relationship with child
- Barriers to relationship with child

Children_living_with

- Narratives about regaining custody
- The place and meaning of these children in their life

Category: Indigenous women & child protection system

Indigenous_family_separation

- Narratives of multiple losses (historic displacement, geographic separation, spiritual disconnection; mental disruption and imbalance; and, cultural disintegration)
- Narratives of intergenerational family separation
- Narrative of impact of intergenerational separation on pregnancy/parenting practices
- Narratives of impact of intergenerational separation on CPS interactions

Indigenous_services

- Narratives about advantages/disadvantages of Indigenous-specific services
- Desires or needs for more culturally-safe services
- Engagement in culturally-based wellness practices
- Disinterest in Indigenous identity or Indigenous services
- Place of culture and ceremony
- Narratives about lack of access to services

Category: Parent-child separation

Post_Apprehension_health_safety

- Narratives of drug use safety in aftermath of separation from child
- Narratives of sex work safety in aftermath of separation from child
- Narratives about experiences with health and social services
- Physical health experiences after separation
- Mental health experiences after separation
- Emotional health experiences after separation
- Spiritual health experiences after separation
- Connection to community
- Narrative of 'trauma' of apprehension
- Violence in aftermath of separation
- Housing precarity after separation
- Institutional interactions after separation (e.g., incarceration)

Post_apprehension_support_isolation

- Narratives of experiences with legal services
- Narratives of experiences with
- Narratives of housing experiences after separation from child
- Narratives about intimate and social relationships after separation from child
- Narratives about lack of access to services

Category: Social change

System_Change

- ideas for systemic change
- service and support needs for pregnant/parenting sex workers
- service and support needs for pregnant/parenting women who use drugs

- Narratives of proposed social reforms
- Narratives/visions of social transformation

APPENDIX M: OUPUT FROM QUALITATIVE ANALYSIS DEPICTING CASCADE OF NEGATIVE SOCIAL CONSEQUENCES FOR SEX WORKERS IN AFTERMATH OF CHILD CUSTODY LOSS

Figure 4: Depiction of cascade of negative social consequences for sex workers in aftermath of child custody loss.



REFERENCES

1. Pelton LH. For reasons of poverty: A critical analysis of the public child welfare system in the United States. Praeger Publishers; 1989.
2. Berger LM, Waldfogel J. Economic determinants and consequences of child maltreatment. OECD Soc Employment, Migr Work Pap. 2011;(111):0_1.
3. Gilbert R, Fluke J, O'Donnell M, Gonzalez-Izquierdo A, Brownell M, Gulliver P, et al. Child maltreatment: Variation in trends and policies in six developed countries. Vol. 379, The Lancet. 2012. p. 758–72.
4. Trocmé N, Knoke D, Blackstock C. Pathways to the overrepresentation of Aboriginal children in Canada's child welfare system. Soc Serv Rev. 2004;78(4):577–600.
5. Wildeman C, Emanuel N. Cumulative risks of foster care placement by age 18 for US children, 2000–2011. PLoS One. 2014;9(3):e92785.
6. Slack KS, Lee BJ, Berger LM. Do welfare sanctions increase child protection system involvement? A cautious answer. Soc Serv Rev. 2007;81(2):207–28.
7. Rivaux SL, James J, Wittenstrom K, Jeffries V. The Intersection of Race, Poverty, and Risk: Understanding the Decision to Provide Services to Clients and to Remove Children. 2008;151–69.
8. Wells K, Guo S. Reunification and reentry of foster children. Child Youth Serv Rev. 1999;21(4):273–94.
9. Sankaran VS, Church C. Easy Come, Easy Go: The Plight of Children Who Spend Less Than Thirty Days in Foster Care. U Pa JL Soc Chang. 2016;19:207.
10. Zlotnick C, Tam TW, Soman LA. Life course outcomes on mental and physical health: The impact of foster care on adulthood. Am J Public Health. 2012;102(3):534–40.
11. Turney K, Wildeman C. Mental and physical health of children in foster care. Pediatrics. 2016;e20161118.
12. Runyan DK. Invited Commentary: Gaze Aversion and Unnoticed Phenomena. Am J Epidemiol. 2018;kwy061.
13. Fong K. Children and Youth Services Review Child welfare involvement and contexts of poverty : The role of parental adversities , social networks , and social services. 2017;72:5–13.

14. Wells K, Marcenko MO. Introduction to the Special Issue: Mothers of children in foster care. *Child Youth Serv Rev* [Internet]. 2011;33(3):419–23. Available from: <http://dx.doi.org/10.1016/j.chilyouth.2010.06.022>
15. Marcenko MO, Hook JL, Romich JL, Lee JS. Multiple Jeopardy: Poor, Economically Disconnected, and Child Welfare Involved. *Child Maltreat*. 2012;
16. Wulczyn F, Chen L, Courtney M. Family reunification in a social structural context. *Child Youth Serv Rev*. 2011;
17. Marcenko MO, Lyons SJ, Courtney M. Mothers’ experiences, resources and needs: The context for reunification. *Child Youth Serv Rev*. 2011;
18. Broadhurst K, Mason C. Birth parents & the collateral consequences of court-ordered child removal: Towards a comprehensive framework. *Int J Law, Policy Fam*. 2017;31(1):41–59.
19. Duff P, Bingham B, Simo A, Jury D, Reading C, Shannon K. The “stolen generations” of mothers and daughters: Child apprehension and enhanced HIV vulnerabilities for sex workers of aboriginal ancestry. *PLoS One*. 2014;9(6).
20. Dodsworth J. Sex worker and mother: Managing dual and threatened identities. *Child Fam Soc Work*. 2014;19(1):99–108.
21. Hester M, Westmarland N. Tackling street prostitution: towards a holistic approach. Home Office Research, Development and Statistics Directorate; 2004.
22. McClelland GT, Newell R. A qualitative study of the experiences of mothers involved in street-based prostitution and problematic substance use. *J Res Nurs* [Internet]. 2008 Sep 1 [cited 2016 Apr 2];13(5):437–47. Available from: <http://jrn.sagepub.com/content/13/5/437.short>
23. Dewey S, Orchard T, Brown K. Shared Precarities and Maternal Subjectivities: Navigating Motherhood and Child Custody Loss Among North American Women in Street-Based Sex Work. *Ethos*. 2018;46(1):27–48.
24. Jackson L a., Bennett CG, Sowinski B a. Stress in the sex trade and beyond: Women working in the sex trade talk about the emotional stressors in their working and home lives. *Crit Public Health* [Internet]. 2007;17(3):257–71. Available from: <http://www.tandfonline.com/doi/abs/10.1080/09581590701549535>
25. Sloss CM, Harper GW, Budd KS. Street Sex Work and Mothering. *J Assoc Res Mothering* [Internet]. 2004;6(2):102–15. Available from: <http://ezproxy.library.dal.ca/login?url=http://search.proquest.com/docview/59995171?accountid=10406>

26. Dalla R. “I Fell Off [the Mothering] Track”: Barriers to “Effective Mothering” Among Prostituted Women. *Fam Relat.* 2004;53(2):190–200.
27. Sharpe TT. Sex-for-Crack-Cocaine Exchange, Poor Black Women, and Pregnancy. *Qual Health Res* [Internet]. 2001 Sep 1 [cited 2016 Apr 4];11(5):612–30. Available from: <http://qhr.sagepub.com.libproxy.lib.unc.edu/content/11/5/612.short>
28. Duff P, Shoveller J, Zhang R, Alexson D, Montaner JS, Shannon K. High Lifetime Pregnancy and Low Contraceptive Usage Among Sex Workers Who Use Drugs- An Unmet Reproductive Health Need. *BMC Pregnancy Childbirth* [Internet]. 2011;11(1):61. Available from: <http://www.biomedcentral.com/1471-2393/11/61>
29. Weiner A. Understanding the social needs of streetwalking prostitutes. *Soc Work.* 1996;41(1):97–105.
30. Dalla RL. When the Bough Breaks ... : Examining Intergenerational Parent-Child Relational Patterns Among Street-Level Sex Workers and Their Parents and Children. *Appl Dev Sci.* 2003;7(4):216–28.
31. Deering KN, Amin A, Shoveller J, Nesbitt A, Garcia-Moreno C, Duff P, et al. A systematic review of the correlates of violence against sex workers. Vol. 104, *American Journal of Public Health.* 2014.
32. Shannon K, Strathdee SA, Goldenberg SM, Duff P, Mwangi P, Rusakova M, et al. Global epidemiology of HIV among female sex workers: influence of structural determinants. *Lancet (London, England)* [Internet]. 2015 Jan 3 [cited 2016 Feb 7];385(9962):55–71. Available from: <http://europepmc.org/articles/PMC4297548/?report=abstract>
33. Beyrer C, Crago AL, Bekker LG, Butler J, Shannon K, Kerrigan D, et al. An action agenda for HIV and sex workers. *Lancet.* 2015;385(9964):287–301.
34. Lyons T, Krüsi A, Pierre L. “ It depends on how you represent yourself in public ”: Transgender sex workers ’ encounters with frontline HIV- - - related healthcare services
Conflict of Interest Disclosure I declare no conflict of interest .
35. Krüsi A, Pacey K, Bird L, Taylor C, Chettiar J, Allan S, et al. Criminalisation of clients: reproducing vulnerabilities for violence and poor health among street-based sex workers in Canada-a qualitative study. *BMJ Open* [Internet]. 2014;4(6):e005191. Available from: <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=4054637&tool=pmcentrez&rendertype=abstract>
36. Sanders T. A continuum of risk? The management of health, physical and emotional risks by female sex workers. *Sociol Health Illn* [Internet]. 2004 Jul [cited 2016 Apr 4];26(5):557–74. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/15283777>

37. der Meulen E, Durisin EM, Love V. *Selling sex: Experience, advocacy, and research on sex work in Canada*. UBC Press; 2013.
38. UNAIDS WHO. *Report on the global AIDS epidemic*. New York US UNAIDS. 2008;
39. Surratt HL, Kiley MC, Inciardi JA, Kurtz SP. Barriers to health and social services for street-based sex workers. *J Health Care Poor Underserved*. 2005;16(2):345–61.
40. Logie CH, James LI, Tharao W, Loutfy MR. HIV, gender, race, sexual orientation, and sex work: A qualitative study of intersectional stigma experienced by HIV-positive women in Ontario, Canada. *PLoS Med*. 2011;8(11).
41. Decker MR, McCauley HL, Phuengsamran D, Janyam S, Silverman JG. Sex trafficking, sexual risk, sexually transmitted infection and reproductive health among female sex workers in Thailand. *J Epidemiol Community Health* [Internet]. 2011 Apr 1 [cited 2016 Apr 4];65(4):334–9. Available from: <http://jech.bmj.com.libproxy.lib.unc.edu/content/early/2010/05/31/jech.2009.096834.full>
42. El-Bassel N, Witte S. Drug use and physical and sexual abuse of street sex workers in New York City. *Res Sex Work*. 2001;4:31–2.
43. Goldenberg SM, Strathdee SA, Gallardo M, Rhodes T, Wagner KD, Patterson TL. “Over here, it’s just drugs, women and all the madness”: The HIV risk environment of clients of female sex workers in Tijuana, Mexico. *Soc Sci Med* [Internet]. 2011;72(7):1185–92. Available from: <http://dx.doi.org/10.1016/j.socscimed.2011.02.014>
44. Simić M, Rhodes T. Violence, dignity and HIV vulnerability: street sex work in Serbia. *Sociol Health Illn* [Internet]. 2009 Jan [cited 2016 Mar 2];31(1):1–16. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/19144087>
45. Shannon K, Strathdee SA, Shoveller J, Rusch M, Kerr T, Tyndall MW. Structural and environmental barriers to condom use negotiation with clients among female sex workers: Implications for HIV-prevention strategies and policy. *Am J Public Health*. 2009;99(4):659–65.
46. Duff P, Shoveller J, Dobrer S, Ogilvie G, Montaner JSG, Chettiar J, et al. The relationship between social, policy and physical venue features and social cohesion on condom use for pregnancy prevention among sex workers: a safer indoor work environment scale. *J Epidemiol Community Health* [Internet]. 2015;1–7. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25678713>
47. Lippman SA, Donini A, Díaz J, Chinaglia M, Reingold A, Kerrigan D. Social-environmental factors and protective sexual behavior among sex workers: The Encontros intervention in Brazil. *Am J Public Health*. 2010;100(SUPPL. 1).

48. Kerrigan D, Moreno L, Rosario S, Gomez B, Jerez H, Barrington C, et al. Environmental-structural interventions to reduce HIV/STI risk among female sex workers in the Dominican Republic. *Am J Public Health* [Internet]. 2006 Jan 10 [cited 2016 Apr 3];96(1):120–5. Available from: <http://ajph.aphapublications.org/libproxy.lib.unc.edu/doi/full/10.2105/AJPH.2004.042200>
49. Organization WH, others. Prevention and treatment of HIV and other sexually transmitted infections for sex workers in low-and middle-income countries: recommendations for a public health approach. World Health Organization; 2012.
50. Armstrong L. From law enforcement to protection? Interactions between sex workers and police in a decriminalized street-based sex industry. *Br J Criminol*. 2017;57(3):570–88.
51. Fitzharris P, Hannan C, Baker D, Soeberg M, Piper S, Ritchie K, et al. Report of the prostitution law review committee on the operation of the prostitution reform act 2003. Wellingt Gov New Zeal. 2008;
52. Armstrong L. Screening clients in a decriminalised street-based sex industry: Insights into the experiences of New Zealand sex workers. *Aust N Z J Criminol*. 2014;47(2):207–22.
53. Abel G, Fitzgerald L, Healy C, Taylor A. Taking the crime out of sex work: New Zealand sex workers’ fight for decriminalisation. Policy Press; 2010.
54. UNAIDS. The gap report. Geneva: UNAIDS; 2014. 2015.
55. Krüsi A, Chettiar J, Ridgeway A, Abbott J, Strathdee S, Shannon K. Negotiating safety & sexual risk reduction with clients in unsanctioned quasi-brothels: A qualitative study. *Am J Public Health*. 2012;102(6):1154–9.
56. Lippman SA, Donini A, Díaz J, Chinaglia M, Reingold A, Kerrigan D. Social-environmental factors and protective sexual behavior among sex workers: the Encontros intervention in Brazil. *Am J Public Health* [Internet]. 2010 Apr 1 [cited 2016 Apr 14];100 Suppl:S216-23. Available from: <http://ajph.aphapublications.org/doi/abs/10.2105/ajph.2008.147462>
57. Deering KN, Amin A, Shoveller J, Nesbitt A, Garcia-Moreno C, Duff P, et al. A systematic review of the correlates of violence against sex workers. *Am J Public Health*. 2014;104(5):42–54.
58. Krüsi A, Kerr T, Taylor C, Rhodes T, Shannon K. ‘They won’t change it back in their heads that we’re trash’: the intersection of sex work-related stigma and evolving policing strategies. *Sociol Health Illn*. 2016;38(7):1137–50.
59. Surratt HL, Inciardi J a. HIV risk, seropositivity and predictors of infection among homeless and non-homeless women sex workers in Miami, Florida, USA. *AIDS Care*. 2004;16(5):594–604.

60. Reeves A, Steele S, Stuckler D, McKee M, Amato-Gauci A, Semenza JC. National sex work policy and HIV prevalence among sex workers: an ecological regression analysis of 27 European countries. *Lancet HIV*. 2017;4(3):e134–40.
61. Scoular J. Criminalising “punters”: Evaluating the Swedish position on prostitution [Internet]. *Journal of Social Welfare and Family Law*. 2004 [cited 2016 Apr 4]. Available from: <http://strathprints.strath.ac.uk/4193/>
62. Strathdee SA, Crago AL, Butler J, Bekker LG, Beyrer C. Dispelling myths about sex workers and HIV. *Lancet*. 2015;385(9962):4–7.
63. El-Bassel N, Schilling RF, Irwin KL, Faruque S, Gilbert L, Von Bargen J, et al. Sex trading and psychological distress among women recruited from the streets of Harlem. *Am J Public Health*. 1997;87(1):66–70.
64. Rössler W, Koch U, Lauber C, Hass A-K, Altwegg M, Ajdacic-Gross V, et al. The mental health of female sex workers. *Acta Psychiatr Scand* [Internet]. 2010 Aug [cited 2016 Apr 4];122(2):143–52. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/20105147>
65. Ying H. Self-perceived stigma, depressive symptoms, and suicidal behaviors among female sex workers in China. *J Transcult Nurs* [Internet]. 2010;21(1):29–34. Available from: <http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=emed9&NEWS=N&AN=19820172>
66. SE R, Potter K, Martin J, Herbison P. The mental and physical health of female sex workers: a comparative study. *Aust New Zeal J Psychiatry* [Internet]. 2001;35(1):75–80 6p. Available from: <http://search.ebscohost.com/login.aspx?direct=true&db=rzh&AN=106094865&site=ehost-live>
67. Roxburgh A, Degenhardt L, Copeland J. Posttraumatic stress disorder among female street-based sex workers in the greater Sydney area, Australia. *BMC Psychiatry* [Internet]. 2006;6:24. Available from: <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1481550&tool=pmcentrez&rendertype=abstract>
68. Stoltz J-AM, Shannon K, Kerr T, Zhang R, Montaner JS, Wood E. Associations between childhood maltreatment and sex work in a cohort of drug-using youth. *Soc Sci Med* [Internet]. 2007 Sep [cited 2016 Apr 2];65(6):1214–21. Available from: <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=2254224&tool=pmcentrez&rendertype=abstract>
69. Valera RJ, Sawyer RG, Schiraldi GR. Violence and post traumatic stress disorder in a sample of inner city street prostitutes. *Am J Health Stud*. 2000;16(3):149.

70. Shannon K, Kerr T, Strathdee S a., Shoveller J, Montaner JS, Tyndall MW. Prevalence and structural correlates of gender based violence among a prospective cohort of female sex workers. *BMJ*. 2009;339:b2939.
71. Shannon K, Rusch M, Shoveller J, Alexson D, Gibson K, Tyndall MW. Mapping violence and policing as an environmental-structural barrier to health service and syringe availability among substance-using women in street-level sex work. *Int J Drug Policy* [Internet]. 2008 Apr [cited 2016 Jan 26];19(2):140–7. Available from: <http://www.sciencedirect.com/science/article/pii/S0955395907002617>
72. Bromwich R, DeJong MM. *Mothers, Mothering and Sex Work*. Demeter Press; 2015.
73. Sloss CM, Harper GW. When street sex workers are mothers. *Arch Sex Behav*. 2004;33(4):329–41.
74. Bungay V, Halpin M, Atchison C, Johnston C. Structure and agency: reflections from an exploratory study of Vancouver indoor sex workers. *Cult Health Sex* [Internet]. 2011 Jan 19 [cited 2016 Apr 4];13(1):15–29. Available from: <http://www.tandfonline.com.libproxy.lib.unc.edu/doi/abs/10.1080/13691058.2010.517324>
75. Beard J, Biemba G, Brooks B, Bresnahan M, Flynn D, Simon J. Children of female sex workers and injection drug users : a review of vulnerability , resilience , and family-centered models of care in low and middle-income countries. *Crit Rev Pap*. 2010;13(Suppl 2):0–13.
76. Johnston DD, Swanson DH. Cognitive acrobatics in the construction of worker--mother identity. *Sex Roles*. 2007;57(5–6):447–59.
77. Rivers-Moore M. But the kids are okay: Motherhood, consumption and sex work in neo-liberal Latin America. *Br J Sociol*. 2010;61(4):716–36.
78. Knight KR. *Addicted. pregnant. poor*. Duke University Press; 2015.
79. Wahab S, Abel G. The Prostitution Reform Act (2003) and Social Work in Aotearoa/New Zealand. *Affilia*. 2016;31(4):418–33.
80. Canada T and RC of. *Honouring the truth, reconciling for the future: Summary of the final report of the Truth and Reconciliation Commission of Canada*. 2015.
81. Bingham B, Leo D, Zhang R, Montaner J, Shannon K. Generational sex work and HIV risk among Indigenous women in a street-based urban Canadian setting. *Cult Health Sex* [Internet]. 2014 Jan 16 [cited 2016 Apr 4];16(4):440–52. Available from: <http://www.tandfonline.com.libproxy.lib.unc.edu/doi/abs/10.1080/13691058.2014.888480>
82. Hunt S. Decolonizing sex work: Developing an intersectional indigenous approach. *Sell sex Exp advocacy, Res sex Work Canada*. 2013;82–100.

83. Jeal N, Salisbury C, Turner K. The multiplicity and interdependency of factors influencing the health of street-based sex workers: a qualitative study. *Sex Transm Infect* [Internet]. 2008;84(5):381–5. Available from: <http://sti.bmj.com/content/84/5/381.long>
84. Shonkoff JP, Garner AS, on Psychosocial Aspects of Child C, Health F, on Early Childhood Adoption, Care D, et al. The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*. 2011;peds--2011.
85. Mennen FE, Brensilver M, Trickett PK. Do maltreated children who remain at home function better than those who are placed? *Child Youth Serv Rev*. 2010;32(12):1675–82.
86. Davidson-Arad B, Klein A. Comparative well being of Israeli youngsters in residential care with and without siblings. *Child Youth Serv Rev*. 2011;33(11):2152–9.
87. Chernoff R, Combs-Orme T, Risley-Curtiss C, Heisler A. Assessing the health status of children entering foster care. *Pediatrics*. 1994;93(4):594–601.
88. Doyle Jr. JJ. Child Protection and Child Outcomes: Measuring the Effects of Foster Care. *Am Econ Rev* [Internet]. 2007;97(5):1583–610. Available from: <http://www.jstor.org/stable/30034577%5Cnhttp://www.jstor.org/stable/30034577>
89. Ahrens KR, Garrison MM, Courtney ME. Health outcomes in young adults from foster care and economically diverse backgrounds. *Pediatrics*. 2014;peds--2014.
90. Long SJ, Evans RE, Fletcher A, Hewitt G, Murphy S, Young H, et al. Comparison of substance use, subjective well-being and interpersonal relationships among young people in foster care and private households: a cross sectional analysis of the School Health Research Network survey in Wales. *BMJ Open*. 2017;7(2):e014198.
91. Gaetz S. Coming of Age—Reimagining the Response to Youth Homelessness in Canada [Internet]. *The Homeless Hub: Report Series*. 2013. 1-135 p. Available from: http://www.homelesshub.ca/sites/default/files/ComingOfAgeHH_0.pdf
92. Ahrens KR, Katon W, McCarty C, Richardson LP, Courtney ME. Association between childhood sexual abuse and transactional sex in youth aging out of foster care. *Child Abuse Negl*. 2012;36(1):75–80.
93. Berger LM, Bruch SK, Johnson EI, James S, Rubin D. Estimating the “impact” of out-of-home placement on child well-being: Approaching the problem of selection bias. *Child Dev*. 2009;80(6):1856–76.
94. Doyle Jr. JJ. Child Protection and Adult Crime: Using Investigator Assignment to Estimate Causal Effects of Foster Care. *J Polit Econ* [Internet]. 2008;116(4):746–70. Available from: <http://www.journals.uchicago.edu/doi/10.1086/590216>

95. Wald MS, Carlsmith JM, Leiderman PH, Smith C, others. Protecting abused and neglected children. Stanford University Press; 1988.
96. Jenkins S, Norman E. Filial deprivation and foster care. New York: Columbia University Press; 1972.
97. Haight WL, Black JE, Mangelsdorf S, Giorgio G, Tata L, Schoppe SJ, et al. Making visits better: The perspectives of parents, foster parents, and child welfare workers. *Child Welfare*. 2002;81(2):173–202.
98. Hook JL, Romich JL, Lee JS, Marcenko MO, Kang JY. Trajectories of Economic Disconnection among Families in the Child Welfare System. *Soc Probl*. 2016;
99. Kenny KS, Barrington C, Green SL. “I felt for a long time like everything beautiful in me had been taken out”: Women’s suffering, remembering, and survival following the loss of child custody. *Int J Drug Policy*. 2015;26(11):1158–66.
100. Nixon KL, Radtke HL, Tutty LM. “Every day it takes a piece of you away”: Experiences of grief and loss among abused mothers involved with child protective services. *J Public Child Welf* [Internet]. 2013;7(2):172–93. Available from: <http://search.ebscohost.com/login.aspx?direct=true&db=swh&AN=85654&site=ehost-live&scope=site>
101. Sykes J. Negotiating stigma: Understanding mothers’ responses to accusations of child neglect. *Child Youth Serv Rev*. 2011;33(3):448–56.
102. Schofield G, Moldestad B, Höjer I, Ward E, Skilbred D, Young J, et al. Managing loss and a threatened identity: Experiences of parents of children growing up in foster care, the perspectives of their social workers and implications for practice. *Br J Soc Work*. 2011;41(1):74–92.
103. Kenny KS, Barrington C. “People just don’t look at you the same way”: Public stigma, private suffering and unmet social support needs among mothers who use drugs in the aftermath of child removal. *Child Youth Serv Rev*. 2018;86.
104. Doka KJ. *Disenfranchised grief: Recognizing hidden sorrow*. Lexington Books Lexington, MA; 1989.
105. Raskin VD. Maternal bereavement in the perinatal substance abuser. *J Subst Abuse Treat*. 1992;9(2):149–52.
106. Wall-Wieler E, Roos LL, Brownell M, Nickel N, Chateau D, Singal D. Suicide Attempts and Completions among Mothers Whose Children Were Taken into Care by Child Protection Services: A Cohort Study Using Linkable Administrative Data. *Can J Psychiatry*. 2017;706743717741058.

107. Wall-Wieler E, Roos LL, Nickel NC, Chateau D, Brownell M. Mortality among mothers whose children were taken into care by child protection services: a discordant sibling analysis. *Am J Epidemiol*. 2018;kwy062.
108. Wall-Wieler E, Roos LL, Bolton J, Brownell M, Nickel NC, Chateau D. Maternal health and social outcomes after having a child taken into care: population-based longitudinal cohort study using linkable administrative data. *J Epidemiol Community Heal*. 2017;71(12):1145–51.
109. Sciences H, Marni D, Sciences CH. Maternal mental health after custody loss and death of child : A retrospective cohort study using linkable administrative data. 2017;
110. Kenny KS. Mental Health Harm to Mothers When a Child Is Taken by Child Protective Services: Health Equity Considerations. *Can J Psychiatry*. 2017;
111. Wall-wieler E, Bolton J, Liu C, Wilcox H, Roos LL, Hjern A. Journal of Affective Disorders Intergenerational involvement in out-of-home care and death by suicide in Sweden : A population-based cohort study. *J Affect Disord* [Internet]. 2018;238(May):506–12. Available from: <https://doi.org/10.1016/j.jad.2018.06.022>
112. Mertz M, Andersen SH. The hidden cost of foster-care: New evidence on the inter-generational transmission of foster-care experiences. *Br J Soc Work*. 2016;47(5):1377–93.
113. Fusco RA. Second Generation Mothers in the Child Welfare System: Factors that Predict Engagement. *Child Adolesc Soc Work J*. 2015;
114. Connell CM, Vanderploeg JJ, Flaspohler P, Katz KH, Saunders L, Tebes JK. Changes in placement among children in foster care: A longitudinal study of child and case influences. *Soc Serv Rev*. 2006;80(3):398–418.
115. Kohl PL, Jonson-Reid M, Drake B. Maternal mental illness and the safety and stability of maltreated children. *Child Abuse Negl*. 2011;35(5):309–18.
116. Landertinger LCL. Child Welfare and the Imperial Management of Childhood in Settler Colonial Canada, 1880s-2000s. 2017.
117. de Leeuw S. Tender grounds: Intimate visceral violence and British Columbia’s colonial geographies. *Polit Geogr*. 2016;52:14–23.
118. Blackstock C. Should Governments be Above the Law? The Canadian Human Rights Tribunal on First Nations Child Welfare. *Child Aust* [Internet]. 2015;40(02):95–103. Available from: http://www.journals.cambridge.org/abstract_S1035077215000061
119. Coulthard GS. Red skin, white masks: Rejecting the colonial politics of recognition. Taylor & Francis; 2014.

120. Jacobs MD. White mother to a dark race: Settler colonialism, maternalism, and the removal of Indigenous children in the American West and Australia, 1880-1940. U of Nebraska Press; 2009.
121. Million D. Therapeutic Nations. Ther Nations Heal an Age Indig Hum Rights. 2013;103–22.
122. Kline M. Complicating the Ideology of Motherhood: Child Welfare Law and First Nation Women. *Queens Law J* [Internet]. 1993;18(2):306. Available from: <http://heinonline.org/HOL/Page?handle=hein.journals/queen18&id=312&div=&collection=journals>
123. Kaspar V. The lifetime effect of residential school attendance on indigenous health status. *Am J Public Health*. 2014;
124. Nelson SE, Wilson K. The mental health of Indigenous peoples in Canada: A critical review of research. *Soc Sci Med*. 2017;
125. Hackett C, Feeny D, Tompa E. Canada's residential school system: measuring the intergenerational impact of familial attendance on health and mental health outcomes. *J Epidemiol Community Health*. 2016;jech-2016.
126. Elias B, Mignone J, Hall M, Hong SP, Hart L, Sareen J. Trauma and suicide behaviour histories among a Canadian indigenous population: An empirical exploration of the potential role of Canada's residential school system. *Soc Sci Med*. 2012;
127. Heart MYHB, DeBruyn LM. The American Indian holocaust: Healing historical unresolved grief. *Am Indian Alaska Nativ Ment Heal Res*. 1998;8(2):56.
128. Creswell JW, Klassen AC, Plano Clark VL, Smith KC. Best practices for mixed methods research in the health sciences. *Bethesda Natl Institutes Heal*. 2011;2094–103.
129. Pearlin LI, Schieman S, Fazio EM, Meersman SC. Stress, health, and the life course: Some conceptual perspectives. *J Health Soc Behav*. 2005;46(2):205–19.
130. Frieden TR. A framework for public health action: the health impact pyramid. *Am J Public Health* [Internet]. 2010 Apr 30 [cited 2016 Mar 9];100(4):590–5. Available from: <http://ajph.aphapublications.org/doi/abs/10.2105/ajph.2009.185652>
131. Beauchamp DE. Public health as social justice. *Inquiry*. 1976;13(1):3–14.
132. Krieger N. Embodiment: a conceptual glossary for epidemiology. *J Epidemiol Community Health* [Internet]. 2005 May 1 [cited 2016 Apr 5];59(5):350–5. Available from: <http://jech.bmj.com/content/59/5/350.short>

133. Braveman P, Barclay C. Health disparities beginning in childhood: a life-course perspective. *Pediatrics*. 2009;124(Supplement 3):S163--S175.
134. Geronimus AT, Hicken M, Keene D, Bound J. "Weathering" and age patterns of allostatic load scores among blacks and whites in the United States. *Am J Public Health* [Internet]. 2006 May 10 [cited 2016 Apr 4];96(5):826–33. Available from: <http://ajph.aphapublications.org.libproxy.lib.unc.edu/doi/abs/10.2105/AJPH.2004.060749>
135. Danese A, McEwen BS. Adverse childhood experiences, allostasis, allostatic load, and age-related disease. *Physiol Behav*. 2012;106(1):29–39.
136. Gee GC, Walsemann KM, Brondolo E. A life course perspective on how racism may be related to health inequities. *Am J Public Health*. 2012;102(5):967–74.
137. Browne AJ, Smye VL, Varcoe C. Pertinence des approches post-colonialistes The Relevance of Postcolonial Theoretical Perspectives to Research in Aboriginal Health. *Cjnr*. 2005;37(4):16–37.
138. Césaire A. *Discourse on Colonialism*: Transl. by Joan Pinkham. Monthly Review Press; 1972.
139. Fanon F. *Black faces, white masks*. Trans Charles Lam Markmann New York Grove. 1967;
140. Kirkham SR, Anderson JM. Postcolonial nursing scholarship: From epistemology to method. *Adv Nurs Sci*. 2002;25(1):1–17.
141. Walters KL, Simoni JM. Reconceptualizing Native women's health: An "indigenist" stress-coping model. *Am J Public Health*. 2002;92(4):520–4.
142. Hancock A-M. When multiplication doesn't equal quick addition: Examining intersectionality as a research paradigm. *Perspect Polit*. 2007;5(1):63–79.
143. Crenshaw K. Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Rev*. 1989;43(6):1241–99.
144. Cho S, Crenshaw KW, McCall L. Toward a field of intersectionality studies: Theory, applications, and praxis. *Signs (Chic)*. 2013;38(4):785–810.
145. Bowleg L. The problem with the phrase women and minorities: Intersectionality-an important theoretical framework for public health. *Am J Public Health*. 2012;102(7):1267–73.
146. Spade D. Intersectional Resistance and Law Reform. 2013;38(4).

147. Fassin D, Rechtman R. *The empire of trauma: An inquiry into the condition of victimhood*. Princeton University Press; 2009.
148. Fraser S, Valentine K. *Substance and Substitution: Methadone Subjects in Liberal Societies* [Internet]. Palgrave Macmillan; 2008 [cited 2016 Apr 14]. Available from: <http://arrow.monash.edu.au/vital/access/manager/Repository/monash:29752>
149. Seear K, Fraser S. The addict as victim: producing the “problem” of addiction in Australian victims of crime compensation laws. *Int J Drug Policy* [Internet]. 2014 Sep [cited 2016 Apr 14];25(5):826–35. Available from: <http://www.sciencedirect.com/science/article/pii/S0955395914000590>
150. Kirmayer L, Simpson C, Cargo M. Healing traditions: Culture, community and mental health promotion with Canadian Aboriginal peoples. In: *Australasian Psychiatry*. 2003.
151. Gracey M, King M. Indigenous health part 1: determinants and disease patterns. *Lancet*. 2009;374(9683):65–75.
152. Alfred T. Colonialism and state dependency. *J la sant {é} Autoch*. 2009;5:42–60.
153. Jones A, Sinha V, Trocmé N. Children and youth in out-of-home care in the Canadian provinces. *CWRP Inf sheet E*. 2015;167.
154. US Department of Health and Human Services. *Trends in Foster Care and Adoption : FY 2006 - FY 2015*. 2016;2015:1–3. Available from: https://www.acf.hhs.gov/sites/default/files/cb/trends_fostercare_adoption2015.pdf
155. Roberts D. *Shattered bonds: The color of child welfare*. Civitas Books; 2009.
156. Zlotnick C, Tam TW, Soman LA. Life course outcomes on mental and physical health: the impact of foster care on adulthood. *Am J Public Health* [Internet]. 2012 Mar 8 [cited 2016 Apr 3];102(3):534–40. Available from: <http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2011.300285>
157. Shannon K, Kerr T, Allinott S, Chettiar J, Shoveller J, Tyndall MW. Social and structural violence and power relations in mitigating HIV risk of drug-using women in survival sex work. *Soc Sci Med*. 2008;66(4):911–21.
158. Bingham B, Leo D, Zhang R, Montaner J, Shannon K. Generational sex work and HIV risk among Indigenous women in a street-based urban Canadian setting. *Cult Health Sex*. 2014;16(4):440–52.
159. Shannon K, Bright V, Allinott S, Alexson D, Gibson K, Tyndall MW. Community-based HIV prevention research among substance-using women in survival sex work: the Maka Project Partnership. *Harm Reduct J*. 2007;4(1):20.

160. Duff P, Deering K, Gibson K, Tyndall M, Shannon K. Homelessness among a cohort of women in street-based sex work: the need for safer environment interventions. *BMC Public Health*. 2011;11(1):643.
161. Burstrom B. Self rated health: Is it as good a predictor of subsequent mortality among adults in lower as well as in higher social classes? *J Epidemiol Community Heal* [Internet]. 2001 Nov 1 [cited 2016 Apr 14];55(11):836–40. Available from: <http://jech.bmj.com/content/55/11/836.short>
162. Bernstein DP, Fink L. *Childhood trauma questionnaire: A retrospective self-report: Manual*. Psychological Corporation; 1998.
163. Abrahams RR, MacKay-Dunn MH, Nevmerjitskaia V, MacRae GS, Payne SP, Hodgson ZG. An Evaluation of Rooming-in Among Substance-exposed Newborns in British Columbia. *J Obstet Gynaecol Canada*. 2010;32(9):866–71.
164. Grossman MR, Berkwitz AK, Osborn RR, Xu Y, Esserman DA, Shapiro ED, et al. An Initiative to Improve the Quality of Care of Infants With Neonatal Abstinence Syndrome. *Pediatrics* [Internet]. 2017;139(6):e20163360. Available from: <http://pediatrics.aappublications.org/lookup/doi/10.1542/peds.2016-3360>
165. Duff P, Shoveller J, Chettiar J, Feng C, Nicoletti R, Shannon K. Sex Work and Motherhood: Social and Structural Barriers to Health and Social Services for Pregnant and Parenting Street and Off-Street Sex Workers. *Health Care Women Int* [Internet]. 2014;(January 2015):1–17. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25513844>
166. Hunt S. Representing colonial violence: trafficking, sex work, and the violence of law. *Atl Crit Stud Gender, Cult Soc Justice*. 2016;37(2):25–39.
167. Sinclair R. Identity lost and found: Lessons from the sixties scoop. *First Peoples Child Fam Rev*. 2007;3(1):65–82.
168. Statistics Canada. *Census Profile. 2016 Census. Census Profile 2016 Census* [Internet]. 2017;1. Available from: <http://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E>
169. Women’s Earth Alliance, Native Youth Sexual Health Network. *Violence on the Land, Violence on Our Bodies: Building an Indigenous Response to Environmental Violence*. 2016;1–116. Available from: <http://landbodydefense.org/uploads/files/VLVBReportToolkit2016.pdf>
170. Truth and Reconciliation Commission of Canada. *Canada’s Residential Schools: The Final Report of the Truth and Reconciliation Commission of Canada. Vol. 1*. McGill-Queen’s Press-MQUP; 2015.

171. Smylie J. Indigenous Child Well-Being in Canada. *Encycl Qual Life Well-Being*. 2014;3220–7.
172. Inhorn MC, Whittle KL. Feminism meets the “new” epidemiologies: toward an appraisal of antifeminist biases in epidemiological research on women’s health. *Soc Sci Med*. 2001;53(5):553–67.
173. Viruell-Fuentes EA, Miranda PY, Abdulrahim S. More than culture: Structural racism, intersectionality theory, and immigrant health. *Soc Sci Med [Internet]*. 2012;75(12):2099–106. Available from: <http://dx.doi.org/10.1016/j.socscimed.2011.12.037>
174. Donzelot J. *The policing of families*. Random House Incorporated; 1979.
175. Petersen A, Lupton D. *The new public health: Health and self in the age of risk*. Sage Publications, Inc; 1996.
176. Lieblich A, Tuval-Mashiach R, Zilber T. *Narrative research: Reading, analysis, and interpretation*. Vol. 47. Sage; 1998.
177. Riessman CK. *Narrative Methods for the Human Sciences [Internet]*. Vol. 54. SAGE Publications; 2008 [cited 2016 Apr 14]. 251 p. Available from: <https://books.google.com/books?hl=en&lr=&id=0DdzM-vh54UC&pgis=1>
178. Namaste V. *Invisible lives: The erasure of transsexual and transgendered people*. University of Chicago Press; 2000.
179. Campbell N, Ettore E. *Gendering addiction: The politics of drug treatment in a neurochemical world*. Springer; 2011.
180. Nixon R. *Slow Violence and the Environmentalism of the Poor*. Harvard University Press; 2011.
181. Thistle JA. *Definition of Indigenous Homelessness in Canada*. *Can Obs Homelessness*.
182. Skye AD. *Aboriginal Midwifery: A Model for Change*. *J Aborig Heal [Internet]*. 2010;6(1):28. Available from: http://www.naho.ca/journal/2010/01/15/aboriginal-midwifery-a-model-for-change/%5Cnhttp://www.naho.ca/documents/journal/jah06_01/06_01_03_Aboriginal_Midwifery.pdf
183. Nathoo T, Poole N, Bryans M, Dechief L, Marcellus L, Poag E, et al. *Voices from the community : Developing effective community programs to support pregnant and early parenting women who use alcohol and other substances*. *First Peoples Child Fam Rev* . 2013;8(1):93–106.

184. Maynard R. Policing black lives: State violence in Canada from slavery to the present. Fernwood Publishing; 2017.
185. Wildeman C, Fallesen P. The effect of lowering welfare payment ceilings on children's risk of out-of-home placement. *Child Youth Serv Rev.* 2017;72:82–90.
186. Dumbrill GC. Parental experience of child protection intervention: A qualitative study. *Child Abus Negl.* 2006;30(1):27–37.
187. McEWEN BS. Stress, Adaptation, and Disease: Allostasis and Allostatic Load. *Ann N Y Acad Sci* [Internet]. 1998 May 7 [cited 2015 Feb 20];840(1):33–44. Available from: <http://doi.wiley.com/10.1111/j.1749-6632.1998.tb09546.x>
188. Wall-wieler E, Roos LL, Nickel NC, Chateau D, Brownell M. Original Contribution Mortality Among Mothers Whose Children Were Taken Into Care by Child Protection Services : A Discordant Sibling Analysis. 2018;187(6):1182–8.
189. Roberts DE. Community Dimension of State Child Protection, The. *Hofstra L Rev.* 2005;34:23.
190. Ross L, Solinger R. Reproductive justice: An introduction. Vol. 1. Univ of California Press; 2017.
191. Duff KP. Investigating the role of structural determinants in shaping sex workers' reproductive health access and outcomes. University of British Columbia; 2014.
192. Simpson L. Dancing on our turtle's back : stories of Nishnaabeg re-creation, resurgence and a new emergence. ARP. 2011.
193. Macrory F, Boyd SC. Developing primary and secondary services for drug and alcohol dependent mothers. *Semin Fetal Neonatal Med.* 2007;12(2):119–26.
194. Abrahams RR, Kelly SA, Payne S, Thiessen PN, Mackintosh J, Janssen PA. Rooming-in compared with standard care for newborns of mothers using methadone or heroin. *Can Fam Physician.* 2007;53(10):1722–30.
195. Chartier M, Nickel NC, Chateau D, Enns JE, Isaac MR, Katz A, et al. Families First Home Visiting programme reduces population-level child health and social inequities. *J Epidemiol Community Health.* 2018;72(1):47–53.
196. Nathoo T, Poole N, Bryans M, Dechief L, Hardeman S, Marcellus L, et al. Voices from the community: Developing effective community programs to support pregnant and early parenting women who use alcohol and other substances. *First peoples child Fam Rev.* 2013;8(1):93–106.

197. Etherington K. Creation as transformation: Parenting as a turning point in drug users' lives. *Couns Psychother Res* [Internet]. 2007;7(2):71–8. Available from: <http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2007-08049-002&site=ehost-live&scope=site%5Cnkim.etherington@bris.ac.uk>
198. Institute for Urban Indigenous Health (IUIH). *Stronger Families. The IUIH Model for Child Protection*. 2014;1–10.
199. Blackstock C. Toward the full and proper implementation of Jordan's principle: An elusive goal to date. Vol. 21, *Paediatrics and Child Health (Canada)*. 2016. p. 245–6.
200. Pelton LH. The continuing role of material factors in child maltreatment and placement. *Child Abus Negl* [Internet]. 2015;41:30–9. Available from: <http://dx.doi.org/10.1016/j.chiabu.2014.08.001>
201. Haskins R, Garfinkel I, McLanahan S. Introduction: Two-generation mechanisms of child development. *Futur Child*. 2014;3–12.
202. Tobis D. *From Pariahs to Partners: How Parents and Their Allies Changed New York City's Child Welfare System*. Oxford University Press; 2013.
203. Gesink D, Whiskeyjack L, Guimond T. Perspectives on restoring health shared by Cree women, Alberta, Canada. *Health Promot Int*. 2018;
204. Greenwood M, de Leeuw S. Teachings from the land: Indigenous people, our health, our land, and our children. *Can J Nativ Educ*. 2007;30(1):48.
205. Ketteringham ES, Cremer S, Becker C. Healthy Mothers, Helathy Babies: A Reproductive Justice Response to the Womb-to-Foster-Care Pipeline. *CUNY L Rev*. 2016;20:77.